**Ganpat University**

**Faculty of Engineering and Technology**

VALUE ADDITION PROGRAMS - "Programs that Enhance the Skill"

**Objective:**

The Value-Added Courses aim to provide additional learner centric graded skill oriented technical training, with the primary objective of improving the employability skills of engineering students. These courses offered beyond the working hours of the institute. These courses are blend of theory/experiment/project/activity-based learning. Students have option to choose a course in order to enhance their skills and knowledge, which will help them to face the challenges of future.

**Following Value Added Courses offered by Institute:**

| Sr. No. | Name of the Course | Course Code |
|---|---|---|
| 1 | Creative & Critical Thinking | 2OS101 |
| 2 | Ethics & Values | 2OS102 |
| 3 | Environmental Studies and Disaster Management | 2OS103 |
| 4 | Energy Conservation and Renewable Energy | 2OS104 |
| 5 | Industrial Management | 2OS105 |
| 6 | Phonetics & Writing Skill | 2OS106 |
| 7 | Probability & Statistics | 2OS107 |
| 8 | Research Methods and Statistical Applications | 2OS108 |
| 9 | Water Resource Management | 2OS110 |
| 10 | Economics for Engineers | 2OS111 |
| 11 | Supply Chain Management-Planning | 2OS112 |
| 12 | Introduction to Computer Technology | 2OS113 |
| 13 | Entrepreneurship Development | 2OS114 |
| 14 | Career Development Program-I | 2OS116 |
| 15 | Career Development Program-II | 2OS117 |
| 16 | Professional Skill Building-I | 2OS118 |
| 17 | Professional Skill Building-II | 2OS119 |
| 18 | Career Development | 2OS121 |
| 19 | Organizational Behaviour | 2OS131 |
| 20 | Research Ethics | 2OS132 |
| 21 | Resume Writing | 2OS133 |
| 22 | Pattern Recognition and Image Analysis | 2OS134 |
| 23 | Personality Development | 2OS136 |
| 24 | Numerical Methods | 2OS137 |
| 25 | Introduction to Literature | 2OS138 |
| 26 | Introduction to Econometrics | 2OS139 |
| 27 | Engineering Law | 2OS140 |
| 28 | Introduction to Robotics | 2OS141 |
| 29 | Industrial Safety & Maintenance Engineering | 2OS142 |
| 30 | Energy & Environment | 2OS143 |
| 31 | Thermal Management of Electronic System | 2OS144 |
| 32 | Machine Learning | 2OS145 |
| 33 | Introduction to Fire and Safety Engineering | 2OS146 |
| 34 | Composite Materials | 2OS149 |
| 35 | Arduino for Engineers | 2OS150 |
| 36 | Basics of Quality Management | 2OS161 |
| 37 | Financial Management | 2OS162 |
| 38 | Finite Element Method | 2OS163 |
| 39 | Disaster Management | 2OS164 |
| 40 | Human Resource Management | 2OS171 |
| 41 | Modern Indian History | 2OS172 |
| 42 | Electrical Power Utilisation and Safety | 2OS173 |

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| 43 | Operating Systems | 2OS174 |
| 44 | Air Pollution Control Techniques | 2OS181 |
| 45 | Functional Foods and Health Supplements Theory | 2OS182 |
| 46 | Project Management | 2OS191 |
| 47 | Renewable energy sources | 2OS192 |
| 48 | Health and Nutrition | 2OS193 |
| 49 | Matlab for Engineers | 2OS194 |
| 50 | Technical Writing | 2OS195 |
| 51 | Operations Research | 2OS201 |
| 52 | Elements of management | 2OS202 |
| 53 | Yoga and Meditation | 2OS203 |
| 54 | Economics for Engineer | OSAE101 |
| 55 | Entrepreneurship Development | OSAE102 |
| 56 | Electric Machines and Applications | OSAE103 |
| 57 | Fundamental of Electronics | OSBM101 |
| 58 | 3D printing | OSBM102 |
| 59 | Digital Marketing | OSCE101 |
| 60 | Animation | OSCE102 |
| 61 | Research & Publication Ethics | OSCE103 |
| 62 | BUSINESS ECONOMICS | OSCE104 |
| 63 | PRINCIPLES OF MANAGEMENT | OSCE105 |
| 64 | Basics of remote surveying and GIS | OSCEAI101 |
| 65 | ADVANCED SURVEYING | OSCEAI102 |
| 66 | Applied Statistics | OSCI101 |
| 67 | Road Safety Management | OSCI102 |
| 68 | Remote sensing, GIS and GPS | OSCI103 |
| 69 | Introduction to Accounting | OSCI104 |
| 70 | Industrial Safety | OSEE101 |
| 71 | PCB design and fabrication | OSEE102 |
| 72 | Electrical Estimation and Energy Auditing | OSEE103 |
| 73 | Advanced Photogrammetry | OSIT101 |
| 74 | Social Network Analysis | OSIT102 |
| 75 | E-Resources & E-Publication | OSIT103 |
| 76 | COMPUTER APPLICATION IN MARKETING | OSIT104 |
| 77 | ACADEMIC RESEARCH & REPORT WRITING | OSIT105 |
| 78 | Media Culture and Society | OSMC101 |
| 79 | FPGA based VLSI Design | OSMC102 |
| 80 | Advanced Instrumental Techniques | OSMC103 |
| 81 | International taxation | OSMC104 |
| 82 | Yoga and Meditation | OSMC105 |
| 83 | Concept and use of MS word, MS excel & MS power point | OSME101 |
| 84 | Introduction to Mechatronics | OSME102 |
| 85 | Cryogenics Engineering | OSME103 |
| 86 | PIPING DESIGN ENGINEERING | OSME104 |
| 87 | POWER PLANT DESIGN | OSME105 |
| 88 | Leadership Development | OSMR102 |
| 89 | POSITIVE PSYCHOLOGY | OSPCE101 |
| 90 | Contributory traits as engineer | OSPCE102 |
| 91 | HUMAN RESOURCE MANAGEMENT | OSPCE103 |
| 92 | General studies for Civil services | OSCSBS101 |

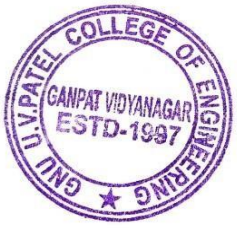
**Contact Hours:** 30 Hours or more

**Course Faculty:** Expert faculty from Ganpat University, outside university & Industry.

**Eligibility:** Courses are open for all Engineering students.

**Registration:** Submit the registration form duly filled by participants. Final list of Participants are to be displayed on the notice board.






Dr. Kiran Amin
Executive Dean,
FoET, Ganpat University.

| GANPAT UNIVERSITY | | |
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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Creative and Critical Thinking | |
| **Subject code** | 2OS101 | |
| **Learning Outcome:** | | |
| On successful completion of the course, the students will be:<br>• able to enhance their creative and innovative thinking skills<br>• familiar with processes and methods of creative problem solving: observation, definition, representation, ideation, evaluation and decision making<br>• able to take better decisions<br>• able to evaluate facts in an argument<br>• learn the Art of Questioning<br>• able to be better thinkers | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Initial Considerations: Exploring Thinking In General 1. Ascertain personal thinking strengths and weaknesses 2. Compare personal thinking habits to those of others 3. Compose personal goals for thinking skills improvement | 6 |
| 2 | Introduction to creativity and innovation, differentiation between creative and critical thinking, thinking styles and common mistakes of thinking, thinking about information and emotions, truth and knowledge, evaluating knowledge by asking the right questions about issues, conclusions, reasons, assumptions and evidence etc. | 8 |
| 3 | Techniques for improving creativity: Brainstorming, lateral thinking, list of mental associations, random considerations, matrix of ideas, use of manipulative verbs, tree of possibilities, abstractions, transformation, use of mind stimulation: games, brain twisters and puzzles. | 8 |
| 4 | Creativity in Problem Solving: Problem definition, understanding, representing, pattern bracketing, thinking differently, changing your point of view, watching for paradigm shift, challenging conventional wisdom, lateral thinking etc | 8 |
| **References** | | |
| 1 | Asking the Right Questions by M. Neil Browne, Stuart M. Keeley | |
| 2 | Teach Yourself to Think by Edward Ee Bono | |
| 3 | Lateral thinking | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Ethics & Values | |
| **Subject code** | 2OS102 | |
| **Learning Outcome:** | | |
| After successful completion of the course, student will be able to<br>● Be aware and understand importance of Engineering Ethics and Human Social Values<br>● Understand social responsibilities of an engineer<br>● Appreciate ethical dilemma while discharging duties in professional/industrial life. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Human Values: Morals, Values and Ethics – Integrity – Work Ethic – Honesty – Courage –Empathy – Self-Confidence – Character = Continuous Happiness and Prosperity- A look at basic Human Aspirations, Understanding and living in harmony at various levels | 6 |
| 2 | Engineering Ethics: Senses of 'Engineering Ethics' - variety of moral issued - types of inquiry - moral dilemmas - moral autonomy - Kohlberg's theory - Gilligan's theory - consensus and controversy – Models of Professional Roles - theories about right action - Self-interest - customs and religion - uses of ethical theories. Valuing Time – Co-operation – Commitment – | 6 |
| 3 | Engineering as Social Experimentation: Engineering as experimentation - engineers as responsible experimenters - codes of ethics - a balanced outlook on law - the challenger case study | 6 |
| 4 | Safety, Responsibilities and Right: Safety and risk - assessment of safety and risk - risk benefit analysis and reducing risk - the Three Mile Island and Chernobyl case studies, Collegiality and Loyalty - respect for Authority – collective Bargaining - confidentiality - Conflicts of Interest – Professional rights - Employee Rights. | 6 |
| 5 | Global Issues: Multinational corporations - Environmental ethics - computer ethics - weapons development - engineers as managers-consulting engineers-engineers as expert witnesses and advisors -moral leadership | 6 |
| **References** | | |
| 1 | A Textbook on Professional Ethics and Human Values by Naagarazan, R.S, New Age Pub. | |
| 2 | Ethics in Engineering by Mike Martin and Roland Schinzinger, McGraw-Hill, New York | |
| 3 | Engineering Ethics by Govindarajan M, Natarajan S, Senthil Kumar V. S, Prentice Hall | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Environmental Studies and Disaster Management | |
| **Subject code** | 2OS103 | |

**Learning Outcome:**

Upon completion of this course, students will acquire knowledge about

- Understand the natural environment and its relationships with human activities.
- Characterize and analyze human impacts on the environment.
- Integrate facts, concepts, and methods from multiple disciplines and apply to environmental problems.
- Capacity to integrate knowledge and to analyse, evaluate and manage the different public health aspects of disaster events at a local and global levels.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Environment:**<br>Definition, Components of Environment, Relationship between different components, Man-Environment relationship, Impact of Technology on the environment, Environmental Degradation, Sustainable Development, Environmental Education. | 5 |
| 2 | **Ecology & Ecosystems:**<br>Introduction: Ecology- Objectives and Classification, Concepts of an ecosystem- structure & function of ecosystem, Components of ecosystem- Producers, Consumers, Decomposers,<br>Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids. - Introduction, types, characteristic features, structure and function of the following ecosystem: (a) Forest ecosystem (b) Grassland ecosystem , (3) Desert ecosystem, (4) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) | 6 |
| 3 | **Environmental Pollution:**<br>**Air Pollution:** Composition of air, Structure of atmosphere, Ambient Air Quality Standards, Classification of air pollutants, Sources of common air pollutants like SPM, $SO_2$, $NO_X$.<br>**Noise Pollution:** Introduction, Sound and Noise measurements, Sources of Noise Pollution, Ambient noise levels, Effects of noise pollution, Noise pollution control measures.<br>**Water Pollution:** Introduction **–** Water Quality Standards, Sources of Water Pollution, Classification of water pollutants, Effects of water pollutants<br>**Current Environmental Global Issues:** Global Warming and Green Houses Effect, Acid Rain, Depletion of Ozone Layer. | 6 |
| 4 | **Energy Resources:**<br>Renewable Resources, Non-renewable Resources, Indian Scenario, Destruction versus Conservation. | 3 |
| 5 | **Renewable Resources, Non-renewable Resources, Indian Scenario, Destruction versus Conservation.**<br>Introduction, Types of Natural Disasters, Accidental Disasters, Impact of Disasters on Trade and International Trade. | 4 |
| 6 | **Types of Disaster**<br>Introduction, Earthquakes, Tornadoes, Floods, Tsunami, Volcanoes, , Forest Fires, Severe, Landslides, Epidemics and Insect Infestations, Types of Technological Hazards, Social Disasters, Components of Disaster Management, Government's Role in Disaster Management through Control of Information, Actors in Disaster Management. | 6 |

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| **Text Books** | |
| 1 | Basics of Environmental Studies by Dr. N. S. Varandani, Books India Publications. |
| 2 | Disaster Management by MukeshDhunna, Vayu Education of India, Delhi Publication |
| **Reference Books** | |
| 1 | Environmental Studies by R. Rajagopalan, Oxford University Press Publication. |
| 2 | Environmental Science by Richard T Wright & Bernard J Nebel, Prentice Hall India Publication. |
| 3 | Environmental Science by Daniel B Botkin& Edward A Keller, Wiley Publications. |
| **ICT/MOOCsReference** | |
| 1 | http://www.nptelvideos.com/civil_engineering/environmental_air_pollution_video_lectures.php |
| 2 | https://www.geo.lu.lv/fileadmin/user_upload/lu_portal/projekti/gzzf/Vides_zinatne_kursi/2014/Eng_1000/15.LECTURE-Natural_disasters__Compatibility_Mode_.pdf |
| 3 | https://www.slideshare.net/PIRATERHINO/disaster-management-ppt |
| 4 | http://nptel.ac.in/courses/105104099/ |
| 5 | https://www.iare.ac.in/sites/default/files/lecture_notes/dm%20notes.pdf |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Energy Conservation & Renewable Energy | |
| **Subject code** | 2OS104 | |
| **Learning Outcome:** | | |
| ● Conceptual knowledge of the technology, economics and regulation related issues associated with energy conservation and energy auditing<br>● Ability to analyze the viability of energy conservation projects<br>● Capability to integrate various options and assess the business and policy environment regarding energy conservation and energy auditing | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| | **ENERGY CONSERVATION** | |
| **1** | **Introduction:**<br>Concept of Energy Conservation, Economic aspects of Energy Conservation. | 3 |
| **2** | **Electrical Energy Auditing & Management:**<br>Energy Audit-Purpose, dynamics and Methodology with respect to process Industries. Importance of Energy Management, Energy Economics - Discount Rate, Payback Period, Internal Rate of Return, Life Cycle Costing. | 4 |
| **3** | **Energy Conservation Approaches and Techniques**<br>Potential Areas for Electrical Energy Conservation in Various Industries. Opportunities in Electrical Heating, Lighting system, Cable selection - Energy Efficient Equipment .Concept of Total Energy - Total Energy systems- Advantages & Limitations - Total Energy system &Application - Various Possible Schemes in Total Energy Systems -Potential & Economics of Total Energy Systems**.** | 4 |
| | **RENEWABLE ENERGY** | |
| 1. | **Solar Energy**<br>Solar Power, Opportunities & limitations of Solar Power technology. Solar power Economics. | 3 |
| 2. | **Wind Energy:**<br>Wind Power, Opportunities & limitations of Wind Power technology. Wind power Economics | 4 |
| 3. | **Energy From Bio mass:**<br>Biomass and Conversion Technologies, biomass generation, factors affecting digestion, classification of biogas plant , Energy storage and applications . | 6 |
| 4. | **Hydro Power Generation**<br>Principle of Hydro Power generation, Environmental factors affecting hydro Power Generation. Hydro power Economics. | 6 |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Industrial Management | |
| **Subject code** | 2OS105 | |

**Learning Outcome:**

- Choose, prepare, interpret and use cost estimates as a basis for the different situations in an industrial company,
- Interpret financial statements and other financial reports of industrial companies, including the income statement, the balance sheet, the cash flow statement and key measures in these,
- Explain how strategic planning, management, management control, entrepreneurship, organization, production and learning works in an industrial company,
- Explain how the industrial company markets and price it's products,
- Explain how the company deals with its environment.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | MANAGEMENT CONCEPT AND FUNCTION: Concept and functions–planning, organizing, directing, co-ordination, controlling, motivating, principle of measurement, traditional v/s modern management, approaches, decision making, delegation | 4 |
| 2 | ORGANIZATION: Concept, principles, lines and staffs functions, organization structure and its importance, system concepts of organization | 3 |
| 3 | PRODUCTIVITY AND ITS TECHNIQUES: Concepts, gains of productivity, productivity and economic development, role of management in promotion of productivity, selected productivity techniques, work study, time study & work management, quality control CPM and PERT | 4 |
| 4 | PERSONNEL MANAGEMENT: Personnel function, manpower assessment, recruitment, training, selection and development, wages systems, Salary and incentive plans, participate management, performance appraisal and counseling, discipline improvement, grievance handling & industrial dispute and methods of setting them, union-management, industrial relation. | 5 |
| 5 | HUMAN SIDE OF MANAGEMENT: Understanding of human behavior, group dynamics, interpersonal behavior, motivation, communication, leadership. | 3 |
| 6 | FINANCIAL MANAGEMENT: Financial management and quantitative techniques, management accounting, breakeven analysis, preparation & analysis of balance sheet, capital budgeting, cost accounting, cost counting, cost and budgetary contract. | 3 |
| 7 | MARKETING MANAGEMENT: Introduction to marketing management concepts & approach, product development & diversification, industrial marketing | 3 |
| 8 | INDUSTRIAL ACTS: Factory act, boiler act, electricity act, workman's compensation act and other labor laws. | 2 |
| 9 | MATERIAL MANAGEMENT: Introduction, objective functions, standardization, value analysis, codification, inventory control, stores management, industrial purchasing. | 3 |

**Reference Books**


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| 1 | Industrial Engineering and Management Sciences buy T. R. banga, N. K. Aggrawal and S. C. Sharma |
| 2 | Industrial Engineering and Management by O. P. Khanna |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Phonetics & Writing Skill | |
| **Subject code** | 2OS106 | |
| **Learning Outcome:** | | |
| ● Explain how English sounds are articulated<br>● Identify processes that take place in continuous English speech<br>● Explain the basic functions of English intonation<br>● Apply their knowledge of English phonetics and phonology to improve their own pronunciation, in further studies of languages and linguistics and in teaching<br>● Understand how English accents vary and changeable to express themselves in appropriate academic English | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction**<br>Phonology and Phonetic, Articulation and Acoustics, Speech Production, Manners and places of Articulation, Stop - Oral Stop and Nasal Stop, Phonology and Phonetic Transcription, Consonant and Vowel Charts, Phonology, The International Phonetic Association / Alphabet | 3 |
| 2 | **Articulation: The Production of Speech Sounds**<br>Articulation vs Pronunciation / Enunciation, The Articulation of Vowel Sounds, The Face Diagram & Articulators, Classification of Speech Sounds / Criteria for Classification, Description of Speech Sounds / Vowels vs. Consonants & Semi-vowels | 3 |
| 3 | **English Segmental Phonemes 1: Vowels**<br>The Cardinal Vowels / Primary Cardinal Vowels / Criteria For Classifying Vowels / Variables Of Vowel Quality, Description & Distribution of English Short Vowels, Long Vowels, Diphthongs / Kinds of Diphthongs: Centering & Closing, Tripthongs | 3 |
| 4 | **English Segmental Phonemes 2: Consonants**<br>Description of English Consonants, Detailed Descriptions, Definitions of Phonemes / Allophones / Complimentary Distribution / Free Variations, Distribution and Realizations of English Consonants | 3 |
| 5 | **The Syllable Structure**<br>Definitions: Utterance / Word / Syllable, Problems in Defining Syllables, Structure of the English Syllable, Detailed Description of the English Syllable | 3 |
| 6 | **Strong / Weak Syllables & Weak Forms**<br>Definitions: strong / weak , The Reduced Vowels: the Schwa / close front and close back vowels, Syllabic Consonants: nasal / lateral / flap, Weak Forms: Functions Words − Rules about Use of Strong Forms | 3 |
| 7 | **English Supra-segmental Phonemes 1: Stress**<br>Definition, Degrees of Stress / Transcription, Word Stress, Considerations in Deciding on Stress Placement, Sentence Stress | 3 |
| 8 | **English Supra-segmental Phonemes 2: Intonation**<br>Definition, Tones vs. Intonation − Tonal Languages vs. Intonational Languages, Structure of the English Tone Unit, Functions of English Intonation | 3 |
| 9 | **BUSINESS MEMOS**<br>Principles and Fundamentals, Business Memos, Letters Vs Memos, Characteristics and Writing Strategies of Effective Memos, Form and Structure – Parts of a Memo | 2 |

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| 10 | **E-MAILS**<br>Principles and Fundamentals, Advantages and Characteristics of Successful E-mail messages, E-mail Format and Standard E-mail Practices | 1 |
| 11 | **PROPOSALS**<br>Nature and Significance, Types of Proposals, Structure and Writing Tips for Formal Proposals | 1 |
| 12 | **TECHNICAL ARTICLES**<br>Nature and Significance, Types of Technical Articles, Journal Articles, Conference Papers, Review and Research Articles | 2 |
| **Reference Books** | | |
| 1 | Technical Communication – Principles and Practice by Meenaksi Raman & Sangeeta Sharma (Oxford University Press) | |
| 2 | Effective Technical Communication by M Ashraf Rizvi (TMH Publication) | |
| 3 | Finegan, E. (2004). Language: Its Structure and Use (4th ed.). Boston: Thomson Wadsworth | |
| 4 | Fromkin, V., Blair, D. & Collins, P. (1991). An Introduction to Language (4th ed.) NSW: Harcourt Australia Pty, Limited | |
| 5 | O'Grady, W. et al. (1996). Contemporary Linguistics: an Introduction. Harlow: Pearson Education Limited | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Probability & Statistics | |
| **Subject code** | 2OS107 | |

**Learning Outcome:**

- Basic probability axioms and rules and the moments of discrete and continuous random variables as well as be familiar with common named discrete and continuous random variables.
- How to calculate probabilities of absorption and expected hitting times for discrete time Markov chains with absorbing states
- How to translate real-world problems into probability models.
- How to read and annotate an outline of a proof and be able to write a logical proof of a statement.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Frequency Distribution:** Collection of data, Classification of data, Class interval, Types of Classes, Class frequency, Class mark, Class Boundaries, Width of a class, Frequency density, Relative frequency, Percentage frequency, Cumulative frequency | 5 |
| 2 | **Measures Of Central Tendency:** Introduction, Arithmetic Mean, Simple and weighted for raw data, Discrete frequency distribution, Continuous frequency distribution, Properties of A.M., Merits & De merits of A.M., Median for raw data, Discrete frequency distribution, Continuous frequency distribution, Merits and demerits of Median, Mode for raw data, D.f.s., c.f.s., Merits & demerits of mode | 5 |
| 3 | **Measures Of Dispersion:** Introduction, Range, coefficient of range, Quartiles, Quartiles deviations, coefficient of quartile deviations, Mean deviation and coefficient of mean deviation, S.D and variance for all types of frequency distribution, Coefficient of Dispersion, Coefficient of variation | 4 |
| 4 | **Correlation:** Definition of Correlation, Types of Correlation, Scatter Diagram Method, Karl Person's Correlation Coefficients, Correlation Coefficients for Bivariate frequency distribution, Probable error for Correlation Coefficients,Rank Correlation Co-efficient. | 3 |
| 5 | **Regression:** Definition of Regression, Regression lines, Regression Coefficients, Properties of regression Coefficients, and Fitting of regression lines and estimation for Bivariate frequency distribution | 3 |
| 6 | **Probability Theory:** Introduction, Random Experiment, Sample Space, Events, Complementary Events, Union and Intersection of Two Events, Difference Events, Exhaustive Events, Mutually Exclusive Events, Equally Likely Events, Independent Events, Mathematical & Statistical definition of Probability, Axiomatic definition of probability, Addition Theorem, Multiplication Theorem, Theorems of Probability, Conditional Probability, Inverse Probability. | 4 |

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| 7 | **Probability Distributions:**<br>**Binomial Distribution :**<br>Introduction, Probability mass function of Binomial distribution, Mean and Variance of Binomial distribution, Properties of Binomial Distribution, Uses of Binomial Distribution.<br>**Poisson Distribution :**<br>Introduction, Probability mass function of Poisson distribution, Mean and Variance of Poisson distribution, Properties of Poisson Distribution, Applications of Poisson Distribution.<br>**Normal Distribution :**<br>Introduction, Probability density function of Normal distribution, Properties of Normal distribution, Importance of Normal Distribution. | 6 |
| **Reference Books** | | |
| 1 | Fundamental of Applied Statistics By S.C. Gupta & V.K. Kapoor , Sultan Chand Publication | |
| 2 | Statistical Methods By S. P. Gupta, Sultan Chand Publication | |
| 3 | Business Statistics By Prof. H.R. Vyas & Others, B.S. Shah Prakashan | |
| 4 | Probability, Statistics and Random Process By T Veerarajan, TMH | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Research Methods & Statistical Applications | |
| **Subject code** | 2OS108 | |

**Learning Outcome:**

- Choose the right research method
- Choose the right statistical technique to be used with the research method
- Understand when to apply which statistical procedure
- Evaluate, infer, and understand a product, situation, services, or a treatment option through statistics
- Interpret statistical literature, research articles, and the claims made on the basis of statistics
- Make informed choices with respect to methodology and research design

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Research definition - meaning - purpose - importance of research - Motivation in research - types of research - [ a) theoretical research b) Analytical research] pure research - applied research - action research - Significance of research in social science - steps followed in research Scientific method - induction – deduction Research report- structure of report contents - steps in drafting - Layout of research report - styles of reporting - editing the final draft - Evaluation of final draft. | 4 |
| 2 | Research problem - sources of problem - formulation of research Problem - criteria in selection of problem - research questions - Importance of literature survey - research design - characteristic of Research design - steps in research design - types of research design | 3 |
| 3 | Sampling theory - objective of sampling theory - sample testing Techniques - types of sampling - simple random sampling method - Stratified random sampling technique - systematic sampling method - Cluster sampling method - multistage sampling method - sampling with Probability proportional to size method - convenience sampling method - Judgments sampling method - purposive sampling method - quota sampling Method steps in sampling design - characteristic of good sample design - Sample size - advantage & disadvantage of sampling | 4 |
| 4 | Hypothesis testing - meaning - importance of hypothesis testing – sources Of hypothesis - types of hypothesis - characteristic of hypothesis - Different forms - fundamentals of testing hypothesis - hypothesis testing And generalization - level of significance - error in hypothesis testing - Type of testing hypothesis - formulation of hypothesis - difficulties in the Formulation of hypotheses - review of literature standard error. Statistical analysis - measures of central tendency and average - Measures of dispersion - skew ness – kurtosis | 4 |
| 5 | Research methods source - historical - the case study - survey research - Experimental research - field investigation research – evaluation Research - action research - ex - post facto research – explanatory Research – exploratory | 3 |
| 6 | Research methods and statistics<br>Research methods or data collective - primary data meaning – secondary Data meaning - importance of data - types of data - characteristics of Quantitative data - characteristics of qualitative data - methods of data Collection - merit & limitation of data - interview method - questionnaire - Pre testing the questionnaire - a specimen questionnaire - data analysis - Data interpret - measurement & scaling – technique - techniques of forecasting – linear – non linear estimations - time series and forecasting – clustering – factor – discriminate data analysis – spatial analysis | 4 |
| 7 | Parametric tests - tests of significance for attributes - tests of Significance concerning means for large samples - test of significance For small samples - analysis of variance one way. Analysis of variance Two ways | 3 |
| 8 | Non parametric test - advantage of non- parametric test – disadvantages Of non- parametric tests - chi - square test - sign test - wilcoxon`s signed Rank test - waldwolfowitz runs test - krushallwallis test – friedman Test - mannwhiteny test. | 3 |
| 9 | Applications with Excel, Gretl, SPSS, Minitab, SYSTAT, STATISTICA | 2 |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Water Resource Management | |
| **Subject code** | 2OS110 | |

**Learning Outcome:**

- Various components of hydrologic cycle that affect the movement of water in the earth
- Various Stream flow measurements technique
- The concepts of movement of ground water beneath the earth
- The basic requirements of irrigation and various irrigation techniques, requirements of the crops
- Distribution systems for canal irrigation and the basics of design of unlined and lined irrigation canals design
- Basic components of river Training works.
- Apply math, science, and technology in the field of water resource Engineering.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction:** Elementary hydrology, hydrological cycle, application of hydrological cycleypes of water resources, conservation of water, water shade. | 4 |
| 2 | **Precipitation:** Types of precipitation, factor affecting precipitation, types of rain gauge (recording and non-recording), measurement. | 4 |
| 3 | **Infiltration:** Introduction,factor affecting infiltration and it's measurement. | 3 |
| 4 | **Runoff:** Runoff process, factors affecting runoff, methods of computation. | 3 |
| 5 | **Watersheds:** Introduction, Watersheds, Characteristics of watersheds, watershed development program and its objective, soil and water conservation technique. | 4 |
| 6 | **Hydraulic structure of storage:** types of dams, gravity dam earthen dam, weir, barrage, cross drainage work, water conveying system. | 4 |
| 7 | **Irrigation:** Definition, necessity, methods of irrigation, benefits of irrigation | 4 |
| 8 | **Floods:** Definition, Causes of floods, damages, methods of flood control, flood forecasting and warning. | 4 |
| | **FIELD VISIT:**<br>Field visits based on course content are suggested | |

**Reference Books**

| | |
|---|---|
| 1 | Hydrology and Water Resources Engineering by S. K. Garg |
| 2 | Irrigation and water power engineering by Dr. B. C. Punamiya |
| 3 | Engineering Hydrology - K. Subramanya |
| 4 | Hydrology by H. M. Raghunath |
| 5 | Hydrology and Water Resources Engineering by James & Lee |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Economics for Engineers | |
| **Subject code** | 2OS111 | |
| **Learning Outcome:** | | |
| ● Describe the role of economics in the decision making process and perform calculations in regard to interest formulas<br>● Estimate the Present, annual and future worth comparisons for cash flows<br>● Calculate the rate of return, depreciation charges and income taxes<br>● Enumerate different cost entities in estimation and costing<br>● Explain the importance of finance functions, financial ratios and solve related problems<br>● Explain the elements of budgeting and bench marking | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Basic Principles and Methodology of Economics. Demand/Supply – elasticity –Government Policies and Application. Theory of the Firm and Market Structure. Basic Macroeconomic Concepts (including GDP/GNP/NI/Disposable Income) and Identities for both closed and open economies. Aggregate demand and Supply (IS/LM). Price Indices (WPI/CPI), Interest rates, Direct and Indirect Taxes | 8 |
| 2 | Public Sector Economics –Welfare, Externalities, Labour Market. Components of Monetary and Financial System, Central Bank –Monetary Aggregates; Commercial Banks & their functions; Capital and Debt Markets. Monetary and Fiscal Policy Tools & their impact on the economy – Inflation and Phillips Curve. | 7 |
| 3 | Elements of Business/Managerial Economics and forms of organizations. Cost & Cost Control – Techniques, Types of Costs, Budgets, Break even Analysis, Capital Budgeting, Application of Linear Programming. Investment Analysis – NPV, ROI, IRR, Payback Period,Depreciation, Time value of money. Business Forecasting – Elementary techniques. Statements – Cash flow, Financial. Case Study Method. | 8 |
| 4 | Indian economy Brief overview of post independence period – plans. Post reform Growth, Structure of productive activity. Issues of Inclusion – Sectors, States/Regions, Groups of people (M/F), Urbanization. Employment–Informal, Organized, Unorganized, Public, Private. Challenges and Policy Debates in Monetary, Fiscal, Social, External sectors. | 7 |
| **Reference Books** | | |
| 1 | Mankiw Gregory N., “Principles of Economics”, Thompson Asia. | |
| 2 | V. Mote, S. Paul, G. Gupta, “Managerial Economics”, Tata McGraw Hill. | |
| 3 | Misra, S.K. and Puri, “Indian Economy”, Himalaya. | |
| 4 | Pareek Saroj , “Textbook of Business Economics”, Sunrise Publishers. | |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Supply Chain Management-Planning | |
| **Subject code** | 2OS112 | |

**Learning Outcome:**

- Develop an understanding of the importance of logistics in the formulation of the business strategy and the conduct of supply chain operations.
- Develop an in-depth understanding of logistics operating areas and their interrelationship.
- Strengthen integrative management analytical and problem-solving skills.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to Supply Chain- Supply chain systems, stages and decision phases andProcess view of supply chain; supply chain flows; examples of supply chains; competitive supply chain strategies; drivers for supply chain performance. | 6 |
| 2 | Designing the Supply Chain Network- Distribution Networking – role, design; Supply Chain Network – SCN- Role, factors; framework for design decisions. | 6 |
| 3 | Facility Location and Network Design- Models for facility location and capacity location; Impact of uncertainty on SCN – discounted cash flow analysis; evaluating network design decisions using decision trees; analytical problems. | 6 |
| 4 | Planning and Managing Inventories in a Supply Chain- Inventory concepts, trade Promotions; managing multi-echelon cycle inventory, safety inventory determination; impact of supply uncertainty aggregation and replenishment. | 6 |
| 5 | Sourcing, Transportation and Pricing Products-Role of sourcing, supplier- scoring and assessment, selection and contracts, design collaboration; role of transportation, models of transportation and designing transportation network; revenue management. | 6 |

**Text Books:**

| | |
|---|---|
| 1 | Sunil Chopra and Peter M, “Supply Chain Management”, Pearson publishing, 2001. |
| 2 | Blanchard, D., “Supply chain management”, Best practices. New Jersey: John Wiley & Sons. 2007. |

**Reference Books**

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|---|---|
| 1 | Hugos, M., “Essentials of supply chain management”, New Jersey: John Wiley & Sons, 2006,2nd edition. |
| 2 | Kim, B., “Supply chain management in the mastering business in As”. |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Introduction to Computer Technology | |
| **Subject code** | 2OS113 | |
| **Learning Outcome:** | | |
| ● Understand computer history and how it can relate to the future of computing and society.<br>● Understand the impacts of computers and artificial intelligence on individuals and on society; proactively decide how they would like computers and artificial intelligence to be incorporated into their future.<br>● Understand how computers, computer networks, and the Internet work so as to better utilize them in their lives and to the improvement of society.<br>● Understand and implement computer security concepts.<br>● Efficiently learn and use Microsoft Office applications. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction to Computer Systems:**<br>The Computer defined, Early history, Basic parts and structure of a computer, Categorizing Computers, Information Processing life cycle, Essential computer hardware, Essential computer software. | 4 |
| 2 | **Introduction to Office Automation:** Open Office, Text Document, Spread sheet, Presentation, Drawing, Database Formula | 4 |
| 3 | **Interacting with the Computer, Computer Organization:**<br>Keyboard, Mouse, Inputting data in other ways: Pen-based systems, data scanning devices, game controllers, voice recognition devices, microphone, visual input devices, Video and sound, Monitors, Printers, Plotters, Data projectors, Sound systems. | 4 |
| 4 | **Storage Device Concepts:**<br>Number systems, ASCII, BCD, CPU, Buses, Mother Board, Chip sets, Microprocessors.<br>Storage media, Floppy drive, Hard disks, Logical structure of hard disks and file systems, Optical media, CD-ROM, CD-R, CD-RW, DVD-ROM, Recordable DVD, Combo Drive, Blue-Ray, Magnetic Tape. Software, Custom-made Software, Shrunk-wrapped software, Types of operating system, Computer processing techniques, Functions of Operating Systems, Management of processor, memory, virtual storage, devices, and information, JCL, Examples of Operating Systems. | 4 |
| 5 | **Computer Networking** | 3 |
| 6 | **Introduction to Operating System** | 3 |
| 7 | **Types of Software:**<br>Application software, System Software, Computer programming tools | 3 |
| 8 | **Introduction to languages:**<br>High-level language, Assembly language, Low-level language | 2 |
| 9 | **Internet** | 3 |
| **Text Books:** | | |
| 1 | C: The Complete Reference, Herbert Schildt, McGrawHill | |
| **Reference Books** | | |
| 1 | Peter Norton: Introduction to Computers, 7th Edition, Tata McGraw Hill | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Entrepreneurship Development | |
| **Subject code** | 2OS114 | |
| **Learning Outcome:** | | |
| ● Have the ability to discern distinct entrepreneurial traits<br>● Know the parameters to assess opportunities and constraints for new business ideas<br>● Understand the systematic process to select and screen a business idea<br>● Design strategies for successful implementation of ideas<br>● Write a business plan | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Entrepreneurship**<br>Definition, requirements to be an entrepreneur, entrepreneur and entrepreneur, entrepreneur and manager, growth of entrepreneurship in India, women entrepreneurship, rural and urban entrepreneurship. | 5 |
| 2 | **Entrepreneurial Motivation**<br>Motivating factors, motivation theories-Maslow's Need Hierarchy Theory, McClelland's Acquired Need Theory, government's policy actions towards entrepreneurial motivation, entrepreneurship development programmes. | 5 |
| 3 | **Types of Enterprises and Ownership Structure:**<br>Small scale, medium scale and large scale enterprises, role of small enterprises in economic development; proprietorship, partnership, Ltd. companies and co-operatives: their formation, capital structure and source of finance. | 5 |
| 4 | **Projects:**<br>Identification and selection of projects; project report: contents and formulation, concept of project evaluation, methods of project evaluation: internal rate of return method and net present value method. | 5 |
| 5 | **Management of Enterprises**<br>Objectives and functions of management, scientific management, general and strategic management; introduction to human resource management: planning, job analysis, training, recruitment and selection, etc.; marketing and organizational dimension of enterprises; enterprise financing : raising and managing capital, shares, debentures and bonds, cost of capital; break- even analysis, balance sheet its analysis. | 5 |
| 6 | **Institutional Support and Policies:**<br>Institutional support towards the development of entrepreneurship in India, technical consultancy organizations, government policies for small scale enterprises | 5 |
| **Text Books:** | | |
| 1 | Ram Chandran, 'Entrepreneurial Development', Tata McGraw Hill, New Delhi | |
| 2 | Saini, J. S., 'Entrepreneurial Development Programmes and Practices' , Deep & Deep Publications (P), Ltd | |
| 3 | Khanka, S S. 'Entrepreneurial Development', S Chand & Company Ltd. New Delhi | |
| **Reference Books** | | |
| 1 | Peter Norton: IntrodBadhai, B 'Entrepreneurship for Engineers', Dhanpat Rai & co. (p) Ltd. | |
| 2 | Desai, Vasant, ' Project Management and Entrepreneurship', Himalayan Publishing House, Mumbai, 2002. | |
| 3 | Gupta and Srinivasan, 'Entrepreneurial Development', S Chand & Sons, New Delhi. | |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Career Development Program-I | |
| **Subject code** | 2OS116 | |
| **Learning Outcome:** | | |
| ● Apply sound principles of teaching, learning, advocacy and reflection<br>● Exhibit effective techniques which promote learning for all students regardless of race, culture, gender, age, creed or ability<br>● Display professionalism and ownership of professional growth and learning<br>● Extend collaboration to students, colleagues and the community | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Basics of Communication:**<br>Definition, Principles, Process, Functions, and Forms of communication (Formal – Informal, Verbal – Non-verbal, Electronic and Visual)<br>Barriers to Communication with Remedies<br>All eight Parts of Speech, Tenses, Active and passive Voice | **6** |
| 2 | **Introduction to Functional Grammar in English**<br>Verb Forms, Collocations, Homophones and Homonyms, Conjunctions, Abbreviations &Acronyms and Introduction to English Sounds | **6** |
| 3 | **Receptive Language Skills [Listening and Reading Skills]**<br>**A. Listening Skill:**<br>Definition and process of listening skill<br>Pre-requisites of effective listening<br>Modes of listening<br>Causes of poor listening<br>Tips for effective listening<br>Traits of a good listening<br>**B. Reading Skill**:<br>Definition and types of reading<br>Techniques for effective reading comprehension<br>Purposes of Reading | **6** |
| 4 | **Productive Language Skills (Written Communication)**<br>**Basic Writing Skills**<br>Significance of written communication for professionals<br>Fundamentals of good writing<br>Guidelines for effective writing – Selection of words<br>Improving Technical vocabulary<br>Framing sentences and composing paragraphs.<br>Precise writing<br>**Letter Writing**<br>Structure and layout of a business letter / emails<br>Types of business letters – inquiry, reply, complaint and adjustment letter, salespromotion, Job application with resume<br>Error free writing, Improving word power and fast writing<br>**Advertisement / PR Writing**<br>Advertisement drafts with special reference to engineering & technology<br>Writing PR drafts for events & activities | **6** |

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|---|---|---|
| 5 | **Learning Basic Etiquettes**<br>What is Etiquette<br>Why Etiquettes are needed?<br>Dressing and Grooming Etiquette<br>Wishing, Meeting and Parting Etiquette<br>Standing Tall Etiquette<br>Interview Ethics Etiquette<br>Being Polite Etiquette<br>General Office Manners Etiquette<br>Telephone Etiquette / Mobile Etiquette | **6** |
| **Reference Books** | | |
| 1 | Business Communication by V. K. Jain and OmprakashBiyani (S. Chand & Company) | |
| 2 | A Communicative Grammar of English by Geoffery Leech and Fan Svartvik (Pearson Longman) | |
| 3 | Oxford English for Careers: Technology 1: Student's Book by Eric Glendinning | |
| 4 | English for Specific Purposes (Resource Books for Teachers) by Keith Harding | |
| 5 | Word Power Made Easy by Norman Lewis | |
| 6 | English Grammar by Wren & Martin | |
| 7 | Nautical Miles by IMS | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Career Development Program-II | |
| **Subject code** | 2OS117 | |
| **Learning Outcome:** | | |
| On successful completion of the course the students will be able to:<br>● Develop and Present Professional Presentations<br>● Develop discussion skills and further participate in discussions<br>● Develop Reasoning Skills in Discussion<br>● Plan primary CV with a view to develop it further in upcoming semesters<br>● Asses himself/herself in various career related assessments | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Learning Presentation Skills**<br>What is Presentation, Key elements of Presentation, Presentation Delivery, Rules of a professional Presentation, Positive and Nervous making Factors, Tips for dynamic Deliveries, Dealing with questions in Presentation | 4 |
| 2 | **Mock Presentation**<br>Delivering Presentation | 4 |
| 3 | **Learning Group Discussion Skills**<br>What is Group Discussion?, Personality Qualities in Group Discussion, Need of Group Discussion in Industry / Organization, Organization's Group Discussion Perspective<br>Aspects of Group Discussion, Types of Topics, Managing Score Cards in Group, Discussion, Techniques to Imitate Group Discussion, Do's and Don'ts in Group Discussion, Positive and Negative factors in Group Discussion | 6 |
| 4 | **Profile Development**<br>Learning CV Building Skills, Planning Profile Building Factors, Execution Strategies for Profile Building | 4 |
| 5 | **Personality Skills**<br>Learning through Professional Role Plays, Learning Situation Reactions, Picture & Word Perceptions | 4 |
| 6 | **Personality Assessments**<br>Career Advancement Assessment, Attention Disorder Assessment, Comm. Skill Assessment, Employability Skills Assessment | 4 |
| 7 | **Mock Group Discussions**<br>Group Discussion on Factual & Abstract Topics | 4 |
| **Reference Books** | | |
| 1 | Business Communication by V. K. Jain and OmprakashBiyani (S. Chand & Company) | |
| 2 | A Communicative Grammar of English by Geoffery Leech and Fan Svartvik (Pearson Longman) | |
| 3 | Oxford English for Careers: Technology 1: Student's Book by Eric Glendinning | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Professional Skill Building-I | |
| **Subject code** | 2OS118 | |

**Learning Outcome:**

- Face One- to-One Interview
- Present oneself [Personality Development]
- Solve various questions based on quantitative ability, logical reasoning and data interpretation.
- Learn skills involved in developing enriching interpersonal relationships
- Handle emotions of largely self and others
- Understand the necessity and importance of working together as a team
- Deal with stress
- Able to create a first-hand bio-data for self

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Higher Quantitative Abilities<br>Problems on Time and Work<br>Problems on Allegation and Mixtures<br>Problems on Partnership<br>Problems on Set Theory | 6 |
| 2 | Non Verbal Logical Reasoning<br>Coding – Decoding<br>Blood Relations | 4 |
| 3 | Data Interpretations<br>Tables<br>Pie Charts<br>Bar Chart<br>Line Chart | 4 |
| 4 | Life Skills<br>Learning Time Management Skills<br>Learning Team Building Skills<br>Learning Stress Management Skills | 6 |
| 5 | Personality Development<br>Profile [CV] Building [Workshop] | 4 |
| 6 | Soft Skills<br>Learning Interview Facing Skills | 2 |
| 7 | Mock Interviews | 4 |

**Text books**

| | |
|---|---|
| 1 | Verbal and Non-Verbal reasoning by R S Agrawal |

**Reference Books**

| | |
|---|---|
| 1 | Quantitative abilities by Arun Sharma |
| 2 | The Magic of Thinking Big by David Schwartz |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Professional Skill Building-II | |
| **Subject code** | 2OS119 | |
| **Learning Outcome:** | | |
| On successful completion of the course the students will be able to:<br>• Solve various questions based on quantitative ability and logical reasoning.<br>• Handle oneself in a given professional setting though effective communication skills<br>• Face HR and Behaviour Interviews<br>• Write a professional CV and further be able to plan the profile development for remaining course<br>• Ability to follow and execute the code of conduct in a professional environment<br>• Stand tall in corporate with professional etiquettes | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Quantitative Abilities<br>Problems on Permutations and Combinations, Problems on Probability<br>Problems on Probability<br>Problems on Stocks and Shares<br>Problems on Calendar<br>Problem Square Root and Cube Root<br>Problem Area and Volume | 8 |
| 2 | Logical Reasoning<br>Logical Deductive Reasoning<br>Statement and Argument | 6 |
| 3 | Communication Skills<br>Learning Communication through Role Plays<br>Learning Persuasion and Convincing skills | 6 |
| 4 | Life Skills [Corporate Skills]<br>Campus to Company | 4 |
| 5 | Personality Development<br>Learning HR Skills<br>Profile [CV] Building Workshop | 4 |
| 6 | Learning Professional Etiquettes | 2 |
| **Reference Books** | | |
| 1 | Quantitative abilities by Arun Sharma | |
| 2 | Verbal and Non-Verbal reasoning by R S Agrawal | |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Career Development Program | |
| **Subject code** | 2OS121 | |
| **Learning Outcome:** | | |
| ● Apply sound principles of teaching, learning, advocacy and reflection<br>● Exhibit effective techniques which promote learning for all students regardless of race, culture, gender, age, creed or ability<br>● Display professionalism and ownership of professional growth and learning<br>● Extend collaboration to students, colleagues and the community | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | Hrs |
| 1 | **Basics of Communication:**<br>Definition, Principles, Process, Functions, and Forms of communication (Formal – Informal, Verbal – Non-verbal, Electronic and Visual)<br>Barriers to Communication with Remedies<br>All eight Parts of Speech, Tenses, Active and passive Voice | 4 |
| 2 | **Introduction to Functional Grammar in English**<br>Verb Forms, Collocations, Homophones and Homonyms, Conjunctions, Abbreviations &Acronyms and Introduction to English Sounds | 4 |
| 3 | **Receptive Language Skills [Listening and Reading Skills]**<br>Listening Skill, Reading Skill | 4 |
| 4 | **Productive Language Skills (Written Communication)**<br>Basic Writing Skills, Letter Writing, Advertisement / PR Writing | 4 |
| 5 | **Learning Presentation Skills**<br>What is Presentation, Key elements of Presentation, Presentation Delivery, Rules of a professional Presentation, Positive and Nervous making Factors, Tips for dynamic Deliveries, Dealing with questions in Presentation<br>**Mock Presentation**<br>Delivering Presentation | 4 |
| 6 | **Learning Group Discussion Skills**<br>What is Group Discussion?, Personality Qualities in Group Discussion, Need of Group Discussion in Industry / Organization, Organization's Group Discussion Perspective<br>Aspects of Group Discussion, Types of Topics, Managing Score Cards in Group, Discussion, Techniques to Imitate Group Discussion, Do's and Don'ts in Group Discussion, Positive and Negative factors in Group Discussion<br>**Mock Group Discussions**<br>Group Discussion on Factual & Abstract Topics | 6 |
| 7 | **Profile Development**<br>Learning CV Building Skills, Planning Profile Building Factors, Execution Strategies for Profile Building<br>**Personality Assessments**<br>Career Advancement Assessment, Attention Disorder Assessment, Comm. Skill Assessment, Employability Skills Assessment | 4 |

| Reference Books | |
|---|---|
| 1 | Business Communication by V. K. Jain and OmprakashBiyani (S. Chand & Company) |
| 2 | A Communicative Grammar of English by Geoffery Leech and Fan Svartvik (Pearson Longman) |
| 3 | Oxford English for Careers: Technology 1: Student's Book by Eric Glendinning |
| 4 | English for Specific Purposes (Resource Books for Teachers) by Keith Harding |
| 5 | Word Power Made Easy by Norman Lewis |
| 6 | English Grammar by Wren & Martin |
| 7 | Nautical Miles by IMS |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | |
| **Programme** | B.Tech |
| **Subject Name** | Organizational Behaviour |
| **Subject code** | 2OS131 |

**Learning Outcome:**

At the end of the course, Students will be able to-

- Comprehend and apply principles of organizational dynamics relating to systems, culture, structure and change processes
- Develop critical analytical skills that will help them diagnose situations pertaining to human behavior and generate effective solutions for the same
- Comprehend performance behavior at individual and group levels
- Develop the ability to lead and motivate others to succeed

**Syllabus – Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Organizational Behaviour:** Concept of Organizational Behaviour(OB), History, Nature and scope of OB, Key elements in OB, Interdisciplinary contribution to OB, Managerial Roles | 03 |
| 2 | **Individual Behaviour, Values & Personality:** Concept of Individual Differences, Values commonly studied across culture, Fundamentals and Determinants of Personality, Big Five Dimensions, Personality Theory, Personality Traits | 03 |
| 3 | **Learning & Perception:** Fundamentals of Learning, Learning Theories-Classical Conditioning Theory, Operant Conditioning Theory, Social Learning Theory, Behaviour Modification, Definition of Perception, Perceptual Process, Common Perceptual Errors | 05 |
| 4 | **Motivation:** Basic concept of Motivation, Theories of Motivation-Maslow, Herzberg's Two Factor Theory, ERG, McClelland, Equity and Vroom's Expectancy Theory | 04 |
| 5 | **Leadership:** Introduction, Leadership Theories-Trait Theories, Behavioural Theories and Situation Theories | 06 |
| 6 | **Group Dynamics:** Defining and classification groups, Stages of group development, Group Properties-Roles, Norms, Status, Size and Cohesiveness, Group Decision making | 02 |
| 7 | **Managing Change in Organization:** Definition, Forces of Change, Causes for Resistance to Change, Overcoming Resistance to change, Force Fields Analysis and Kotter's Model for Change | 04 |
| 8 | **Organizational Culture:** Meaning, Strong Culture Vs. Weak Culture, Creating & sustaining Culture, Socialization | 03 |

**References**


| | |
|---|---|
| 1 | Robbins, S.P.Judge, T.A. &, Sanghi, Seema. Organizational Behavior, Person |
| 2 | Pareek, U, Understanding Organizational Behavior, Oxford University Press |
| 3 | Luthans, F. Organizational Behaviour, Tata McGraw Hill |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Research Ethics | |
| **Subject code** | 2OS132 | |

**Learning Outcome:**

At the end of the course, Students will be able to-

- To be able to describe and apply theories and methods in ethics and research ethics
- To acquire an overview of important issues in research ethics, like responsibility for research, ethical vetting, and scientific misconduct
- To acquire skills of presenting arguments and results of ethical inquiries

**Syllabus – Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to ethics and research ethics**. Overview of theories and methods in ethics and research ethics. | 06 |
| 2 | **How to handle data.** The meaning of secrecy and confidentiality | 05 |
| 3 | **Good research practice, research integrity and scientific misconduct**. Criteria and principles for good research practice. Meaning of scientific misconduct and fraud. Cases and procedures for establishing misconduct, preventions and sanctions | 07 |
| 4 | **Responsibility for the results of research**. Responsibility for research and the results and consequences of research. The limits of responsibility. Risks and the precautionary principle. | 06 |
| 5 | **Ethical vetting of research.** Different kinds of vetting of research, procedures and ethical principles guiding research on human beings and animals. | 06 |

**References**


| | |
|---|---|
| 1 | Collste, G, Introduction to Ethics |
| 2 | De Peol & Royakkers 2011, Ethics, Technology and Engineering, 8.3 The Engineers Responsibility for Safety (pp 223-238) |
| 3 | Good research practice, Vetenskapsrådets rapportserie, 3:2011 |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Resume Writing | |
| **Subject code** | 2OS133 | |
| **Learning Outcome:** | | |
| At the end of the course, Students will be able to-<br>● Explain the concept of Resume, Report and Proposal writing. plain Concept<br>● Describe the types and elements of Resume, Report and Proposal writing<br>● Draft suitable and effective Resume, Report and Proposal writing. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hr** |
| 1 | **Resume Writing**: Concept of Résumé Writing, Types of Resumes, The Chronological Resume, The Functional Resume, The Combination Resume, Curricula Vitae, Making the Choice, Bio-data: Difference, Preparing to Write Your Resume, Elements of Résumé, Practice session | 09 |
| 2 | **Presentation of Resume:** , Presentation, Professional Objective and Education Section, Take an Objective Look at Your Experience, Skills Section, Honors and Awards, Activities and Interests, Bolstering Your Resume, Polishing Your Resume, Cover Letters, Resumes in the Digital Age, Practice session | 09 |
| 3 | **Writing Reports and Proposals: Writing Reports,** Concept of Report Writing<br>Elements of Report, Types of Reports, Dos and Don'ts of Report Writing, Formats for Report, Examples | 06 |
| 4 | **Proposal Writing:** Concept of Proposal Writing, Characteristics of Proposal, Types of Proposals, Elements of Proposal Writing, Purpose of a Research Proposal, Examples | 06 |
| **References** | | |
| 1 | Kulkarni, R. A. (2001). A Handbook of Communication Skills in English. Kolhapur: PhadakePrakashan. | |
| 2 | http://www.howtowritethereport.com/report-writing-basics/ | |
| 3 | https://www.fundsforngos.org/how-to-write-a-report/introduction-to-reportwriting/<br>https://ors.ou.edu/report/type.html | |

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|---|---|---|
| FACULTY OF ENGINEERING & TECHNOLOGY | | |
| **Programme** | B.Tech | |
| **Subject Name** | Pattern Recognition and Image Analysis | |
| **Subject code** | 2OS134 | |

**Learning Outcome:**

At the end of the course, Students will be able to-

- Aunderstand Basics of Image formation and transformation using sampling and quantization
- Understand different types signal processing techniques used for image sharpening and smoothing
- Perform and apply compression and coding techniques used for image data
- Understand the nature and inherent difficulties of the pattern recognition problems
- Understand concepts, trade-offs, and appropriateness of the different feature types and classification techniques such as Bayesian, maximum-likelihood, etc
- Select a suitable classification process, features, and proper classifier to address a desired pattern recognition problem.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Image Processing:** Image formation, image geometry perspective and other transformation, stereo imaging elements of visual perception. Digital Image-sampling and quantization serial & parallel Image processing. | 05 |
| 2 | **Image Restoration:** Image Restoration-Constrained and unconstrained restoration Wiener filter , motion blur remover, geometric and radiometric correction Image data compression-Huffman and other codes transform compression, predictive compression two tone Image compression, block coding, run length coding, and contour coding. | 05 |
| 3 | **Segmentation Techniques:** Segmentation Techniques-thresh holding approaches, region growing, relaxation, line and edge detection approaches, edge linking, supervised and unsupervised classification techniques, remotely sensed image analysis and applications, Shape Analysis – Gestalt principles, shape number, moment Fourier and other shape descriptors, Skelton detection, Hough trans-form, topological and texture analysis, shape matching. | 05 |
| 4 | **Pattern Recognition:** Basics of pattern recognition, Design principles of pattern recognition system, Learning and adaptation, Pattern recognition approaches, Mathematical foundations – Linear algebra, Probability Theory, Expectation, mean and covariance, Normal distribution, multivariate normal densities, Chi squared test. | 05 |
| 5 | **Statistical Patten Recognition**<br>Bayesian Decision Theory, Classifiers, Normal density and discriminant functions, Parameter estimation methods: Maximum-Likelihood estimation, Bayesian Parameter estimation, Dimension reduction methods – Principal Component Analysis (PCA), Fisher Linear discriminant analysis, Expectation-maximization (EM), Hidden Markov Models (HMM),Gaussian mixture models. | 05 |

**References**


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|---|---|
| 1 | Digital Image Processing – Ganzalez and Wood, Addison Wesley, |
| 2 | Pattern Recognition and Machine Learning – C. M. Bishop, Springer, |
| 3 | Digital Picture Processing – Rosenfeld and Kak, vol.I & vol.II, Academic, |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Personality Development | |
| **Subject code** | 2OS136 | |

**Learning Outcome:**

At the end of the course, Students will be able to-

- Nurture a deep sense and understanding of personality development, soft skills and interpersonal relationship for overall self-development
- Realize the role of technology in personality development and the importance of time and stress management
- Develop and exhibit a balanced attitude in life and learn to handle failures

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Personality Development:** Define personality, determinants of personality development, types of personalities, personality traits, developing effective habits, emotional intelligence, manners and etiquettes | 03 |
| 2 | **Attitude:** Define attitude, factors affecting attitudes, positive attitude & advantages, negative attitude & disadvantages, ways to develop positive attitude | 03 |
| 3 | **Habits:** Habit: guiding principles, identifying good and bad habits, breaking bad habits, forming habits of success, goal setting, addiction | 03 |
| 4 | **Digital Etiquettes:** Use of ICT in day-to-day management, effective use of social media, e-mail etiquette netiquette, useful electronic gadgets and mobile applications | 03 |
| 5 | **Communication Skills**: Self-confidence, effective reading/writing/listening/communication skills, Overcoming stage fear, art of professional presentation, role of body language, use of audio & visuals in presentations, Negotiation Skills | 04 |
| 6 | **Time and Stress Management:** Time as a Resource, Identify Important Time Wasters, Techniques for better Time Management, Introduction to Stress, Causes of Stress, Results of Stress, Managing Stress | 03 |
| 7 | **Facing Failures:** Factors affecting failures, Learning from failures, overcoming failures, power of faith, practicing faith | 03 |
| 8 | **Interpersonal Relationship:** Defining interpersonal relationship. Human perceptions, understanding people, types of interpersonal relationships, factors affecting interpersonal relationship, tips to improve interpersonal relations, conflict resolution | 03 |
| 9 | **Art of Networking:** Grooming, Dining etiquettes, Cross-cultural etiquettes, Cross culture intelligence | 05 |

**References**


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|---|---|
| 1 | Dorch Patricia, What Are Soft Skills? New York: Execu Dress Publishers |
| 2 | Kamin Maxine, Soft Skills Revolution: A Guide for Connecting with Compassion for Trainers, Teams, and Leaders, Washington, DC: Pfeiffer & Company |
| 3 | Klaus Peggy, Jane Rohman & Molly Hamaker, The Hard Truth about Soft Skills. London: Harper Collins |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Numerical Methods | |
| **Subject code** | 2OS137 | |

**Learning Outcome:**

At the end of the course, Students will be able to-

- Understand the basic concepts and techniques of solving algebraic and transcendental equations.
- Appreciate the numerical techniques of interpolation and error approximations in various intervals in real life situations.
- Apply the numerical techniques of differentiation and integration for engineering problems.
- Understand the knowledge of various techniques and methods for solving first and second order ordinary differential equations.
- Solve the partial and ordinary differential equations with initial and boundary conditions by using certain techniques with engineering applications.

**Syllabus - Theory**

| Unit | Content | Hr |
|---|---|---|
| 1 | **Solution Of Equations And Eigenvalue Problems**: Solution of algebraic and transcendental equations, Fixed point iteration method, Newton Raphson method, Solution of linear system of equations, Gauss elimination method, Pivoting, Gauss Jordan method, Iterative methods of Gauss Jacobi and Gauss Seidel, Eigen values of a matrix by Power method and Jacobi's method for symmetric matrices. | 06 |
| 2 | **Interpolation And Approximation:** Interpolation with unequal intervals, Lagrange's interpolation, Newton's divided difference interpolation, Cubic Splines, Difference operators and relations, Interpolation with equal intervals, Newton's forward and backward difference formulae. | 06 |
| 3 | **Numerical Differentiation And Integration:** Approximation of derivatives using interpolation polynomials, Numerical integration using Trapezoidal, Simpson's 1/3 rule, Romberg's Method, Two point and three point Gaussian quadrature formulae, Evaluation of double integrals by Trapezoidal and Simpson's 1/3 rules. | 06 |
| 4 | **Initial Value Problems For Ordinary Differential Equations:** Single step methods, Taylor's series method, Euler's method, Modified Euler's method, Fourth order Runge - Kutta method for solving first order equations, Multi step methods - Milne's and Adams, Bash forth predictor corrector methods for solving first order equations. | 06 |
| 5 | **Boundary Value Problems In Ordinary And Partial Differential Equations:** Finite difference methods for solving second order two, point linear boundary value problems, Finite difference techniques for the solution of two dimensional Laplace's and Poisson's equations on rectangular domain, One dimensional heat flow equation by explicit and implicit (Crank Nicholson) methods, One dimensional wave equation by explicit method. | 06 |

**References**


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|---|---|
| 1 | Burden, R.L and Faires, J.D, "Numerical Analysis", 9th Edition, Cengage Learning, 2016 |
| 2 | Grewal, B.S., and Grewal, J.S., "Numerical Methods in Engineering and Science", Khanna Publishers, 10th Edition, New Delhi, 2015 |
| 3 | Brian Bradie, "A Friendly Introduction to Numerical Analysis", Pearson Education, Asia, New Delhi, 2007 |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Introduction to Literature | |
| **Subject code** | 2OS138 | |
| **Learning Outcome:** | | |
| At the end of the course, Students will be able to-<br>● Analyse the importance of literature and art as they relate to their socio-cultural context and to their "universal" appeal.<br>● Perform close textural analysis as a means of identifying and deciphering the aesthetic, political, and cultural importance of literature as a means of culture production.<br>● Demonstrate analytic and oral skills related to interpretation of different artistic and literary genres. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hr** |
| 1 | **Nature of Literature:** Literature as a Humanistic Experience Definitions: (i) Humanities: concern with culture, values, ideologies (ii) Literature: Concepts of imitation, expression, intuition & imagination | 06 |
| 2 | **Themes of Literature:** Major Themes of Literature: Nature, Science, Selfhood, Love, Rebellion | 06 |
| 3 | **The Language of Literature:** Modes of literary and non-literary expression. The concepts of Figurative language, imagery, symbolism, style. | 07 |
| 4 | **Forms of Literature:** Prose Narratives( short stories & novels), Poetry, Drama and Essays<br>1. On Love by Francis Bacon(Essay)<br>2. The Origin of Species by Charles Darwin (Essay)<br>3. The Monkey's Paw by W W Jacobs (Short Story)<br>4. Night of the Scorpion, Nissim Ezekiel (Poem)<br>5. An Introduction. Kamala Das (Poem)<br>6. Little Red-Cap, by Carol Ann Duffy(Poem)<br>7. Ulyssesm Alfred Lord Tennyson(Poem)<br>8. If you forget me, Pablo Neruda(Poem)<br>9. If, Rudyard Kipling(Poem)<br>10. Bury the Dead, Irwin Shaw(Play)<br>11. The Old Man and the Sea, Ernest Hamingway(Novel)<br>12. A Critical History of English Literature, David Daiches, Allied Publishers | 11 |
| **References** | | |
| 1 | David Murdoch(ed.). The Siren's Song: An Anthology of British and American Verse, Orient Longman | |
| 2 | Bury the Dead, Irwin Shaw(Play) | |
| 3 | The Old Man and the Sea, Ernest Hamingway(Novel) | |

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|---|---|---|
| FACULTY OF ENGINEERING & TECHNOLOGY | | |
| **Programme** | B.Tech | |
| **Subject Name** | Introduction to Econometrics | |
| **Subject code** | 2OS139 | |
| **Learning Outcome:** | | |
| At the end of the course, Students will be able to-<br>● Interpret the various statistical tools and techniques for econometric model building and testing<br>● Apply econometric aspects in select cases of economic decision making<br>● Evaluate empirical research and develop econometric reporting | | |
| **Syllabus – Theory** | | |
| **Unit** | **Content** | **Hr** |
| 1 | **Basic Econometric Concepts:** Meaning and methodology of Econometrics, Understanding mathematical models and econometric models, Revision of statistical concepts – normal distribution – small and large sample tests, F-test | 03 |
| 2 | **Data sources, Data base and Data Structure:** cross sectional data time, series data, pooled data, panel data | 03 |
| 3 | **The simple Regression Model**: Regression Analysis, regression and correlation, two variable regression model, the problem of estimation, Classical Linear Regression model – CLRM, assumptions underlying Ordinary Least Square (OLS) – standard errors – properties of least squares estimation – The Guess-Markov Theorem | 03 |
| 4 | **Multiple Regression Analysis**: The multivariate regression analysis, The problem of estimation, interpretation of multiple regression model, OLS estimator, Maximum Likelyhood Estimator, $R^2$ and adjusted $R^2$ the problem of inference | 03 |
| 5 | **Hypothesis Testing:** Hypothesis testing and prediction using multiple regression analysis, Functional forms and interpretations | 03 |
| 6 | **Important Problems in Econometric Model Building and Testing:** Violations of classical assumpations, Nature of multicollinearity, estimation in the presence of multicollinearity, consequences of multicollinearity, remedial measures, Rule of Thumb procedures, Nature of hetroscedasticity, estimation in the presence of hetroscedasticity, consequences of hetroscedasticity, Detection – informal and formal methods, remedial measures Nature of autocorrelation, OLS in the presence of autocorrelation, Detecting autocorrelation – Durbin Watson Test and Breusch Godfrey Test (BG) | 05 |
| 7 | **Econometric Reporting:** Evaluating the findings of empirical research – sign of coefficient of independent variables, interpretation of p-value and $R^2$ and F statistic probability value – a measure of goodness of fit of the model | 03 |
| 8 | **Applications and Cases:** testing of hypothesis, prediction and forecasting, business policy and planning, cases – consumption function, demand function and production function | 07 |
| **References** | | |
| 1 | Gujarati N Damodar & Dawn C Porter, Basic Econometrics, McGrew Hill International | |
| 2 | Dougherty Christopher, Introduction of Econometrics, Oxford University Press | |
| 3 | Baltagi H Badai, Econometries – Springer International | |
| 4 | Rao P and R.L. Miller, Applied Econometrics Prentice Hall of India LTD, New Delhi | |
| 5 | Klein L. R. , An Introduction to Econometrics, Prentice-Hall of India Ltd. | |
| 6 | Goldberger A. S.,Topics in Regression Analysis, Macmillam, New York | |
| 7 | Dilip M. Nachane, Econometrics: Theoretical Foundations and Empirical Perspectives Oxford University Press India. | |
| 8 | Levin L Richard and Rubin S Davide Statistics for Management, Prentice Hall, Pearson Brown | |

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| FACULTY OF ENGINEERING & TECHNOLOGY | |
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| **Programme** | M.Tech |
| **Subject Name** | Engineering Law |
| **Subject code** | 2OS140 |

**Learning Outcome:**

At the end of the course, Students will be able to-

- Gain experience in team leadership and develop leadership skills.
- Understand the importance of legal accountability in management or practice of engineering.
- Understand how to implement necessary legal procedures and processes while delivering a compliant proposal.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Financial Issues:** Understanding Financial Statements, Understanding Financial Ratios and Capital Markets, How Time and Interest Affect Money, Present Worth Analysis, Rate of Return Analysis, Breakeven and Replacement Analysis; Depreciation and Taxes | 05 |
| 2 | **Introduction:** Sources of law regulating engineers including the, legislative, judicial and regulatory systems | 04 |
| 3 | **Legal and Administrative System:** The legal system and legislative, judicial and administrative systems, criminal and civil law, etc. | 05 |
| 4 | **Contract introduction:** principles of contract formation, Contract parties, contract forms and purposes, effect of illegality, performance and breach, Intentional torts and principles of liability, Negligence and Strict Liability, Insurance and Bonds | 08 |
| 5 | **Engineering Ethics** | 06 |
| 6 | **Case Study** | 02 |

**References**


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|---|---|
| 1 | Suresh T. Viswanathan: The Indian Cyber Laws, Bharat Law House, New Delhi-88 |
| 2 | BL Wadehra: Patents, Trademarks, Designs and Geological Indications.Universal Law Publishing - LexisNexis. |
| 3 | P. Narayan: Intellectual Property Law, Eastern Law House, New Delhi |
| 4 | Executive programme study material Company Law, Module II, by ICSI (The Institute of Companies Secretaries of India) (Only relevant sections i.e., Study 1, 4 and 36).https://www.icsi.edu/media/webmodules/publications/Company%20Law.pdf |
| 5 | Handbook on e-Governance Project Lifecycle, Department of Electronics & Information Technology, Government of India, https://www.meity.gov.in/writereaddata/files/eGovernance_Project_Lifecycle_Participant_Handbook-5Day_CourseV1_20412.pdf |
| 6 | Companies Act, 2013 Key highlights and analysis by PWC. https://www.pwc.in/assets/pdfs/publications/2013/companies-act-2013-key-highlights-andanalysis.pdf |

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|---|---|---|
| FACULTY OF ENGINEERING & TECHNOLOGY | | |
| **Programme** | B.Tech | |
| **Subject Name** | Introduction to Robotics | |
| **Subject code** | 2OS141 | |
| **Learning Outcome:** | | |
| After successful completion of the course, student will be able to<br>● Understand the concept of robotic and its applications in engineering.<br>● Carryout the coordinate transformation with respect to robotic systems.<br>● Formulate the mathematical relations for forward and inverse kinematic analysis and trajectory generation of robotic manipulator.<br>● Determine forces at end effector and select the actuator and sensor for a robot in a specific job task. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Robot technology**<br>Fundamentals of Robots: Introduction, fundamentals of robot technology, classification, applications, Systems overview of a robot, basic components, control system and components. | 4 |
| 2 | **Robot motion analysis and control**<br>Robot arm kinematics, forward & inverse kinematics solutions, Trajectory design, Introduction to robot arm dynamics, introduction to mobile robots. | 6 |
| 3 | **Actuators and sensors in Robot**<br>AC/DC motors, stepper motors and servo motor, Internal sensors, Position, Velocity, Acceleration, Proximity sensors, Touch and Slip sensors, Force and Torque sensors, External sensors, contact and non-contact type like Vision, ranging, laser, acoustic, tactile etc. sensor selection and control. | 4 |
| 4 | **Types of End Effectors and Design**<br>End effectors, Classification, Force analysis and Gripper design. | 4 |
| 5 | Robot Programming issues, optimization position definitions and interpolation language command, data object command, motion commands, gripper command, tool commands, sensors command, other command, Writing programs for different tasks. | 6 |
| 6 | Industry 4.0: Technologies involved, Implementation and Potential<br>Non-Industrial Robots: Technologies involved with Domestic Robots, Humanoids, Nature Exploration Robot and other futuristic design. | 6 |
| **References** | | |
| 1 | Richard D. Klafter, Thomas A Chmielewski and Michael Negin, Robotics Engineering: An integrated approach, Prentice Hall | |
| 2 | Mittal and Nagrath , Robotics & Control , Tata McGraw-Hill Publishing Company Ltd., New Delhi | |
| 3 | John Craig , Introduction to Robotics, mechanics and control, Pearson Education, New Delhi | |
| 4 | M.P. Groover, Mitchell Weiss, Roger N. Nagel & Nicholas Godfrey, Industrial Robotics. Tata McGraw Hill Education Pvt. Ltd | |
| 5 | Ashitava Ghoshal, Robotics Fundamental Concepts & Analysis, Oxford University Press. | |
| 6 | Robotics: Control, Sensing Vision and Intelligence: K.S. Fu, R.C. Gonzalez, C.S.g Lee, McGraw Hill | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Industrial Safety & Maintenance Engineering | |
| **Subject code** | 2OS142 | |
| **Learning Outcome:** | | |
| Upon completion of this course, students will acquire knowledge about<br>• Understand the methods for prevention of accident and protective method for industry.<br>• Understand the industrial laws, regulations and source models.<br>• Maintenance planning for equipment and industry.<br>• Apply the methods of prevention policies and monitoring. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction:** Safety Programs, Engineering Ethics, Accident and Loss Statistics, Acceptable Risk, Public Perceptions, Nature of the Accident Process, Inherent Safety, Seven Significant Disasters | 4 |
| 2 | **Accident preventions, protective equipment and the Acts:**<br>Personal protective equipment, Survey the plant for locations and hazards, Part of body to be protected, Education and training in safety, Prevention causes and cost of accident, Housekeeping, First aid, Fire fighting equipment, Accident reporting, Investigations, Industrial psychology in accident prevention, Safety trials. | 6 |
| 3 | **Safety Acts:**<br>Features of Factory Act, Introduction of Explosive Act, Boiler Act, ESI Act, Workman's compensation Act, Industrial hygiene, Occupational safety, Diseases prevention, Ergonomics, Occupational diseases, stress, fatigue, health, safety and the physical environment, Engineering methods of controlling chemical hazards, safety and the physical environment, Control of industrial noise and protection against it, Code and regulations for worker safety and health. | 6 |
| 4 | **Principles and practices of Maintenance planning:**<br>Basic Principles of maintenance planning – Objectives and principles of planned maintenance activity – Importance and benefits of sound Maintenance systems – Reliability and machine availability, Equipment Life cycle, Measures for Maintenance Performance: Equipment's breakdowns, Mean Time Between Failures, Mean Time To Repair, Factors of availability, Maintenance organization, Maintenance economics. | 4 |
| 5 | **Maintenance policies and preventive maintenance:**<br>Maintenance categories – Comparative merits of each category – Preventive maintenance, Maintenance schedules: Repair cycle, Principles and methods of lubrication, Fault Tree Analysis, Total Productive Maintenance: Methodology and Implementation, | 6 |
| 6 | **Condition Monitoring:**<br>Condition Monitoring: Cost comparison with and without Condition Monitoring, On load testing and off load. Methods and instruments for Condition Monitoring, Temperature sensitive tapes, Pistol thermometers, wear-debris analysis, noise vibration and harshness analysis of machines | 4 |
| **Text Books** | | |
| 1 | Srivastava, S.K., "Industrial Maintenance Management", S. Chand and Co. | |
| 2 | Bhattacharya, S.N., "Installation, Servicing and Maintenance", S. Chand and Co. | |
| 3 | Willie Hammer, "Occupational Safety Management and Engineering", Prentice Hall | |
| **Reference Books** | | |
| 1 | Garg, M.R., "Industrial Maintenance", S. Chand and Co. | |
| 2 | Davies, "Handbook of Condition Monitoring", Chapman and Hall | |
| 3 | Ray Asfahl, C., "Industrial Safety and Health Management", 5th Edition, Prentice Hall | |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | ENERGY AND ENVIRONMENT | |
| **Subject code** | 2OS143 | |

**Learning Outcome:**

On successful completion of the course, the students will be:

- Summarize the basic concepts of energy, its distribution and general Scenario.
- Explain different energy storage systems, energy management, audit and economic analysis.
- Summarize the environment eco system and its need for awareness.
- Identify the various types of environment pollution and their effects.
- Discuss the social issues of the environment with associated acts.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Basic Introduction to Energy: Energy and power, forms of energy, primary energy sources, energy flows, world energy production and consumption,<br>Key energy trends in India: Demand, Electricity, Access to modern energy, Energy production and trade,<br>Factors affecting India's energy development: Economy and demographics Policy and institutional framework, Energy prices and affordability, Social and environmental aspects, Investment. | 6 |
| 2 | Fundamentals of environment - Water cycle - Oxygen cycle - Carbon cycle -Nitrogen cycle - Phosphorous cycle - Bio-diversity - Environmental aspects of energy utilization - Public health issues related to environmental pollution.<br>Environmental effects of energy extraction: Air-Water-Noise-Soil-Radioactive Pollution due to energy use: Classification pollutants, sources of emission and quality standards - characteristics - Factors influencing pollutants - Analysis of pollutants. | 8 |
| 3 | Environmental Pollution: Definition, Cause, effects and control measures of - Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution and Nuclear hazards , Solid waste Management, Disaster management Role of an individual in prevention of pollution, Pollution case studies. | 8 |
| 4 | Social Issues and the Environment: Climate change, global warming, acid rain, ozone layer depletion. Environment Protection Act, Air (Prevention and Control of Pollution) Act, Water (Prevention and control of Pollution) Act, Wildlife Protection Act, Forest Conservation Act, Issues involved in enforcement of environmental legislation. | 8 |

**TEXT BOOKS**

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|---|---|
| 1 | Textbook for Environmental Studies For Undergraduate Courses of all Branches of Higher Education by University grant commission and Bharathi Vidyapeeth Institute of environment education and Research ,Pune |
| 2 | De, B. K., Energy Management audit & Conservation, 2nd Edition, Vrinda Publication, 2010. |
| 3 | Energy and the Challenge of Sustainability, World energy assessment, UNDP<br>New York, 2000 |

**REFERENCE BOOKS:**

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|---|---|
| 1 | Turner, W. C., Doty, S. and Truner, W. C., Energy Management Hand book, 7th edition, Fairmont Press, 2009. |
| 2 | Murphy, W. R., Energy Management, Elsevier, 2007 |
| 3 | Smith, C. B., Energy Management Principles, Pergamum, 2007 |
| 4 | Environment pollution control Engineering by C S rao, New Age Inytermnational, 2006, reprint 2015, 2nd edition |
| 5 | Environmental studies, by Benny Joseph, Tata McGraw Hill, 2008, 2nd edition. |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Thermal Management of Electronic Systems | |
| **Subject code** | 2OS144 | |
| **Learning Outcome:** | | |
| Course Outcomes(CO):<br>At the end of the course, students will able to-<br>1. appraise the importance of thermal management of electronic systems,<br>2. distinguish the various heat transfer modes,<br>3. select various cooling methods for electronic systems,<br>4. Solve thermal management related problems using simulation tools. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction**<br>Enclosures and thermal issues in 10s and electronic systems, PCB cooling and importance of thermal management of electronics, temperature effects on different failure modes. | 3 |
| 2 | **Heat transfer modes**<br>Principles of conservation of energy, first law of thermodynamics, cooling load calculation of electronic devices. Heat transfer modes - basics of conductive heat transfer, convection basics; forced convection, radiation at normal ambient, combined modes, extended surfaces, contact resistance and thermal interface materials, thermal<br>resistance networks, numerical methods. | 6 |
| 3 | **Cooling methods and techniques**<br>Conduction cooling, cooling by heat sinks, design aspects of heat sinks, convection cooling, blowers, fans, ventilation of systems, selection of fan, liquid immersion cooling, flow-through cooling, cold wall cooling, cold plates, jet impingement cooling, synthetic jet cooling, thermoelectric/Peltier and solid state coolers, cooling using phase change, micro/mini channel cooling, cooling using heat pipes, liquid cooled high power modules. Vapour compression systems. Refrigerated cabinets. Conductive flexible links. | 9 |
| 4 | **Layout design and selection of cooling technique**<br>PCB layout design: Placement of various electronics components to evenly distribute the heat and minimum resistance from component to heat sink. Ranges of cooling rates of different cooling methods, selection criteria. Basics of design of heat exchanger. Experimental techniques used in for thermal measurements, Reliability issues:<br>importancel bathtub curve. Jedec standards. | 5 |
| 5 | **Usage of software tools and applications**<br>Introduction to software tools for thermal management of electronic systems, applications and case studies related to effective thermal management of electronic systems (including cooling of ICS, microprocessors and power electronics, laptop thermal management, heat sink design, space applications) | 7 |
| **Reference Books** | | |
| 1 | Younes Shabany, Heat Transfer: Thermal Management of Electronics, CRC Press | |
| 2 | Ravi Kandasamy and Arun S. Mujumdar. Thermal Management of Electronic Components, Lambert Academic Publishing | |
| 3 | Dave S. Steinberg, Cooling Techniques for Electronic Equipment. Wiley | |
| 4 | Incropera, P P and Dewitt, D P. Fundamentals of Heat and Mass Transfer, Wiley Eastern | |
| 5 | Holman J P. Heat Transfer, McGraw Hill | |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Machine Learning | |
| **Subject code** | 2OS145 | |
| **Learning Outcome:** | | |
| Course Outcomes:<br>At the end of the course, students will be able to -<br>1. comprehend statistical methods as basis of machine learning domain<br>2. learn variety of learning algorithms for appropriate applications<br>3. identify various machine learning techniques to solve problems<br>Domains | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Probability and Statistics:** Empirical Probability, Theoretical Probability, Joint Probability, Bayes' Theorem, Descriptive Statistics, Measure of Center, Measure of Variability, Measure of Position. | 4 |
| 2 | **Regression Techniques:** Basic concepts and applications of Regression, Simple Linear Regression Gradient Descent and Normal Equation Method, Non-Linear Regression, Linear Regression with Regularization, Hyper-parameters tuning, Loss Functions, Evaluation Measures for Regression Techniques. | 7 |
| 3 | **Classification Techniques:** Basics of supervised learning, Naïve Bayes Classification, Fitting Multivariate Bernoulli Distribution, Gaussian Distribution and Multinomial Distribution, K-Nearest Neighbours, Decision trees, Random Forest Support Vector Machines: Hard Margin and Soft Margin, Kernels and Kernel Trick, Evaluation Measures for Classification Techniques. | 9 |
| 4 | **Artificial Neural Networks:** Biological Neurons and Biological Neural Networks, Perceptron Learning, Activation Functions, Multilayer Perceptron, Back-propagation Neural Networks. | 5 |
| 5 | **Clustering:** Basics of unsupervised learning, Hierarchical Agglomerative Clustering, k-means Algorithm, Self-Organizing Maps. | 5 |
| **Reference Books** | | |
| 1 | Tom Mitchell, Machine Learning, TMH | |
| 2 | C. Bishop, Pattern Recognition and Machine Learning, Springer | |
| 3 | R. O. Duda, P. E. Hart and D. G. Stork, Pattern Classification and Scene Analysis, Wiley | |
| 4 | KishanMehrotra, Chilukuri Mohan and Sanjay Ranka, Elements of Artificial Neural Networks, Penram International | |
| 5 | Rajjan Shinghal, Pattern Recognition, Techniques and Applications, OXFORD | |
| 6 | Athem Ealpaydin, Introduction to Machine Learning, PHI | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | |
| **Programme** | B.Tech |
| **Subject Name** | Introduction to Fire and Safety Engineering |
| **Subject code** | 2OS146 |

**Learning Outcome:**

**Course Outcomes (CO):**

At the end of the course, student will be able to-

1. explain the fire process and its chemistry
2. choose fire protection system
3. analyse fire accident
4. select fire insurance and policies

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction**<br>Fire in history, fire losses, fire causes, interested parties in fire safely, fire protection standards and practice. | 2 |
| 2 | **The Fire Process**<br>Introduction, fire triangle, fire tetrahedron, fuels, smouldering, metal fires, combustion of dusts, ease of ignition, heat, ignition processes, thermal feedback, fire stages, structure of flames, flame height/length, flame progression. | 3 |
| 3 | **Chemistry of Fire**<br>Matter around us, Avogadro's hypothesis, work versus energy, energy in chemical reactions, oxidation and reduction, chemical chain reaction in fire, flame chemistry, reducing atmosphere, estimating lower flammability limit (LFL), flash point, fire point, ignition point, ignition energy, different type of combustion processes (Rapid, Spontaneous, Explosive combustions). | 4 |
| 4 | **Heat Transfer in Fires**<br>Fundamentals of heat, heat transfer and heat flux, modes of heat transfer, temperatures versus heat in fire, severity and growth of fire, spontaneous heating and spontaneous combustion, heat release rate. | 2 |
| 5 | **Fire Detectors and Alarms**<br>Introduction, basics of detectors and alarms, detector types based on effects, heat detectors, smoke detectors, optical flame detectors, gas-sensing detectors, application-specific detectors, selection of detectors, alarm systems, fire alarm systems and control panel, principle of operation, selecting detectors and alarm systems. | 3 |
| 6 | **Fire Extinguishers**<br>Firefighting fundamentals, first-aid firefighting extinguishers, common features of extinguishers, types of extinguishers, classification of fires (Class A, B, C, D, E and F) and suitability of extinguishers, rating of extinguishers, hazard categorization and placement of extinguishers Practical demonstration and Revision. | 5 |
| 7 | **Fixed Fire Protection Systems**<br>Introduction, water-based fixed fire protection systems, automatic sprinklers. Foam systems, water spray systems, water mist systems, carbon dioxide flooding systems, clean agents, draining out fire water. | 3 |
| 8 | **Risk Management and Fire Insurance**<br>Origins of general insurance and emergence of risk management, hazard versus risk, hazard identification and analysis, risk assessment and control, principles of insurance, fire insurance policy, covers available, insurance value, features of emergency plans, line of action. | 4 |
| 9 | **Investigating Fire Incidents**<br>Background to fire investigation, practice of investigation, arson, evidence, witnesses, bum patterns, sketches. Photographs and diagrams, material or sequence evidence, records or paper evidence, interpreting evidence and report writing | 4 |

| **Reference Books** | |
|---|---|
| 1 | Das, Akhilkumar, Principles of Fire safety engg, PHI publication. |
| 2 | Handbook of Fire and Explosion Protection Engineering inciples, William Andrew an imprint of Elsevier. |
| 3 | Fire Hazards in Industry, Norman Thomson, Butterworth-Heinemann is an imprint of Elsevier. |

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|---|---|
| 4 | Robert Burke. Fire Protection Systems and Response, CRC Press |
| 5 | John A. Purkiss. Fire Safety Engineering Design of Structures. Butterworth-Heinemann is an imprint of Elsevier. |
| 6 | R.Craig Schroll, Industrial Fire Protection Handbook, CRC Press. |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Composite Materials | |
| **Subject code** | 2OS149 | |
| **Learning Outcome:** | | |
| On successful completion of the course, the students will be:<br>• Explain characteristics and applications of composite materials<br>• Illustrate manufacturing process for development of composite materials<br>• Assess the mechanical behaviour of composite materials<br>• Apply failure theories for strength assessment of the laminate | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Definition of composite materials, classification and characteristics, Advantages and applications, Functional requirements of reinforcement and matrix, Effect of reinforcement: size, shape, distribution, volume fraction. | 8 |
| 2 | Manufacturing of metal matrix composites: Casting – Solid state diffusion technique, Cladding – Hot isostatic pressing, Properties and applications, Manufacturing of ceramic matrix composites: Liquid metal infiltration – liquid phase sintering, Manufacturing of Carbon – Carbon composites: Knitting, Braiding, Weaving. | 8 |
| 3 | Preparation layup, Curing, Properties and application of various type of fibers, Properties and applications of whiskers, Particle reinforcements | 6 |
| 4 | Laminate failure criteria: strength ratio, maximum stress criteria, maximum strain criteria, interfacing failure criteria, Stress concentration. | 8 |
| **References** | | |
| 1 | Callister Jr, W.D. and Rethwisch, D.G., Fundamentals of materials science and engineering: an integrated approach, John Wiley & Sons. | |
| 2 | Lubin, G. Composite Materials, Springer publication. | |
| 3 | Gay D., Composite Materials Design and Application, Taylor & Francis | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Arduino for Engineers | |
| **Subject code** | 2OS150 | |
| **Learning Outcome:** | | |
| On successful completion of the course, the students will be:<br>• Demonstrate programming proficiency using Embedded C for Arduino<br>• Interface Analog and Digital peripherals with Arduino<br>• Establish serial communication using I2C and SPI protocol<br>• Demonstrate proficiency in developing Arduino based applications | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | The Arduino family, Arduino Uno board, Atmega328p Microcontroller, Programming using Arduino IDE | 5 |
| 2 | LED, push-button switch, Hex keypad, Seven segment display, LCD interfacing | 5 |
| 3 | Basics of serial communication, Asynchronous serial communication and data framing, Serial port programming, I2C and SPI communications, LCD interfacing using I2C | 6 |
| 4 | Interfacing of DC and stepper motor, PWM for motor speed control, Relays | 6 |
| 5 | DAC interfacing, Ultrasonic distance sensor, Humidity and temperature sensor, Infrared sensor, Light sensor(LDR), Wifi and Bluetooth module | 8 |
| **References** | | |
| 1 | Simon Monk, Programming Arduino Getting Started with Sketches, McGraw Hill | |
| 2 | Jeremy Blum, Exploring Arduino: Tools and Techniques for Engineering Wizardy, Wiley Publishers | |
| 3 | Michael Margolis, Arduino Cookbook: Receipes to Begin, Expand and Enhance Your Projects, Oreilly Media | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | M.Tech | |
| **Subject Name** | **Basics of Quality Management** | |
| **Subject code** | 2OS161 | |

**Learning Outcome:**

At the end of the course, Students will be able to-

- Define the quality management,
- Illustrate the use of statistical quality control,
- Justify the use of various quality improvement concepts, tools with examples,
- Discuss the quality tools, techniques and philosophies through case studies.

**Syllabus - Theory**

| Unit | Content | Hr |
|---|---|---|
| 1 | Introduction to Quality Management: Introduction to quality, need of quality, evolution of quality, definitions of quality, dimension of product and service quality, facet of quality, inspection, quality control, quality assurance, cost of quality, contribution of quality gurus, quality statement, | 10 |
| 2 | Statistical Quality Control: Basic statistical measure / terms, source of variation, chance and assignable causes, measures of central tendency, measures of dispersion, normal distribution, control charts for variable and attribute, process capability, pareto principle, introduction to acceptance sampling | 6 |
| 3 | Quality Improvement Tools & Techniques: 5S, Quality Circle, PDCA Cycle, Kaizen, Seven New Management Tools, Quality Function deployment (QFD), Failure Mode Effect & Critical Analysis (FMECA), Poka-yoke, Benchmarking, and others | 8 |
| 4 | Associated Concepts with Quality Management: Introduction to ISO, Importance of ISO certification, ISO 9001 Quality Management System, ISO 14001 Environment Management System, OHSAS 18001, Integrated management System (IMS), Lean, Six Sigma and Lean Six Sigma Methodology, TPM, Business Excellence Mo‹lel like Deming Award, Malcolm Baldrige National Quality Award, Ramakrishna Bajaj National Quality Award, Introduction to ZED Maturity Assessment Moc1e1 for Indian MSMEs. | 6 |

**References**


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|---|---|
| 1 | Charantimath P.M., Total Quality Management, Pearson Education India. |
| 2 | Besterfield, D. H., Besterfield-Michna, C., Besterfield, G. H., Besterfield-Sacre, M., Urdhwareshe, H., & Urdhwareshe, R. Total Quality Management, Pearson Education India. |
| 3 | Mitra, A. Fundamentals of Quality Control and Improvement. John Wiley & Sons |
| 4 | Montgomery, D. C. Introduction to Statistical Quality Control. John Wiley & Sons. |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | M.Tech | |
| **Subject Name** | Financial Management | |
| **Subject code** | 2OS162 | |
| **Learning Outcome:** | | |
| At the end of the course, Students will be able to-<br>● To the ways to manage the finance with time.<br>● Analyze the current finance market.<br>● Make the financial decision by their own. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Basic of financial management: Introduction to financial management, Role of finance functions, Time value of money, Basic of risk and return. | 6 |
| 2 | Financial markets and instruments: The financial system, Introduction to financial markets and instruments, Sources and cost of capital. | 6 |
| 3 | Major Financial Decisions: Investment decisions, funding decision, distribution of profit decision, introduction to working capital management, managing risk. | 6 |
| 4 | Using Spreadsheets in Finance: Introduction to financial functions in spreadsheets, spreadsheet application exercise. | 6 |
| **References** | | |
| 1 | *Dr. Eugene F. Brigham*, Financial Management. | |
| 2 | *Raymond M. Brooks*, Financial Management – Core Concepts. | |
| 3 | *Charles E. Menifield*, The Basic of Public Budgeting and Financial Management. | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | M.Tech | |
| **Subject Name** | **Finite Element Method** | |
| **Subject code** | 2OS163 | |
| **Learning Outcome:** | | |
| At the end of the course, students will be able to —<br>1. demonstrate finite element formulation<br>2. analyze one dimensional engineering problems<br>3. solve two dimensional problems of engineering using finite element<br>4. utilize computer program for solving engineering problems. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Finite Element Formulation: Evolution of Finite Element Method (FEM), Applications, Equilibrium conditions, Constitutive law, Principle of discretization, Element field matrix formulation. | 10 |
| 2 | Application to Engineering Disciplines: Computation of element properties using generalized coordinators and natural coordinators for one dimensional & two-dimensional element, Field formulations for isoperimetric elements, Numerical integration, Convergence. | 12 |
| 3 | Computer Applications: Pre-processing, Solution, Post-processing, Development of computer program, Use of FEA packages. | 8 |
| **References** | | |
| 1 | Logan, D. L. A First Course in Finite Element Method, Cengage Learning. | |
| 2 | Desai, Y. M., Eldho, T. I. & Shah, A. H. Finite Element Method with Applications in Engineering, Pearson. | |
| 3 | Cook, R. D., Malkus, D. S., Plesha, M. E., Witt, R. J. Concept and Application of Finite Element Analysis, Wiley. | |
| 4 | Reddy, J. N. An Introduction to the Finite Element Method, McGraw Hill Education. | |
| 5 | Zienkiewicz, 0. C. & Taylor, R. L. Finite Element Method: Its Basic and Fundamentals, Elsevier India. | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | M.Tech | |
| **Subject Name** | Disaster Management | |
| **Subject code** | 2OS164 | |
| **Learning Outcome:** | | |
| At the end of the course, Students will be able to-<br>● Identify and assess risk of a disaster and associated damages<br>● Plan and execute activities for disaster management Appreciate<br>● Appraise policies and role of various stakeholders in disaster management. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Introduction to Disaster Management (DM): Importance & Significance, Types of Disasters, Climate Change, DM cycle. | 6 |
| 2 | Risk Assessment: Risk, Vulnerability, Types of Risk, Risk identification, Emerging Risks, Risk Assessment, Damage Assessment, Risk modelling. | 6 |
| 3 | Disaster Management: Phases, Cycle of Disaster Management, Institutional Framework, Incident Command System, DM Plan, Community Based DM, Community health and safety, Early Warning and Disaster Monitoring, Disaster Communication, Role of GIS and Remote Sensing, Do's and Don'ts in various disasters. | 6 |
| 4 | Role of an Engineer: Challenges and solutions for DM, Disaster Safe Designs and Constructions, Structural and Non Structural Mitigation of Disasters. | 6 |
| 5 | Disaster Management Policy & Practices: Disaster Management Act 2005, Disaster Management Policy, National Guidelines and Plans, Role of Government, Non-Government and Private Agencies. | 6 |
| **References** | | |
| 1 | Modh, S., Introduction to Disaster Management, Macmillan | |
| 2 | Sinha, P.C., Disaster Relief: Rehabilitation and Emergency Humanitarian Assistance, SBS Publishers. | |
| 3 | Piers B, Cannon T., Davis I., & Ben W., At Risk: Natural hazards, People's Vulnerability and Disasters, Routledge. | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Human Resource Management | |
| **Subject code** | 2OS171 | |
| **Learning Outcome:** | | |
| ● Describe roles and responsibilities of the HRM function<br>● Identify different systems within HRM viz. Recruitment and Selection, Performance Management, Compensation Management, Employee Relationship Management and recognize their strategic contribution to business and organizations;<br>● Distinguish between people management role of HR and non-HR specialist in organizations | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | An Introduction to Human Resource Management; HRD and HRM; Corporate Strategy and Human Resource Management; Human Resource Planning; Job Analysis, Recruitment & Selection; Performance Management; Compensation Management; Learning & Development; Employee Relationship Management; Industrial Disputes & Conflicts; Labour Legislation; HRM in Cross-cultural and Global Environments; Organisation Learning; Ethics and Ethical Issues in HRM; Skills and Competencies of a Human Resource Manager; Human Resource Management in Family owned businesses and Not for profit organizations; Organisational Transformation and HRM; Contemporary Concerns in HRM | 30 |
| **Reference Books** | | |
| 1 | Pande, Sharon and Basak, Swapnalekha (2016), *Human Resource Management*, 2nd Ed., Pearson Education: New Delhi | |
| 2 | Dessler, Gary. Varkkey, Biju (2015), *Human Resource Management* , 13th Ed., Pearson Education: New Delhi | |
| 3 | Bohlander, George. Snell, Scott. & Vohra, Veena (2014), *Human Resources Management*, Cengage Learning: New Delhi | |
| 4 | Bernardin, John, H.(2007), *Human Resource Management – An Experiential Approach*, Tata McGraw Hill Publishing Company Limited: New Delhi | |
| 5 | Singh B.D.(2004), *Industrial Relations*, *Emerging Paradigms,* Excel Books: New Delhi | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Modern Indian History | |
| **Subject code** | 2OS172 | |

**Learning Outcome:**

At the end of the course, students will be able to-

- Interpret the impact of renaissance, political and industrial revolution, and colonization in shaping the modern world.
- Explain the state of polity, economy, society and culture during the company raj.
- Compare the different perspectives of nationalism during th e British raj and explain their respective contribution in independence movement.
- Explain the emergence of India as an independent and sovereign country.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| **1.** | **MODERN WORLD HISTORY:** The Renaissance period, Causes of Revolution, Revolutions-French and American, Industrial revolutions, European colonisation | **09** |
| **2.** | **THE COMPANY RAJ (1757 TO 1857) :** India during mid 18$^{th}$ centuary – state of polity, economy, society and culture, Regional kingdoms- Bengal, Mysore, Maratha, Awadh and Punjab, Battle of Plassey and Battle of Buxar, Anglo-Mysore wars and Angio-Maratha wars, East India company-changes in polity economy, society and culture, First war of independence(1857) | **11** |
| **3.** | **THE BRITISH RAJ (1857 TO 1947):** Governance of India under the British crown- state of unity, economy, society and culture, Early nationalism- emergence of congress, swadeshi and revolutionary movements, Gandhidham nationalism- non cooperation movement, Dandi march (salt satyagraha), Khilafat movement, the quit india movement, Akail movements, left movements, tribal movements, Gandhism- Gandhian values which imapacted Indian History, The Indian Independence Act,1947. | **15** |
| **4.** | **EMERGENCE OF NEW STATE:** Negotiations for independence, Indian Constitution Integration of princely states, Constituent Assembly Debates (CAD), Land reforms and inception of planning. | |

**REFERENCE BOOKS:**


| | |
|---|---|
| **1.** | Bandhopadhyay, S., From Plasscy to Pattition: A History of Modern India. Delhi: Orient Blackswan. |
| **2.** | Roy, T., An Economic History of Early Modern India. London: Routledge. |
| **3.** | Bipan, C., Nationalism and Colonialism in Modern India. Delhi: Orient Longman. |
| **4.** | Sarkar, S.. Modern India 1885-1947. Delhi: Macmillan. |
| **5.** | Bandhopadh yay, S., National Movement in India: A Reader. New Delhi: Oxford University Press. |
| **6.** | Robett s , .I. M., & Westad, 0. A., The history of the world. Oxford University Press, USA. |
| **7.** | Lowe, N., Mastering modern world history. Macmillan International Higher Education. |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | **Electrical Power Utilisation and Safety** | |
| **Subject code** | 2OS173 | |

**Learning Outcome:**

After successful completion of the course, student will be able to:

- infer the importance various parameters in e lectrica l system
- suggest and apply suita ble electric heating, welding , refrigeration and air conditioning for a system
- analyze and design illuminati on scheme, electri ficatio n, earthing system and protection system for an application

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| **1.** | Electric Heating and Welding: Advantages of electric heating, resistance heating, types of furnaces , induction heating, types of induction furnaces, dielectric heating, types of welding- arc and resistance | **08** |
| **2.** | Refrigeration and air conditioning: Introduction to refrigeration and air-conditioning, principles of a refrigerator , domestic refrigerator , electrical circuit of refrigerator, need of voltage regulator, water cooler, air conditioner, thermo- electric refrigeration, air purification , central air conditioning systems | **06** |
| **3.** | Illumination Scheme: Basic terms used in illumination scheme, Electric lamps, Recommended levels of illumination, types of lighting schemes, design of lighting schemes , factory lighting, street lighting, F]flood lighting. | **07** |
| **4.** | Electrical Installation, Estimating, costing: Types of load, Load assessment , Electrical supply systems, Wiring systems, Permissible voltage drops and conductor size calculations, Estimating and costing for residential and commercial service connections (single phase and three phase) | **08** |
| **5.** | Power Factor: Effects of power factor, causes of low power factor, disadvantages of lo w power factor, method s of improving power factor, most economical power factor. | **05** |
| **6.** | Electrical Safety, Earthing systems and protective devices: Electrical shock mechanisms, factors influencing the electric shock, body current thresholds (tolerable body current limit), thevenin's concepts and accidental equivalent circuits (step and touch potentials) , protection against electric shock, purpose of earthing, IS rules for earthing of electrical installations, factors governing the resistance of earth electrode, methods of earthing, measurement of earth resistance , methods of reducing earth resistance , fuse , miniature circuit breakers (MCB) and earth leakage circuit breakers (ELC B) | **11** |

**REFERENCE BOOKS:**


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|---|---|
| **1.** | E. Openshaw Taylor , Utilisation of Electrica l Energ y, Universities Press. H. Partab, Art and Science of Utilisation of Electrical Energy, Dhanpat Rai & Co. |
| **2.** | J. B. Gupta, Utilization of Electric Power and Electric Traction, S. K. Kataria & Sons, New Delhi. |
| **3.** | G. C. Garg , Utili zatio n of Electric Power and Electric Traction, Khanna Publishers , Delhi. |
| **4.** | R. K. Rajput, Utilisation of Electrical Po wer, Laxmi Publications (P) Ltd., New Delhi. |
| **5.** | N. V. Suyra narayana, Utilisatio n of Electric Power Including Electric Drive s and Electric Tractio n, New Age Publishers , New Delhi. |
| **6.** | J. B. Gupta, A Co urse in Electrical Installation Estimating and Costing , S. K. Kataria & Sons , New Delhi. |
| **7.** | Dr. J. G. Jamnani , Element s of Electrical Desig n, Mahajan Publishing House |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Operating Systems | |
| **Subject code** | 2OS174 | |
| **Learning Outcome:** | | |
| At the end of the course, students will be able to -<br>I. describe the various components of Operating Systems<br>2. analyze the different service s provided by UNIX Operating System<br>3. design and implement concurrent processes requiring synchronization. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Introduction to Operating Systems: Operating system objectives and functions, evolution of operating systems | 2 |
| 2 | Process description and control: Process states, process description, process control, process management, Uniprocessor scheduling, multiprocessor and real-time scheduling | 09 |
| 3 | Threads and concurrency: Processes And Threads, Symmetric Multiprocessing, Micro kernels, Mutual exclusion and synchronization, deadlock and starvation | 08 |
| 4 | Memory management and virtual memory: Memory management requirements , partitioning, paging , segmentation, virtual memory | 08 |
| 5 | 1/0 Management and filers: 10/ devices, organization of 1/0 functions, OS design issues, 1/0 buffering , disk scheduling, disk cache , file management , security aspects in OS | 3 |
| **Reference Books** | | |
| 1 | William Stallings, Operating Systems, PHI. | |
| | Silbersc hiltz , Galvin and Greg Gange , Operating System, Wiley India . | |
| | Sumitabha Das, Unix Concepts and Applications, TMH Publications. | |
| 2 | Yashvant Kanetkar , Shell Programming, BPB | |
| 3 | A.S.Tanenba um, Modern Operating Systems, TMH Publications. | |
| 4 | Kernighan, the UNIX Programming Environment, Pearson | |
| 5 | Maurice Bach, The Unix Operating System, Prentice Hall | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech. | |
| **Subject Name** | Air Pollution Control Techniques | |
| **Subject code** | 2OS181 | |
| **Learning Outcome:** | | |
| On successful completion of the course, the students will be:<br>• Evaluate fundamentals of sources, effects, sampling and monitoring of air pollutants.<br>• Evaluate air quality and specific source of air pollution.<br>• Determine appropriate air pollution control system for the industries. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs.** |
| 1 | Introduction:<br>Air pollution in India and in the world, Sources and classification of air pollutants, Global concern of air pollutants, Effects of air pollutants, Emission inventory | 3 |
| 2 | Air Quality Criteria and Standards:<br>Air quality criteria, Criteria pollutants, Types of emission standards, Rules and regulations related to air pollution, Various forms of emission standards | 3 |
| 3 | Air quality monitoring, sampling and analysis:<br>Gaseous and particulate pollutants sampling and analysis, Analysis, Ambient air sampling, Stack sampling, Online monitoring of air pollutions | 6 |
| 4 | Control of specific pollutants and mobile sources:<br>Control of volatile organic compounds (VOCs) and odour of sources, Characteristics, Measurement environmental significance and its control, Control of mobile sources: gasoline-powered vehicles, Diesel powered vehicles, Gas turbines and jet engines, Alternatives to existing mobile sources | 6 |
| 5 | Air pollution control methods and equipments:<br>Source correction methods, Particulate control techniques such as gravity, Settling chambers, Cyclone separator, Filters, Wet scrubbers, Control technologies for gaseous pollutants such as scrubbers, absorption and adsorption, Control of specific gaseous pollutants | 6 |
| 6 | Industrial air pollution control system:<br>Emission and its control from thermal power plant, Petroleum refinery, Metallurgy industries. Indoor air quality: Factors affecting, effects, Control and indoor air pollutants | 6 |
| **References** | | |
| 1 | Bouble R.W.Fox D.I.Turner.D.B.. Stern A. C. Fundamentals of Air Pollution, Academic Press. | |
| 2 | Rao C. S. Environmental Pollution Control Engineering, New Age International. | |
| 3 | Trivedy R. K. Goel P. K. An Introduction to Air Pollution, BS Publication | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech. | |
| **Subject Name** | Functional Foods and Health Supplements Theory | |
| **Subject code** | 2OS182 | |
| **Learning Outcome:** | | |
| After successful completion of the course, student will be able to<br>● Understanding the concept of nutraceuticals, their classification and market trends.<br>● Elucidate the role of various classes of phytochemicals as nutraceuticals and functional foods.<br>● Elucidate the role of nutraceuticals in prevention of diseases.<br>● Elucidate the regulatory requirements for nutraceuticals. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs.** |
| 1 | Introduction:<br>Functional foods, Nutraceuticals, Dietary supplements, Classify nutraceuticals and their health benefits, Global scenario and current trends in dietary supplements and nutraceuticals | 6 |
| 2 | Phytochemicals as nutraceuticals:<br>Occurrence, Chemical nature and health benefits, Phytonutrient from class of fatty acids, Organo-sulphurs, Polyphenolics, Dietary fibres and anti-oxidants, Prebiotics and probiotics, Proteins, Vitamins, Minerals, Cereals, Vegetables as functional foods | 8 |
| 3 | Food as a remedies:<br>Nutraceuticals in treatment for cognitive decline, Nutraceuticals remedies for common disorders such as arthritis, Bronchitis, liver disorder, Ulcers, Circulatory problems, Nutraceuticals rich supplements such as green tea, Lecithin, Mushroom extract, Nutraceuticals bridging the gap between food and drug | 8 |
| 4 | Regulatory for nutraceuticals products:<br>FSSAI, DSEA act and global regulatory agencies and bodies for nutraceuticals in different countries, Pharmacopoeial specification for dietary supplements and nutraceuticals and their recommended daily allowance (RDA). | 8 |
| **References** | | |
| 1 | https://www.fssai.gov.in/cms/food-safety-and-standards-regulations.php | |
| 2 | Dietary Supplements". FDA Office of Dietary Supplements Programs. | |
| 3 | Augusti,K.T.Role of Dietary Fibres and Nutraceuticals in Preventing Disease, PharmaMed Press | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Project Management | |
| **Subject code** | 2OS191 | |

**Learning Outcome:**

- Following this course, students will be able to describe a project life cycle, and can skillfully map each stage in the cycle
- Students will identify the resources needed for each stage, including involved stakeholders, tools and supplementary materials
- Students will describe the time needed to successfully complete a project, considering factors such as task dependencies and task lengths
- Students will be able to provide internal stakeholders with information regarding project costs by considering factors such as estimated cost, variances and profits
- Students will be able to develop a project scope while considering factors such as customer requirements and internal/external goals

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Project Management**<br>Defining "project management"<br>Exploring opportunities in the project management field<br>Developing project management skills<br>Categorising different types of projects<br>Understanding the difference between projects and programmes | 2 |
| 2 | **Planning Your Project**<br>Planning a project<br>Identifying and delivering on your client's priorities<br>Managing stakeholders<br>Developing a project management plan<br>RACI Matrix<br>Preventing 'scope creep'<br>Assessing the feasibility of a project<br>Identifying and managing risks | 2 |
| 3 | **Implementing Your Project**<br>Entering into a contract<br>Managing a project<br>Setting up a project database<br>Creating an effective work schedule<br>Monitoring a project<br>Conducting effective meetings<br>Managing change<br>Addressing problems | 4 |
| 4 | **Project Management Techniques**<br>Identifying organisational structures<br>Estimating costs and budgeting<br>Using critical path project management tools (WBS, Gantt chart, Project Network Diagram)<br>Establishing the critical path<br>Tracking project milestones<br>Using the programme evaluation and review technique (PERT tool)<br>Using process improvement tools (Fishbone, SIPOC)<br>Managing time<br>Controlling quality | 4 |
| 5 | **Business and Financial Issues**<br>Understanding the importance of a business case<br>Developing a business case<br>Identifying project costs<br>Calculating return on investment (ROI)<br>Calculating a payback period | 4 |

| | | |
|---|---|---|
| | Determining net present value (NPV) | |
| 6 | **The Project from Start to Finish**<br>Identifying the life cycle of a project<br>Handing over a project<br>Closing a project<br>Reviewing a project | 4 |
| 7 | **People in the Project**<br>Assembling your project team<br>Planning resources for your project team<br>Managing your project team<br>Managing conflict within your team<br>Communicating effectively<br>Providing leadership and fostering teamwork | 4 |
| 8 | **Your Career in Project Management**<br>Progressing through different project management positions<br>Breaking into official project management<br>Creating your cover letter and curriculum vita<br>Networking<br>Interviewing<br>Advancing in your career<br>The next step after project management | 4 |
| **Reference Books** | | |
| 1 | Project Management Case Studies by Harold R KERZNER | |
| 2 | Project Management: The Managerial Process by Gray and Larson and Desai, McGraw Hill | |
| 3 | Textbook of Project Management by V.E.Ramamoorthy P.Gopalakrishnan | |

| GANPAT UNIVERSITY | | |
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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Renewable energy sources | |
| **Subject code** | 2OS192 | |
| **Learning Outcome:** | | |
| To Understand the Need, importance and scope of non conventional and alternate energy resources.<br>To understand role significance of solar energy.<br>To provide importance of Wind Energy.<br>To understand the role of ocean energy in the Energy Generation.<br>To get the utilization of Biogas plants and geothermal energy<br>To understand the concept of energy Conservation. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **SOLAR ENERGY**<br>Solar Radiation, Measurements of Solar Radiation, Flat Plate And Concentrating Collectors, Solar Direct Thermal Applications, Solar Thermal Power Generation, Fundamentals of Solar Photo Voltaic Conversion, Solar Cells, Solar PV Power Generation, Solar PV Applications. | 5 |
| 2 | **WIND ENERGY**<br>Wind Energy Estimation, Types of Wind Energy Systems, Performance, Site Selection, Details of Wind Turbine Generator | 5 |
| 3 | **OCEAN ENERGY**<br>Ocean Thermal Energy Conversion (OTEC), Principle of operation, development of OTEC plants, Tidal and wave energy, Potential and conversion techniques, mini-hydel power plants | 5 |
| 4 | **BIO-MASS**<br>Principles of Bio-Conversion, Anaerobic/aerobic digestion, types of Bio-gasdigesters, gas yield, combustion characteristics of bio-gas, utilization for cooking | 5 |
| 5 | **GEOTHERMAL ENERGY**<br>Resources, types of wells, methods of harnessing the energy, scope in India. | 5 |
| 6 | **ENERGY CONSERVATION**<br>Principles of energy conservation, the different energy conservation appliances, cooking stoves, Benefits of improved cooking stoves over the traditional cooking stoves | 5 |
| **Reference Books** | | |
| 1 | Reneweble energy resources: Tiwari and ghosal, Narosa publication. | |
| 2 | Non conventional Energy Sources,Khanna Publication | |

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|---|---|---|
| FACULTY OF ENGINEERING & TECHNOLOGY | | |
| **Programme** | B.Tech | |
| **Subject Name** | Health and Nutrition | |
| **Subject code** | 2OS193 | |
| **Learning Outcome:** | | |
| After successful completion of the course student will be able to:<br>1. Remember the fundamentals of health and nutrition<br>2. Cite examples of food labelling<br>3. Describe significance of macronutrients and micronutrients<br>4. Discuss importance of functional foods<br>5. Explain indicators of nutritional status | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction to the basic concepts of health and nutrition** | 4 |
| 2 | **Nutrition**<br>• Macronutrients: Carbohydrates (including dietary fibers), fats and proteins • Micronutrients: Vitamins, minerals, anti-oxidants, gut flora<br>• Significance of macronutrients and micronutrients for optimal health | 6 |
| 3 | **Meal Planning**<br>• Functional foods: Definition of functional foods, Role of functional ingredients and food in nutrition, Health attributes of functional foods<br>• Health attributes of nutrition: Diet and disease, Diet with respect to special population (elderly, pediatric and pregnant women),<br>• Indicators for maintenance of nutritional status: Nutrition Balance Indicator, Satiety Index, Fullness factor, Glycemic index and insulin index | 10 |
| 4 | **Food Labelling (Food service management)**<br>• Nutrition Facts Panel<br>• Serving Size<br>• Calories<br>• Ingredients list<br>• Quantitative indications<br>• Food additives<br>• The percent daily value<br>• Allergan labelling | 10 |
| **Reference Books** | | |
| 1 | Nutritional Sciences: From fundamental to food. By Michelle McGuireand Kathy Beerman. Publisher: Yolanda Cassio. ISBN-13: 978-0840058201 | |
| 2 | Pressman, Alan H., Sheila Buff, and Gary Null. The Complete Idiot's Guide to Vitamins and Minerals. New York: Alpha Books. | |
| 3 | Focus on Pathophysiology, Barbara A. Bullock and Reet L. Henze Lippincott Williams & Wilkins, Philadelphia | |
| 4 | Lehninger Principles of Biochemistry, 3rd ed London : Macmillan Press Ltd. | |
| 5 | 5. Tortora G.J. and Anagnodokos, N.P. Principles of Anatomy and Physiology (Harper and Colling Publishers, New York) | |
| 6 | Advanced Nutrition: Macronutrients, Micronutrients, and Metabolism By: Carolyn D. Berdanier, Lynnette A. Berdanier, Janos Zempleni. Publisher: CRC Press. ISBN 9781420055528 | |
| 7 | Functional Foods and Nutraceuticals By: Aluko, Rotimi E. Publisher: Springer | |
| 8 | B. Srilakshmi. Food science. India, New Age International (P) Limited. | |
| 9 | Kumud Khanna, Sharda Gupta, Santosh Jain Passi, Rama Seth, Ranjana Mahna & Seema Puri . Textbook of Nutrition and Dietetics. India, Elite Publishers. | |
| 10 | C.Gopalan. Nutritive Value of Indian Foods, India, ICMR publications. University Electives | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | MATLAB for Engineers | |
| **Subject code** | 2OS194 | |
| **Learning Outcome:** | | |
| Upon course completion, a student will be able to:<br>● Use basic commands and graphics in MATLAB.<br>● Apply MATLAB in solving algebra and calculus problems.<br>● Create simple MATLAB programs in engineering applications. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **MATLAB basics –**<br>The MATLAB environment - Basic computer programming - Variables and constants, operators and simple calculations - Formulas and functions - MATLAB toolboxes | 5 |
| 2 | **Matrices and vectors –**<br>Matrix and linear algebra review - Vectors and matrices in MATLAB - Matrix operations and functions in MATLAB | 6 |
| 3 | **Computer programming** –<br>Algorithms and structures - MATLAB scripts and functions (m-files) - Simple sequential algorithms - Control structures (if…then, loops)<br>MATLAB programming - Reading and writing data, file handling - Personalized functions - Toolbox structure - MATLAB graphic functions | 8 |
| 4 | **Numerical simulations** –<br>Numerical methods and simulations - Random number generation - Montecarlo methods | 5 |
| 5 | **Hands-on session**<br>Interactive hands-on-session where the whole class will develop one or more MATLAB scripts that solve an assigned problem | 6 |
| **Reference Books** | | |
| 1 | MATLAB Getting Started Guide http://www.mathworks.com/help/pdf_doc/matlab/getstart.pdf | |
| 2 | MATLAB Central (script, toolbox, blog, newsgroup) http://www.mathworks.com/matlabcentral/ MATLAB Newsletters | |
| 3 | http://www.mathworks.com/company/newsletters | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Technical Writing | |
| **Subject code** | 2OS195 | |

**Learning Outcome:**

At the end of the course, students will be able to-

- Participate actively in writing activities (individually and in collaboration) that model effective scientific and technical communication in the workplace.
- Understand how to apply technical information and knowledge in practical documents for a variety of a.) Professional audiences (including peers and colleagues or management) and b) public audiences.
- Practice the unique qualities of professional writing style, including sentence conciseness, readability, clarity, accuracy, honesty, avoiding wordiness or ambiguity, previewing, using direct order organization, objectivity, unbiased analyzing, summarizing, coherence and transitional devices.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | An Introduction to Technical Writing<br>Technical writing vs. General writing b. Purpose, importance and characteristics of technical writing, Objectives of technical writing: Clarity, conciseness, accuracy, organization, ethics, Audience recognition and involvement: High tech audience, low-tech. audience, gender neutral language. | 8 |
| 2 | Memorandum<br>Objectives, difference between memos, letters and emails. Criteria and format for writing and memos. | 2 |
| 3 | Technical description<br>Criteria and process, Technical instructions for user's manual | 2 |
| 4 | Report Writing<br>Characteristics, types and writing of various reports: feasibility reports, inventory report, mishap report, progress report, laboratory report | 5 |
| 5 | Letter- writing<br>Business letters- order, complaint, inquiry, Job-applications, Resume Business Proposals 05 Types & formats | 4 |
| 6 | Graphic representation of Technical Data, SOP writing, Promotional Writings<br>Technical Brochure designing ,Content writing for Websites (For promotional and troubleshooting purposes), Writing Fliers and Newsletters | 4 |
| 7 | Academic Writing 05<br>Summaries, abstracts and instructions, Case studies on Technical Writing | 5 |

**Reference Books**


| | |
|---|---|
| 1 | Sharon J. Gerson and Steven M. Gerson, Technical writing – process and product ,Pearson Education Asia . |
| 2 | Andrea J. Ratherford ,Basic Communication Skills for Technology, Pearson Education Asia |
| 3 | Pfeiffer, W.S. and T.V.S. Padmaja. Technical Communication. Pearson. |
| 4 | Muralikrishna and Sunita Mishra. Communication Skills for Engineers. Pearson |
| 5 | CharlesW.Knisely and KarinI.Knisely.Engineering Communication. Cengage |

| GANPAT UNIVERSITY | | |
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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Operations Research | |
| **Subject code** | 2OS201 | |
| **Learning Outcome:** | | |
| On successful completion of the course the students will be able to:<br>● Describe characteristics and scope of OR.<br>● Define and formulate mathematical problems.<br>● Students will be able to select optimal problems solving techniques for a given problem using LP.<br>● Formulate and solve transportation, travelling sales man and transshipment problems.<br>● formulate and solve optimization problems related to job/ work assignments | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***Introduction to Operations Research:***<br>Introduction, Historical Background, Scope of Operations Research , Features of Operations Research, Phases of Operations Research, Types of Operations Research Models, Operations Research Methodology, Operations Research Techniques and Tools ,Structure of the Mathematical Model, Limitations of Operations Research | 4 |
| 2 | ***Linear Programming:***<br>Introduction, Linear Programming Problem, Requirements of LPP, Mathematical Formulation of LPP, Case Studies of LPP, Graphical Methods to Solve Linear Programming Problems, Applications, Advantages, Limitations | 4 |
| 3 | ***Graphical Analysis of Linear Programming Problems:***<br>Introduction, Graphical Analysis, Some Basic Definitions, Graphical Methods to Solve LPP, Some Exceptional Cases, Important Geometric Properties of LPP *Simplex Method:* Introduction , Standard Form of LPP, Fundamental theorem of LPP, Solution of LPP – Simplex Method, The Simplex Algorithm, Penalty Cost Method or Big M-method, Two Phase Method, Solved Problems on Minimisation, Importance of Duality Concepts, Formulation of Dual Problem, Economic Interpretation of Duality, Sensitivity Analysis | 6 |
| 4 | ***Transportation Problem:***<br>Introduction, Formulation of Transportation Problem (TP), Transportation Algorithm (MODI Method), the Initial Basic Feasible Solution, Moving Towards Optimality | 4 |
| 5 | ***Assignment Problem:***<br>Introduction, Mathematical Formulation of the Problem, Hungarian Method Algorithm, Routing Problem, Travelling Salesman Problem Types of Integer Programming Problems, Gomory's All-IPP Method, All IPP Algorithm, Branch and Bound Technique | 4 |
| 6 | ***Infinite Queuing Models:***<br>Introduction, Queuing Theory, Operating Characteristics of a Queuing System, Constituents of a Queuing System, Service Facility, Queue Discipline | 4 |
| 7 | ***Mathematical Analysis of Queuing Theory:***<br>Introduction, Mathematical Analysis of Queuing Process, Properties of Queuing System, Notations, Service System, Single Channel Models, Multiple Service Channels, Erlang Family of Distribution of Service Times | 4 |
| Text Books | | |
| 1 | Operations Research by A M Natarajan, P Balasubramani, A Tamilarasi, Pearson Education Inc | |
| 2 | Operations Research by P Mariappan, Pearson | |
| Reference Books | | |
| 1 | Hamdy A. Taha: Operations Research-An Introduction, Prentice Hall, 9th Edition, 2010.. 3. A. Ravindran, Don T. Phillips, James J. Solberg: Operations Research. Principles and Practice, John Wiley & Sons, 2005. 4. G. Hadley: Nonlinear and Dynamic Programming, Addison-Wesley, 1964. | |
| 2 | 2. Wayne L. Winston and M. Venkataramanan: Introduction to Mathematical Programming: Applications and Algorithms, 4th edition, Duxbury Press, 2002 | |

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|---|---|
| 3 | 3. A. Ravindran, Don T. Phillips, James J. Solberg: Operations Research. Principles and Practice, John Wiley & Sons, 2005 |

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**FACULTY OF ENGINEERING & TECHNOLOGY**

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|---|---|
| Programme | B.Tech |
| Subject code | 2OS202 |
| Subject Name | Elements of Management |

Learning Outcome:

On successful completion of the course the students will be able to:

- Understand basic concepts, principles and practices of management
- Learn the scientific decision making and modern trend in the management process
- Understand the contemporary practices and issues in management

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Definition, Functions, Process, Scope and Significance of Management. Nature of Management, Managerial Roles, Managerial Skills and Activities, Difference between Management and Administration. Significance of Values and Ethics in Management. | 6 |
| 2 | Evolution of Management Thought, Approaches of Management Thought, Functions of Management. | 4 |
| 3 | Planning and Organizing Nature, Scope, Objective and Significance of Planning, Elements and Steps of Planning, Decision Making Organizing Principles, Span of Control, Line and Staff Relationship, Authority, Delegation and Decentralization. Effective Organizing, Organizational Structures, Formal and Informal Organizations, Staffing | 8 |
| 4 | Different Theories of Motivation Maslow, Herzberg, Mc Clelland, Vroom, Porter and Lawler, Job Satisfaction. Concept of Leadership- Theories and Styles. Communication Process, Channels and Barriers, Effective Communication. | 8 |
| 5 | Coordination Concept, Importance, Principles and Techniques of Coordination, Concept of Managerial Effectiveness | 4 |

Text Books

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|---|---|
| 1 | Management-Tasks, Responsibilities & Practices by Drucker, F. Peter |

Reference Books

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| 1 | Elements of Management by Koontz “O” Donnel Weihrich |
| 2 | Principles of Management by Terry and Franklin |
| 3 | The Process of Management by William H. Newman and E. Kirby Wassen |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject code | 2OS203 | |
| Subject Name | Yoga and Meditation | |
| Learning Outcome: | | |
| On successful completion of the course the students will be able to:<br>● To Practice mental hygiene<br>● To attain higher level of consciousness<br>● To possess emotional stability | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | **Introduction**<br>Human Body- Meaning and its Importance in Yoga, General information, Different parts, Structure, Function and Effect of yogic practices | 8 |
| 2 | **Human Biology**<br>Anatomy & Physiology, Yogic Diet, Nutrition & related Biochemistry, Yoga & Psychology, | 7 |
| 3 | **Introduction to Meditation**<br>What is meditation, why meditate, When and where to meditate, how long to meditate, Harnessing the power of breath, Asanas and pranayama | 8 |
| 4 | **Visual techniques**<br>Introduction to visualisations, Tratak, Focus on brahmacharya, ishwarapranidhana, Pratyahara | 7 |
| Suggested Readings | | |
| 1. | O.P. Tiwari - Asana why and how, Kaivalyadham SMYM samiti, Lonavala, 2012 | |
| 2. | M.L. Gharote - Guidelines for Yogic Practices, Medha Publication, Lonavla | |
| 3. | Dr. Arun K. Sao & Dr. Akhileshwar Sao - Tanav Avm Yoga, Radha Pub. New Delhi, 2013 | |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Economics for Engineers | |
| Subject code | OSAE101 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• Describe the principles of economics that govern the operation of any organization under diverse market conditions<br>• Comprehend macroeconomic principles and decision making in diverse business set up | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***Economic Decisions Making:***<br>Overview, Problems, Role, Decision making process.<br>***Engineering Costs & Estimation***<br>Fixed, Variable, Marginal & Average Costs, Sunk Costs, Opportunity Costs, Recurring And Nonrecurring Costs, Incremental Costs, Cash Costs vs Book Costs, Life-Cycle Costs; Types Of Estimate, Estimating Models - Per-Unit Model, Segmenting Model, Cost Indexes, Power-Sizing Model, Improvement & Learning Curve, Benefits. | 8 |
| 2 | ***Cash Flow, Interest and Equivalence:***<br>Cash Flow – Diagrams, Categories & Computation, Time Value of Money, Debt repayment, Nominal & Effective Interest. | 8 |
| 3 | ***Cash Flow & Rate Of Return Analysis***<br>Calculations, Treatment of Salvage Value, Annual Cash Flow Analysis, Analysis Periods; Internal Rate Of Return, Calculating Rate of Return, Incremental Analysis; Best Alternative Choosing An Analysis Method, Future Worth Analysis, Benefit-Cost Ratio Analysis, Sensitivity And Breakeven Analysis. | 6 |
| 4 | ***Inflation And Price Change***<br>Definition, Effects, Causes, Price Change with Indexes, Types of Index, Composite vs Commodity Indexes, Use of Price Indexes In Engineering Economic Analysis, Cash Flows that inflate at different Rates. | 8 |
| Text Books | | |
| 1 | James L. Riggs, David D. Bedworth, Sabah U. Randhawa : Economics for Engineers 4e , Tata McGraw-Hill | |
| 2 | John A. White, Kenneth E. Case, David B. Pratt : Principle of Engineering Economic Analysis, John Wiley | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Entrepreneurship Development | |
| Subject code | OSAE102 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• Understand and formulate entrepreneurship process<br>• Analyse financial and marketing feasibilities<br>• Evaluate business models | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***Basic Entrepreneurial Concepts:***<br>Definition and structure. Entrepreneurial culture, the concept of Entrepreneurship, Entrepreneurial Traits: Entrepreneurial Skills, Qualities and Characteristics of an Entrepreneur, Nature and Importance of entrepreneurs. Entrepreneurship as a career choice. Contribution of entrepreneurs to the Development of the Nation. | 8 |
| 2 | ***Entrepreneurial Development:***<br>Entrepreneurial Environment, meaning and process of Entrepreneurial Development, Entrepreneurial Development training, Importance, Objectives and Methods of Training. | 8 |
| 3 | ***Project Management:***<br>Search for Business Idea, Concept of Project and classification. Project Identification and Formulation, Project Design & Network Analysis, Project Report, Project Appraisal. | 6 |
| 4 | ***Financial Analysis***<br>Investment Process, Break even analysis, Budget and Planning Process. Sources of Development Finance, Financial Institutions. | 8 |
| Text Books | | |
| 1 | Desai Vasant, Dynamics of Entrepreneurial Development and Management. Himalaya Publishing House. | |
| 2 | Sankar Raj, Essentials of Entrepreneurship Tata McGraw Hill Pvt. Ltd. | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Electric Machines and Applications | |
| Subject code | OSAE103 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• Analyze constructional aspects, operational aspects and performance of electrical machines<br>• Adopt suitable control methods for operating electric machines<br>• Select appropriate electric machines based on constructional and operational characteristics | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***DC Motors:***<br>Construction & Operating principle, types of DC Motors, PMDC motors, back-emf and its importance, torque production, characteristics, various losses & performance estimation, speed control, applications | 7 |
| 2 | **Induction Motors:**<br>Construction and operating principle-single phase and three-phase machines, types of induction motors, torque production, torque-slip characteristic, equivalent circuit representation, various losses & performance estimation, speed control, single-phase ac motors, universal motors and applications. | 8 |
| 3 | **Permanent Magnet Brushless DC (PMBLDC) Motors:**<br>Construction and operating principle, torque and emf equations, torque/speed characteristic: performance and efficiency, controllers for PMBLDC motors, applcations. | 7 |
| 4 | **Steppers and Servo Motors:**<br>Basics of stepper motor, construction, working and characteristics of variable reluctance(VR) stepper motors, micro stepping control of stepper motor, construction and working of multistack VR stepper motor, construction and working of permanent magnet (PM) stepper motor, construction and working of hybrid stepper motor, servo motor types, construction and operation of servo motors, servo motor controllers and applications. | 8 |
| Text Books | | |
| 1 | A. E. Fitzgerald, Charles Kingsley and Stephen D Umans, Electric Machinery: The Dynamics and Statics of Electromechanical Energy Conversion by TMH. | |

| GANPAT UNIVERSITY | | |
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| FACULTY OF ENGINEERING & TECHNOLOGY | | |
| **Programme** | B.Tech | |
| **Subject Name** | Fundamental of Electronics | |
| **Subject code** | OSBM101 | |
| **Learning Outcome:** | | |
| The educational objectives of the course are to educate students to attain the following:<br>• Students can get clear idea of fundamentals of electronic components.<br>• Develop practical skills using various types of electronic components.<br>• Develop skills of testing components needed for the project and experiments.<br>• Enable the student to develop the ability to understand datasheets. | | |
| **Theory syllabus** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **RESISTORS**: Concept of resistors, classification of resistors, materials used for resistors, resistors general specification, color coding, Application in the field of Medical equipment and measurements. | 6 |
| 2 | **CAPACITORS:** Classification of capacitors, materials used for capacitors, capacitors specification:-capacitor working voltage, Coding of capacitors-using numerals, colour band system, directly printed values on capacitors, capacitive reactance | 5 |
| 3 | **CABLES:** General specifications of cables- characteristic impedance, current carrying capacity, flexibility. Types of cables - construction and applications of coaxial cable, 600 E telephone cable-PASP, FRC cable, twin core cable twisted & shielded type, optical fiber cable. | 5 |
| 4 | **CONNECTORS:** General specifications of connectors- contact resistance, breakdown voltage, insulation resistance, Constructional diagram, applications of BNC, D series, Audio, Video, printer, edge, FRC, RJ 45 connectors. | 4 |
| 5 | **FUSES:** Glass, ceramic fuse, resettable fuse, shunt fuse- MOV,HRC fuse. | 3 |
| 6 | **SWITCHES:** Switch specifications – voltage rating, contact current rating, contact resistance, characteristics of switch & relay, application of toggle, rotary, push to on & push to off, rocker switch | 4 |
| 7 | **RELAYS:** Construction, working and application of general purpose relay, reed relays, solid state relays, difference between switch & relay | 3 |
| **Reference Books:** | | |
| 1 | Basic Electronics by Debashis Publisher: De Pearson | |
| 2 | Electronic Components and Materials by Dhir Publisher: Tata McGraw Hill | |

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| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech/M.Tech | |
| **Subject Name** | 3D Printing | |
| **Subject Code** | OSBM102 | |

**Learning Outcome:**

The educational objectives of the course are to educate students to attain the following:

- Student will able to use software tools for 3D Printing.
- Able to prepare 3D printed modules.
- Design products using LOM and FDM technologies.

**Theory syllabus**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **INTRODUCTION:** introduction to design, prototyping fundamentals, introduction to 3d printing, its historical development, advantages, commonly used terms, process chain, 3d modelling, data conversion, transmission, checking and preparing, building, post processing, RP data formats, classification of 3D printing process, application in biomedical field. | 10 |
| 2 | **LIQUID BASED 3D PRINTING:** Stereo lithography apparatus (SLA): Models and specifications, process, working principle, photopolymers, photo polymerization, layering technology, laser and laser scanning, applications, advantages and disadvantages, case studies. Solid ground curing (SGC): Models and specifications, process, working ,principle, applications, advantages and disadvantages, case studies | 10 |
| 3 | **SOLID BASED 3D PRINTING:** Laminated object manufacturing (LOM): Models and specifications, Process, Working principle, Applications, Advantages and disadvantages, Case studies. Fused Deposition Modelling (FDM): Models and specifications, Process, Working principle, Applications, Advantages and disadvantages, Case studies, practical demonstration | 10 |

**References Books:**


| | |
|---|---|
| 1 | Chua C.K., Leong K.F. and LIM C.S Rapid prototyping: Principles an Applications, World Scientific publications, 3rdEd., 2010 |
| 2 | Paul F. Jacobs, " Rapid Prototyping and Manufacturing"–, ASME Press, 1996 |
| 3 | D.T. Pham and S.S. Dimov, "Rapid Manufacturing", Springer, 2001. |
| 4 | Terry Wohlers, " Wholers Report 2000", Wohlers Associates, 2000 |
| 5 | Ian Gibson, Davin Rosen, Brent Stucker "Additive Manufacturing Technologies, Springer, 2nd Ed, 2014. |

| GANPAT UNIVERSITY | | |
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| FACULTY OF ENGINEERING & TECHNOLOGY | | |
| Programme | Bachelor of Technology | |
| Subject Name | Digital Marketing | |
| Subject code | OSCE101 | |

Learning Outcome:

After successful completion of the course, student will be able to

- Analyse the confluence of marketing, operations, and human resources in real-time delivery.
- Demonstrate cognitive knowledge of the skills required in conducting online research and research on online markets, as well as in identifying, assessing and selecting digital market opportunities
- Explain emerging trends in digital marketing and critically assess the use of digital marketing tools by applying relevant marketing theories and frameworks.
- Investigate and evaluate issues in adapting to globalized markets that are constantly changing and increasingly networked
- Comprehend the importance of conversion and working with digital relationship marketing; and Analyse cross-cultural and ethical issues in globalised digital markets.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1. | **INTRODUCTION TO DIGITAL MARKETING**<br>Marketing- Understanding Digital Marketing Process - Types of visibility - Bringing-Targeted Traffic - Inbound and outbound marketing | 5 |
| 2. | **DIGITAL MARKETING VS. TRADITIONAL MARKETING**<br>Benefits of Traditional Marketing - Benefits of Digital Marketing - Tools of Digital Marketing –The Downside to Traditional Marketing – Use of Both Digital & Traditional Marketing | 6 |
| 3. | **SEARCH ENGINE OPTIMIZATION**<br>Introduction to SERP - search engines - Major functions of a search engine - Different types of keywords - Keywords research process - On-Page SEO - Off- Page SEO - Meta Tags, Description | 7 |
| 4. | **SOCIAL MEDIA MARKETING**<br>Understanding the existing Social Media – Forms of Internet marketing - Types of advertising - Targeting in ad campaign - Setting up conversion tracking – Video Marketing - Benefits of video marketing - Targeting Options - Understanding Bid Strategy | 7 |
| 5. | **GOOGLE ANALYTICS & ADWORDS**<br>Google analytics - google adwords & online display advertising - email marketing - lead generation for business - content marketing - affiliate marketing | 5 |

**Reference Books**


| | |
|---|---|
| 1 | Gujarati N Damodar & Dawn C Porter, Basic Econometrics, McGrew Hill International |
| 2 | Dougherty Christopher, Introduction of Econometrics, Oxford University Press |
| 3 | Baltagi H Badai, Econometries – Springer International |
| 4 | Rao P and R.L. Miller, Applied Econometrics Prentice Hall of India LTD, New Delhi |
| 5 | Klein L. R. , An Introduction to Econometrics, Prentice-Hall of India Ltd. |
| 6 | Goldberger A. S.,Topics in Regression Analysis, Macmillam, New York |
| 7 | Dilip M. Nachane, Econometrics: Theoretical Foundations and Empirical Perspectives Oxford University Press India. |
| 8 | Levin L Richard and Rubin S Davide Statistics for Management, Prentice Hall, Pearson Brown |
| 9 | William S, Introduction Econometrics West Group |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Animation | |
| Subject code | OSCE102 | |

Learning Outcome:

After successful completion of the course, student will be able to

- Explore different approaches in computer animation.
- Learn and perform 3D animations on Different work spaces.
- Develop competencies and skills needed for becoming an effective Animator.
- Master the traditional & digital tools to produce stills and moving images.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Basic of Sketching:** Introduction to pose to pose sketching (Action analysis). Rapid sketching from live models, Introduction to Acting, Modeling, Sketching from Acting, Sketching from live models, Introduction to Rapid Sketching Techniques, Sketching from Memory, live action. Basics of Acting - Style breaking, Movements. | 10 |
| 2 | **Basic of Shaping, shading & Drawing :** Shading in different angles of pencil strokes, formatting in different textures with pencil, shading, simple objects in drawing, simple shapes of geometrical shapes, roadsides, rivers, perspective in lines in landscapes, different head shapes, characters, human anatomy | 08 |
| 3 | **Introduction to 3D**: Introduction to 3D, Interface of 3D Max, Basics of 3D Max Modeling, Exporting, Using the menus. Floating and docking, Using drag and drop feature, Introduction to different workspaces. Geometry, sub objects, Extruding, welding, bridging etc. Recognizing the workspaces. | 06 |
| 4 | **Introduction to Modifiers**: Introduction to modifiers and modifier gizmos.Familiarity with common modifier like bend, editpoly, Xform wave, lathe symmetry etc | 06 |

**Reference Books**


| | |
|---|---|
| 1 | Drawing: The head and Figure; Jack Hamm; Penguin Publishers |
| 2 | Pencil Sketching: Thomas C Wang; John Wiley and Sons |
| 3 | The Art of Max:An Introduction to 3D Computer Graphics; Autodesk Maya Press |
| 4 | Introduction to 3D; James McBennet |

| GANPAT UNIVERSITY | | |
|---|---|---|
| FACULTY OF ENGINEERING & TECHNOLOGY | | |
| Programme | Master of Technology | |
| Subject Name | Research and Publication Ethics | |
| Subject code | OSCE103 | |
| Learning Outcome: | | |
| On completion of this course, the student will be able to:<br>● Understand the importance of being ethical in carrying out research and publication activities.<br>● Differentiate the quality publication practices and how to be cognizant about dubious publishing practices/publishers<br>● Get awareness about 'open access' and contribution of research output to open access publishing platform | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | **Philosophy and Ethic:** Introduction to philosophy: definition, nature and scope, concept, branches. Ethics: definition, moral philosophy, nature of moral judgments and reactions | 04 |
| 2 | **Scientific Conduct:** Ethics with respect to science and research, Intellectual honesty and research integrity, Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP), Redundant publications: duplicate and overlapping publications, salami slicing, Selective reporting and misrepresentation of data | 06 |
| 3 | **Publication Ethics**: Publication ethics: definition, introduction and importance, Best practices / standards setting initiatives and guidelines: COPE, WAME, etc. Conflicts of interest, Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types, Violation of publication ethics, authorship and contributor ship, Identification of publication misconduct, complaints and appeals Predatory publishers and journals | 07 |
| 4 | **Open Access Publishing:** Open access publications and initiatives, SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies, Software tool to identify predatory publications developed by SPPU,Journal finder / journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggested, etc. | 06 |
| 5 | **Databases and Research Metrics:** Indexing databases, Citation databases: Web of Science, Scopus, etc. Impact Factor of journal as per Journal Citation Report, SNIP, SIR, IPP, Cite Score 2,Metrics: h-index, g index, i10 index, altimetry's | 07 |

| **Reference Books** | |
|---|---|
| 1. | Resolving Ethical Dilemmas by Bernard Lo |
| | A Companion to Bioethics by Helga Kuhse (Editor); Peter Singer; Peter Singer (Editor) |
| 2. | RESEARCH & PUBLICATION ETHICS Paperback – 13 September 2021<br>by Wakil Kumar Yadav (Author) |
| 3. | Handbook of Research and Publication Ethics (Strictly as per UGC 2 Credit Course) [Paperback] Nimit Chowdhary (Editor) and Sarah Hussain (Editor |
| 4. | Resolving Ethical Dilemmas by Bernard Lo |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Business Economics | |
| **Subject code** | OSCE104 | |
| **Learning Outcome:** | | |
| On successful completion of the course, the students will be:<br>• build a strong theoretical foundation of the various functions of management. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction:** Nature and Scope of Managerial Economics, Managerial Economics and Microeconomics and macroeconomics. Managerial Economics and decision-making. Uses and Significance of Managerial Economics. | 6 |
| 2 | **Meaning and Determinants of Demand:** Demand Function, Law of Demand Market Demand, Elasticity of Demand, Types and Measurement of Elasticity, Demand Forecasting. Meaning, Significance and Methods of Demand Forecasting. | 6 |
| 3 | **Production Function:** Law of Variable Proportions. Law of Supply. Elasticity of Supply. Measurement of Elasticity of Supply. **Costs of Production:** Short run and long run costs. Economies of Scale. Cost estimation and cost forecasting. Breakeven analysis. | 6 |
| 4 | **Pricing Under Various Market Forms; Perfect competition, Monopoly Monopolistic Competition, Oligopoly, Price Discrimination, Prevention and Control of Monopolies, System of Dual Prices.** | 6 |
| 5 | **Pricing Strategies and Methods, Cost plus Pricing, Marginal cost Pricing, Price Leadership, Transfer Pricing, Seasonal Pricing Seasonal Pricing, Cyclical Pricing.** | 6 |
| **References** | | |
| 1 | Managerial Economics – Analysis, Problems and Cases, P.L.Mehta, Sultan Chand and Sons, New Delhi. | |
| 2 | Managerial Economics - Varshney and Maheshwari, Sultan Chand and Sons, New Delhi | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | M.Tech | |
| **Subject Name** | Principles of Management | |
| **Subject code** | OSCE105 | |
| **Learning Outcome:** | | |
| On successful completion of the course, the students will be:<br>• Build a strong theoretical foundation of the various functions of management. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Management concepts & Evaluation of Management:** Management- Meaning, Nature, the importance of Management, management as Art, Science, Profession. | 4 |
| 2 | **Business and Society:** Business Ethics and Values / Standard of Ethics, Business and Environment, Social responsibilities and Obligations of Business, Changing Scenario of Business Responsibilities. | 5 |
| 3 | **Functions of Management-I**: Planning: Meaning, Nature, Features, Types, Importance, steps, Objectives, Budget, Mission, Strategy, Policy, Principles, Rules, Procedures, Methods, Advantages, and Limitations of Planning, Decision making, Meaning, Types, Methods, and Techniques, Business Forecasting, MBO, MBE. | 7 |
| 4 | **Functions of Management-II**: Organizing: Concept, Importance, Principles, Foundation and Dimension of Organization, Structure, Span of Management, Delegation and Departmentalization: Meaning, Importance, Types, and Principles of Delegation, Authority Responsibility and Accountability, Centralization vs Decentralization Principles and Basis of Departmentalization. | 7 |
| 5 | **Functions of Management-III**: Manpower planning, Job, Analysis, Recruitment, Selection and Placement, Job, Evaluation, Induction, and Training Performance Appraisal. Directing:- Meaning, Features, Importance, Principles of Directing. Control: Meaning, Types of control, Control Techniques- Budgetary Control Techniques, Non-Budgetary Control Techniques. | 7 |
| **References** | | |
| 1. | Principle of Management : T. Ramaswamy, (Himalaya Publishing House) | |
| 2. | Management & Organizational Behaviour : Dr. P. Subhan Rao (HPH) (Text, Cases & Games) | |
| 3 | Organization Structure & design : PG Aquinas (Encel Books) (Application & Challenges) | |
| 4. | Organization & Management : C R Basu (S. Chand & Co. Ltd) | |
| 5. | Principles of Management: Pradeep Kumar (Kedar Nath Ram Nath & Co.) | |

| GANPAT UNIVERSITY | |
|---|---|
| FACULTY OF ENGINEERING & TECHNOLOGY | |
| Programme | Bachelor of Technology |
| Subject Name | BASICS OF REMOTE SURVEYING & GIS |
| Subject code | OSCEAI101 |

Learning Outcome:

Upon completion of this course, students will acquire knowledge about

- Understand the concepts of Photogrammetry and compute the heights of objects
- Understand the principles of aerial and satellite remote sensing, Able to comprehend the energy interactions with earth surface features, spectral properties of water bodies
- Understand the basic concept of GIS and its applications, know different types of data representation in GIS
- Understand and Develop models for GIS spatial Analysis and will be able to know what the questions that GIS can answer are
- Apply knowledge of GIS software and able to work with GIS software in various application fields
- Illustrate spatial and non-spatial data features in GIS and understand the map projections and coordinates systems
- Apply knowledge of GIS and understand the integration of Remote Sensing and GIS

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **REMOTE SENSING:** Definition - Physics of Remote Sensing - Electromagnetic Radiation (EMR) - Blackbody Radiation - Planck's Law - StefanBoltzmann Law - Wien's Displacement Law - Components of Remote Sensing - Atmospheric Windows and Blinds - Interaction of EMR with atmosphere, and Earth's surface: soil, water and vegetation - Remote Sensing Platforms and Sensors – Image Interpretations | 06 |
| 2 | **GEOGRAPHICAL INFORMATION SYSTEM:** Maps - Classification of Maps - Map Scale - Map Projections - Grouping of Map Projections - Commonly used Map Projections and their Comparison- GIS - Historical Development of GIS - Components of GIS - Data - Types of Data - Spatial and Non-spatial - Vector Data - Point, Line, Polygon - Raster Data - Database Structures - Vector and Raster Data Structures - Files - File Formats | 06 |
| 3 | **DATA ANALYSIS AND MODELLING:** Data Retrieval - Query - Spatial Analysis - Overlay - Vector Data Analysis - Raster Data Analysis - Modelling in GIS – Digital Elevation Model - Cost and Path Analysis - Network Analysis - Expert Systems - Artificial Intelligence - Integration with GIS | 06 |
| 4 | **DATA OUTPUT AND ERROR ANALYSIS:** Data Input Output Devices - Raster and Vector Data Display Devices - Printers, Plotters. - Sources of Errors - Types of Errors - Elimination of Errors - Precision and Accuracy | 06 |
| 5 | **SOFTWARES FOR GIS AND REMOTE SENSING:** Data processing using RS and GIS software, Case study using software, Hands on training session to process the drone data | 06 |

**Reference Books**


| | |
|---|---|
| 1. | Kumar S., "Basics of Remote Sensing and GIS", Laxmi Publication (P) Ltd |
| 2. | Elangovan K., "GIS: Fundamentals, Applications and Implementations", New India Publishing Agency, New Delhi, 2006 |
| 3 | Kang- Tsung Chang ," Introduction to Geographical Information System", Tata McGraw Hill, 2002 |

| GANPAT UNIVERSITY | |
|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | |
| Programme | Bachelor of Technology |
| **Subject Name** | Advanced Surveying |
| **Subject code** | OSCEAI102 |

**Learning Outcome:**

On successful completion of the course, the students will be:

- Survey drones for high-resolution orthomosaics and detailed 3D models of areas where low-quality, outdated or even no data are available
- The good quality drone equipment, careful flight planning, commercial grade GPS ground control points and commercial grade processing software

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **THEODOLITE:** Introduction to theodolite, Uses of theodolite, Reading of main and vernier scale on horizontal and vertical plate, Temporary adjustment of a theodolite, Permanent adjustment of theodolite, Methods of measuring horizontal angles and vertical angles, Errors in theodolite work and Theodolite Traversing, Traverse computations, Closing errors, Balancing the traverse | 06 |
| 2 | **TRIGONOMETRICAL LEVELLING:** Introduction - Methods of observations (Direct and Reciprocal), Methods of determining the elevation of a particular point, when base of the object is accessible, when base of the object is inaccessible, Related examples using all methods | 06 |
| 3 | T**ACHEOMETRY:** Introduction -Purpose and Principles of tacheometric surveying, Instruments used in Tacheometry, Theory of Stadia Tacheometry, Methods of determining constants of a Tacheometer, Methods of Tacheometry, Method of Fixed Hair. When line of sight is horizontal and staff held vertically, When line of sight is inclined and staff held vertically (Angle of Elevation & Depression), Advantages and disadvantages of Tangential method | 06 |
| 4 | **CURVES:** Introduction - Types of circular curves, Definitions and notations, Designation of curve, Relation between Radius and degree of curve - Elements of simple circular curve - Setting out simple circular curve - Methods of setting out simple circular curves, Transition curves, Requirements and purpose of it, Vertical curves | 06 |
| 5 | **ADVANCED SURVEY EQUIPMENTS:** Introduction, Electromagnetic spectrum, Electromagnetic distance measurement, Total station, Lidar scanners for topographical survey. Drone surveying. Remote Sensing: Introduction, Principles of energy interaction in atmosphere and earth surface features, Image interpretation techniques, visual interpretation. Digital image processing, Global Positioning system Geographical Information System: Definition of GIS, Key Components of GIS, Functions of GIS, Spatial data, spatial information system Geospatial analysis, Integration of Remote sensing and GIS and Applications in Civil Engineering (transportation, town planning).. | 06 |

**References**


| | |
|---|---|
| 1 | B.C. Punmia, “Surveying Vol.2”, Laxmi Publications pvt. Ltd., New Delhi, 2018 |
| 2 | K.R. Arora, “Surveying Vol. 1” Standard Book House, New Delhi, 2019 |
| 3 | T.M Lillesand,. R.W Kiefer,. and J.W Chipman, Remote sensing and Image interpretation, 5th edition, John Wiley and Sons India |
| 4 | S.K. Duggal, “Surveying Vol.I & II”, Tata McGraw Hi ll Publishing Co. Ltd. New Delhi,2019 |
| 5 | R Subramanian, Surveying and Leveling, Second edition, Oxford University Press, New Delhi, 2012 |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Applied Statistics | |
| **Subject code** | OSCI101 | |
| **Learning Outcome:** | | |
| After successful completion of the course, student will be able to<br>● Relate the concept of probability and statistics and their need in engineering.<br>● Compute and interpret the results of regression and correlation analysis.<br>● Perform probabilistic and statistical analysis of data related to engineering research projects. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **The role of statistics in engineering:**<br>The engineering methods and statistical thinking, collecting engineering data, Mechanistic and empirical models, Probability and probability models. | 6 |
| 2 | **Probability and random variables:**<br>Discrete and continuous random variables, probability mass, Probability density and cumulative distributions functions, Binomial, Poisson distribution and normal distribution. | 6 |
| 3 | **Descriptive statistics and point estimation:**<br>Numerical summaries of data, frequency distribution and histograms, scatter diagrams, stem and lead diagrams, point estimation. | 6 |
| 4 | **Sampling distribution and estimation:**<br>Confidence interval on the mean of a normal distribution, confidence interval on the variance and standard deviation of a normal distribution. | 6 |
| 5 | **Regression and correlation:**<br>Properties of least squares estimators, hypothesis test in linear regressing, correlation. | 6 |
| **References** | | |
| 1 | Kadiyali. L. R., *"Traffic Engineering and Transport Planning"*, Khanna Publishers | |
| 2 | Kumar S. R., "*Introduction to traffic engineering",* The orient black swan south Asian edition. | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Road Safety Management | |
| **Subject code** | OSCI102 | |

**Learning Outcome:**

After successful completion of the course, student will be able to

- Appraise the design parameters of road geometry.
- Analyze traffic characteristics of road traffic.
- Evaluate the causes of road accidents and take part in road safety audit.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to road safety and Geometrics:** Introduction to road safety, importance and scope, road characteristics and cross section elements, sight distance, concept of horizontal and vertical alignment, road intersections and types. | 6 |
| 2 | **Traffic Characteristics:** Importance and scope of traffic characteristics, human factors governing road users characteristics, vehicular characteristics, overview of traffic surveys, traffic stream flow characteristics, concept of passenger car units and level of services. | 6 |
| 3 | **Road Accidents:** Causes and prevention, scientific investigation and data collection, analysis of individual accidents to arrive at real causes, cost of road accidents, use of accident data in planning of reconstruction of roads. | 6 |
| 4 | **Road safety audit:** Principles and procedure, code of good practice and checklists, road safety issues, education and enforcement measures for improving road safety, safety of pedestrians, cycle paths, location of rest areas and bus stop. | 6 |
| 5 | **Traffic management techniques:** Integrated safety improvement and traffic calming measures, speed and load limit, traffic lighting, use of intelligent transportation system (ITS), economic evaluation of road improvements. | 6 |

**References**


| | |
|---|---|
| 1 | Kadiyali. L. R., *"Traffic Engineering and Transport Planning"*, Khanna Publishers |
| 2 | Kumar S. R., "*Introduction to traffic engineering",* The orient black swan south Asian edition. |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Remote Sensing, GIS and GPS | |
| **Subject code** | OSCI103 | |
| **Learning Outcome:** | | |
| After successful completion of the course, student will be able to<br>● Apply principles of remote sensing in engineering.<br>● Demonstrate applications of GIS in engineering domain.<br>● Illustrate application of GPS in engineering domain. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Remote Sensing:**<br>Definition, sources of energy, electromagnetic radiation, interaction with target and atmosphere, concept of signatures, sensors characteristics, satellites, spatial and spectral resolution, digital image format, digital image processing, visual image interpretation; Data integration, analysis & presentation; Applications. | 10 |
| 2 | **Geographic Information System:** Concept, components, Data: source, capture, processing,analysis; attribute data management, metadata and spatial data, Applications. | 10 |
| 3 | **Global Navigation Satellite System:**<br>Basics of reference system, types of datum, transformation, coordinate systems, mapprojection systems, Navigation satellites systems, Global Positioning System: segments,<br>principles, signal, receivers, positioning methods, code and carrier phase observable, dataprocessing, location based applications. | 10 |
| 4 | **Self-Study:**<br>The self-study contents will be declared at the commencement of semester. Around 10%of the questions will be asked from self-study contents. | - |
| **References** | | |
| 1 | Bhatt B., *Remote Sensing and GIS*, Oxford University Press. | |
| 2 | Reddy, M. A. *Remote Sensing and Geographical Information System*, B S Publication | |
| 3 | Chang, K. *Introduction to Geographic Information Systems*, McGraw-Hill. | |
| 4 | Kiefer, L. *Remote sensing and image interpretation*, John Wiley & Sons. | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | B.Tech | |
| **Subject Name** | Introduction to Accounting | |
| **Subject code** | OSCI104 | |
| **Learning Outcome:** | | |
| After successful completion of the course, student will be able to<br>● explore various concepts of financial and cost accounting<br>● develop analytical skill in accounting and costing<br>● infer regulatory frame-work in accounting costing<br>● interpret financial and cost statements<br>● evaluate the financial performance of enterprises | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Basics of Accounting:**<br>Accounting Terminologies- Assets, Capital, Liabilities, Revenue, Expenses and others; Importance of Financial Accounting; Book Keeping, Accounting and Accountancy; Accounting Process, and Cycle; Users of Accounting Information, Accounting Concepts, Principles and Standards. | 5 |
| 2 | **Accounting Procedure:**<br>Double Entry Book-Keeping System – Debit and Credit, Accounting Equation, Approaches of Recording – Traditional and Modern, Classification of Accounts, and Rules of Debit and Credit Entries. | 5 |
| 3 | **Recording of Transactions:**<br>Source Documents; Original Book of Entry: Journal/general journal/all-purpose journal, Journal Proper, Subsidiary/Secondary Books, Non-Cash Transaction—Purchase Book, Sales book, Purchase Return Book, Sales Return Book; Cash Transaction –Cash Book, Petty Cash Book; Principal Book of Entry: Ledger, Trial Balance and Rectification of Errors: Error in Accounting, Trial Balance, Rectification of Error. | 5 |
| 4 | **Final Accounts:**<br>Objectives of Final Accounts, Trading Account, Profit and Loss Account, Balance Sheet, Closing Entries, Treatment of Adjustments, Practical Problems. | 5 |
| 5 | **Basics of Cost Accounting:**<br>Definition, Scope, Objectives and Significance of Cost Accounting, Its Relationship with Financial Accounting and Management Accounting. Notion and Classification of Cost: Objects, Cost Centers and Cost Units, Elements of Cost – Material Cost, Labor Cost, Expenses, Classification of Costs – Direct & Indirect Cost, Variable, Fixed and Semi-variable Cost, Product and Period Cost*,* Overheads – Factory Overhead, Administration Overhead, Selling and Distribution Overhead; Functional Classification of Cost. | 5 |
| 6 | **Cost Sheet Analysis and Cost -Volume -Profit Analysis:**<br>Component of Total Cost – Prime Cost, Factory Cost, Office Cost, Cost of Production of Sale, Total Cost, Profit or Loss; Cost Statement*.:* Contribution, P/V Ratio, Break-even point in Output, Break-Even Point in Sales, Margin of Safety, Break-even Analysis, Break-Even Chart. | 5 |
| **References** | | |
| 1 | Soumya Mukherjee & Abhik Mukherjee: Financial Accounting I, Oxford University Press. | |
| 2 | Prasanna Chandra , Finance Sense: Finance for Non-finance Executives, McGraw Hill Education | |
| 3 | ILO, How to read a balance sheet, Oxford & IBH Publishing Co Pvt. Ltd | |
| 4 | J. K. Mitra, Cost and Management Accounting II, Oxford University Press | |

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**FACULTY OF ENGINEERING & TECHNOLOGY**

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|---|---|
| **Programme** | M.Tech |
| **Subject Name** | Industrial Safety |
| **Subject code** | OSEE101 |

**Learning Outcome:**

On successful completion of the course, the students will be:

- To familiarize students with powers of inspectorate of factories.
- To help students to learn about Environment act 1948 and rules framed under the act.
- To provide wide exposure to the students about various legislations applicable to an industrial unit

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Statutory authorities – inspecting staff, health, safety, provisions relating to hazardous processes, welfare – special provisions – penalties and procedures-Tamilnadu Factories Rules 1950 under Safety and health chapters of Factories Act 1948 - Tamilnadu safety officer rules 2005. | 13 |
| 2 | General powers of the central government, prevention, control and abatement of environmental Pollution-Biomedical waste (Management and handling Rules), 1989-The noise pollution (Regulation and control) Rules, 2000- The Batteries (Management and Handling Rules) 2001- No Objection certificate from statutory authorities like pollution control board. Air Act 1981 and Water Act 1974. Central and state boards for the prevention and control of air pollution powers and functions of boards – prevention and control of air pollution and water pollution. | 8 |
| 3 | Indian Boiler (Amendments) Act 2007, static and mobile pressure vessel rules (SMPV), motor vehicle rules, the Mines and Minerals (Development & Regulation) Amendment Act, 2015, workman compensation act, rules – electricity act and rules – hazardous wastes (management, handling and trans boundary) rules, 2008 - the building and other construction workers act 1996., Petroleum rules, Gas cylinder rules 2016, Explosives Act 1884 – Pesticides Act – E waste (management) rules 2016. | 8 |
| 4 | Occupational Safety and Health act of USA (The William- Steiger's Act of 1970) – Health and safety work act (HASAWA 1974, UK) – OHSAS 18000 – ISO 14000 – ISO 45001 - Benefits and Elements. | 7 |

**References**


| | |
|---|---|
| 1 | Indian School of Labour education, "Industrial safety and Laws", Chennai, 1982. |

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**FACULTY OF ENGINEERING & TECHNOLOGY**

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|---|---|
| **Programme** | B.Tech |
| **Subject Name** | PCB design and fabrication |
| **Subject code** | OSEE102 |

**Learning Outcome:**

On successful completion of the course, the students will be:

- Understand basics of PCB designing.
- Apply advance techniques, skills and modern tools for designing and fabrication of PCBs.
- Apply the knowledge and techniques to fabricate Multilayer, SMT and HDI PCB.
- Understand concepts of Packaging.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to Printed circuit board: fundamental of electronic components, basic electronic circuits, Basics of printed circuit board designing: Layout planning, general rules and parameters, ground conductor considerations, thermal issues, check and inspection of artwork. | 8 |
| 2 | Design rules for PCB: Design rules for Digital circuit PCBs, Analog circuit PCBs, high frequency and fast pulse applications, Power electronic applications, Microwave applications, | 4 |
| 3 | Introduction to Electronic design automation(EDA) tools for PCB designing: Brief Introduction of various simulators, SPICE and PSPICE Environment, Selecting the Components Footprints as per design, Making New Footprints, Assigning Footprint to components, Net listing, PCB Layout Designing, Auto routing and manual routing. Assigning specific text (silkscreen) to design, Creating report of design, creating manufacturing data (GERBER) for design. | 8 |
| 4 | Introduction printed circuit board production techniques: Module IV: (6 hrs): Photo printing, film-master production, reprographic camera, basic process for double sided PCBs photo resists, Screen printing process, plating, relative performance and quality control, Etching machines, Solders alloys, fluxes, soldering techniques, Mechanical operations. | 6 |
| 5 | PCB design for EMI/EMC: Subsystem/PCB Placement in an enclosure, Filtering circuit placement, decoupling and bypassing, Electronic discharge protection, Electronic waste; Printed circuit boards Recycling techniques, Introduction to Integrated Circuit Packaging and footprints, NEMA and IPC standards. | 4 |

**References**


| | |
|---|---|
| 1 | Reference material provided by the institute |
| 2 | Printed circuit board design ,fabrication assembly and testing By R. S. Khandpur, Tata McGraw Hill 2006 |

| GANPAT UNIVERSITY | |
|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | |
| **Programme** | B.Tech |
| **Subject Name** | Electrical Estimation and Energy Auditing |
| **Subject code** | OSEE103 |

**Learning Outcome:**

On successful completion of the course, the students will be:

- Draw conventional symbols for various electrical installations.
- To quote the relevant IE rules for a given electrical installation, earthing and clearance of service lines.
- Familiarize the types of wiring.
- List the points to be considered for selection wiring.
- Determine the size of wire for internal wiring.
- Explain the necessity and types of earthing.
- Estimate the quantity of materials required for earthing.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | For complete syllabus and results, class timetable and more pls download I Study Syllabus App. It's a lightweight, easy to use, no images, no pdfs platform to make students life easier. | 8 |
| 2 | Domestic And Industrial Estimate, General requirements of electrical installations for Residential, Commercial and Industrial – Lighting and power sub circuits – Diversity factor for sub circuits – Location of outlets, control switches, main board and distribution boards – Permissible voltage drops and size of wires – Steps to be followed in preparing electrical estimate. Estimate the quantity of material required in Electrical Installation for Small residential building/Flat | 12 |
| 3 | Energy Management & Audit<br>Definition, Energy audit- need, Types of energy audit, Energy management (audit) approach- Understanding energy costs, Bench marking, Energy performance, Matching energy use to requirement, Maximizing system efficiencies, Optimizing the input energy requirements, Fuel and energy substitution, Energy audit Instruments.<br>Electrical system:<br>Electricity billing, Electrical load management and maximum demand control, Power factor improvement and its benefit, Selection and location of capacitors, Performance assessment of PF capacitors, Distribution and transformer losses. 13 | 9 |
| 4 | For complete syllabus and results, class timetable and more pls download I Study Syllabus App. It's a lightweight, easy to use, no images, no pdfs platform to make students life easier. | 6 |

**References**


| | |
|---|---|
| 1 | Electrical Design Estimating And Costing K.B.Raina& S.K.Battacharya New age International Ltd Reprint - 2011 |
| 2 | General Aspect Of Energy Management And Energy Audit Bureau of energy efficiency, new Delhi Second-2005 |

| GANPAT UNIVERSITY | |
|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | |
| Programme | Bachelor of Technology |
| Subject Name | Advanced Photogrammetry |
| Subject code | OSIT101 |

Learning Outcome:

On completion of this course, the student will be able to:

- Identify the pre-mission factors that might affect the quality of photogrammetric products and post-mission measures for evaluating the quality of the delivered product.
- Differentiate between the mechanisms and the sensor modeling alternatives of photogrammetric data acquisition modalities.
- Explain the differences between the various image geo-referencing techniques and its impact on the quality of the final product
- Differentiate between image ortho-rectification techniques
- Explain the principles of LiDAR mapping

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1. | **Quality Assurance (QA) and Quality Control (QC) of photogrammetric mapping**: flight configuration, camera calibration, system calibration, precision, and accuracy | 07 |
| 2. | **Modern digital imaging systems:** frame cameras, multi-head frame cameras, and bush-broom scanners | 05 |
| 3. | **Sensor modeling:** physical and replacement sensor models, Image geo-referencing: indirect geo-referencing, direct geo-referencing, integrated sensor orientation, accuracy analysis | 06 |
| 4. | **Image matching:** cross correlation and least-squares matching, Epipolar geometry, Ortho-rectification: polynomial rectification, differential rectification, and true orthophoto generation | 06 |
| 5. | **LiDAR mapping:** laser principles, system specifications, error sources (random and systematic errors), Quality Assurance and Quality Control (QA/QC), and classification and segmentation of LiDAR data | 06 |

**Practical content**

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**Reference Books**


| | |
|---|---|
| 1. | Krauss, K., [1993]. Photogrammetry, Volume 1: Fundamentals and Standard Processes, 4th Edition, Dummler/Bonn. ISBN 3-427-78684-6 |
| 2. | Krauss, K., [1997]. Photogrammetry, Volume 2: Advanced Methods and Applications, 4th Edition, Dummler/Bonn. ISBN 3-427-78694-3 |
| 3. | Mikhail, E., Bethel, J. and McGlone, J., [2001]. Introduction to Modern Photogrammetry, John Wiley & Sons, Inc. ISBN 0-471-30924-9 |
| 4. | Schenk, T., [1999]. Digital Photogrammetry (Volume I): Background, Fundamentals, Automatic Orientation Procedures, TerraSience. ISBN 0-9677653-1-5 |
| 5. | Shan, J. and Toth, C. (editors), [2009]. Topographic Laser Ranging and Scanning: Principles and Processing, CRC Press, Taylor & Francis Group. ISBN 1-4200-5142-3 |

| GANPAT UNIVERSITY | | |
|---|---|---|
| FACULTY OF ENGINEERING & TECHNOLOGY | | |
| Programme | Bachelor of Technology | |
| Subject Name | Social Network Analysis | |
| Subject code | OSIT102 | |

Learning Outcome:

At the end of the course, Students will be able to-

- Develop semantic web related applications.
- Represent knowledge using ontology.
- Predict human Behaviour in social web and related communities.
- Visualize social networks.

Syllabus -Theory

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction:** Introduction to Semantic Web: Limitations of current Web - Development of Semantic Web - Emergence of the Social Web - Social Network analysis: Development of Social Network Analysis - Key concepts and measures in network analysis - Electronic sources for network analysis: Electronic discussion networks, Blogs and online communities - Web-based networks – Applications of Social Network Analysis. | 05 |
| 2 | **Modeling, Aggregating And Knowledge Representation:** Ontology and their role in the Semantic Web: Ontology-based knowledge Representation - Ontology languages for the Semantic Web: Resource Description Framework - Web Ontology Language - Modeling and aggregating social network data: State-of-the-art in network data representation – Ontological representation of social individuals - Ontological representation of social relationships - Aggregating and reasoning with social network data – Advanced representations. | 07 |
| 3 | **Extraction And Mining Communities In Web Social Networks**: Extracting evolution of Web Community from a Series of Web Archive - Detecting communities in social networks - Definition of community- Evaluating communities - Methods for community detection and mining - Applications of community mining algorithms - Tools for detecting communities social network infrastructures and communities - Decentralized online social networks , Multi-Relational characterization of dynamic social network communities. | 06 |
| 4 | **Predicting Human Behavior And Privacy Issues**: Understanding and predicting human behavior for social communities – User data management - Inference and Distribution - Enabling new human experiences - Reality mining - Context - Awareness - Privacy in online social networks - Trust in online environment - Trust models based on subjective logic - Trust network analysis - Trust transitivity analysis - Combining trust and reputation - Trust derivation based on trust comparisons - Attack spectrum and countermeasures. | 07 |
| 5 | **Visualization And Applications of Social Networks:** Graph theory - Centrality - Clustering - Node-Edge Diagrams – Matrix representation - Visualizing online social networks, Visualizing social networks with matrix-based representations - Matrix and Node-Link Diagrams – Hybrid representations - Applications - Cover networks - Community welfare - Collaboration networks - Co-Citation networks. | 05 |

**Reference Books**


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|---|---|
| 1 | Peter Mika, —Social Networks and the Semantic Web‖, First Edition, Springer 2007 |
| 2 | Borko Furht, —Handbook of Social Network Technologies and Applications‖, 1st Edition, Springer, 2010. |
| 3 | Guandong Xu ,Yanchun Zhang and Lin Li, —Web Mining and Social Networking – Techniques and applications‖, First Edition, Springer, 2011. |
| 4 | Dion Goh and Schubert Foo, —Social information Retrieval Systems: Emerging Technologies and Applications for Searching the Web Effectively‖, IGI Global Snippet, 2008. |
| 5 | Max Chevalier, Christine Julien and Chantal Soulé-Dupuy, —Collaborative and Social Information Retrieval and Access: Techniques for Improved user Modelling‖, IGI Global Snippet, 2009. |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Master of Technology | |
| Subject Name | E-Resources & E-Publication | |
| Subject code | OSIT103 | |
| Learning Outcome: | | |
| On completion of this course, the student will be able to:<br>● Understand the kinds of electronic resources.<br>● Familiarize the components of e- resources<br>● Learn the methods of Networks and Browsers<br>● Receive knowledge on organization of different types of databases<br>● Attain the concept and various types and models of e-publishing. | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 6. | **Basic Concepts of E-Resources:** E-Resources: Definition, Concept - Types: Electronic Thesis and Dissertations (ETD) – Need - Purpose – Features – Benefits – Characteristics – Advantages and Structure of E-resources – File Formats: HTML, PDF, Word, Images | 06 |
| 7. | **E-Resources and Services:** E-Books – E-Journals - Bulletin Board Services (BBS) - Hyper media - Multi-Media - Evaluation of E-resources and services – Consortium services – INFONET – Shodhganga | 06 |
| 8. | **Network and Internet:** Browsers: Google Chrome – Mozilla Firefox – - Microsoft Edge - Internet Explorer – Safari - Search Engines: Google – Microsoft Bing | 06 |
| 9. | **Database Support Services:** Database Support Services – Types: Analytical database and Operational Database - Scopus and Web of Science – Indian Citation Index (ICI) – Google Scholar | 06 |
| 10. | **E-Publishing:** Definition – Concept – Process – Types – Models – Advantages and Disadvantages | 06 |
| **Reference Books** | | |
| 1. | Atwood, R. The net grows. Internet world, 10, Sept. 1996. pp. 30 – 32. | |
| | Gilder, G. Life after television, New York: WW Norton, 1994 | |
| 2. | Herman and Swiss T, eds. The World Wide Web and contemporary cultural theory. New York. Routledge, 2000 | |
| 3 | Jones S G. ed. Virtual culture: Identity and communication in cyber society. London. Sage publications, 1997 | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | B.Tech | |
| Subject Name | Computer Application in Marketing | |
| Subject code | OSIT104 | |
| Learning Outcome: | | |
| On successful completion of the course, the students will be:<br>• Develop understanding of Web- based Commerce and equip them to assess e-commerce requirements of a business.<br>• Develop e-business plans and to interact with various IT professionals who may be developing e-commerce applications. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction to Electronic Commerce:** Meaning, nature and scope, Business application of e-commerce, Global trading environment and adopting of ecommerce, Evolution of World Wide Web. Future of Web.<br>**Business Models of E-Commerce:** B2B, B2C, B2G and other models of ecommerce, applications of e-commerce to supply chain management | 7 |
| 2 | **Electronic Payment System:** Types of payment systems –e-cash and currency servers, e-cheques, credit cards, smart cards, electronic purses and debit cards, Operational, credit and legal risk of e-payment, Risk management options for e-payment systems, Set standards. | 8 |
| 3 | **Security Issues in E-Commerce:** Risks of e-commerce, Types and sources of threats, Protecting electronic commerce assets and intellectual property, Firewalls, Client server network security, Data and message security, Security tools, Digital identity and electronic signature, Encryption and concepts of public and private key infrastructure, Risk management approach to e-commerce security.<br>International cyber laws, cyber laws, Aims and salient Provisions, Cyber laws in India and their limitations, Taxation and e-commerce, Ethical Issues in ecommerce. | 8 |
| 4 | **Introduction to tally:** Features of tally, creation of company by tally, preparation of balance sheets. | 7 |

**References**


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|---|---|
| 1 | Laudon, Kenneth C. and Carol Guercio Traver (2002) E-commerce: business, technology, society. (New Delhi : Pearson Educatin). |
| 2 | Awad, Elias M. (2007), Electronic Commerce: From Vision to Fulfillment (New Delhi : Pearson Education). |
| 3 | Kalakota, Ravi and Marcia Robinson (2001). Business 2.0: Roadmap for Success (new Delhi : Pearson Education). |
| 4 | Smith, P.R. and Dave Chaffey (2005), eMarketing eXcellence; The Heart of eBusiness (UK : Elsevier Ltd.) |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| **Programme** | M.Tech | |
| **Subject Name** | Academic Research & Report Writing | |
| **Subject code** | OSIT105 | |
| **Learning Outcome:** | | |
| On completion of this course, the student will be able to:<br>• Develop understanding of Web- based Commerce and equip them to assess e-commerce requirements of a business<br>• Develop e-business plans and to interact with various IT professionals who may be developing e-commerce applications. | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction**<br>Importance of report writing in academics and research. Various kinds of academic and research activities. Necessity of report writing for achievement of academic and research goals. Various kinds of reports / presentations. Characteristics of academic and research reports / presentations. | 6 |
| 2 | **Research paper writing**<br>Types of research papers, Structure of research papers, Research paper formats, Abstract writing, Methodology, Results and discussions, Different formats for referencing, Ways of communicating a research paper. | 6 |
| 3 | **Thesis writing**<br>Structure of a thesis, Scope of the work, Literature review, Experimental / computational details, Preliminary studies, Results and Discussions, Figures and Tables preparation, Conclusions and future works, Bibliography, Appendices. | 6 |
| 4 | **Tools and Techniques**<br>Various word processors, MS Word, Libra-office, Latex etc. Making effective presentations using Power Point and Beamer, Uses of plagiarism detection tools. | 6 |
| 5 | **Miscellaneous Reports**<br>Writing research proposals, Writings project proposals, Lecture notes, Progress reports, Utilization reports, Scientific reports | 6 |
| **References** | | |
| 1 | A Step-by-Step Guide to Writing Academic Papers, by Anne Whitaker September 2009 | |
| 2 | On Writing a Thesis by C P Ravikumar,IETE Journal of Education, 2000 | |
| 3 | Microsoft Office 2016, by Joan Lambert and Curtis Frye, Microsoft Press, Washington98052-6399 | |
| 4 | LATEX for Beginners, Edition 5, March 2014 Document Reference: 3722-2014 | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Media Culture and Society | |
| Subject code | OSMC101 | |
| Learning Outcome: | | |
| At the end of the course , students will be able to<br>• Interpret and evaluate contemporary global through a critical framework<br>• Recognize and apply foundational context from the field of communication and media studies to an examination of the contemporary world | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***Introduction:***<br>Key concepts and theories: media, culture, high/low culture and popular culture mass culture | 6 |
| 2 | ***Media in the global Context***<br>The development of cultural industries( case studies of cross cultural consumption , medinalsisation, eroticization of the third world, united colors of Benetton ) Documentaries and TED talk (excerpts) | 6 |
| 3 | ***Cultural studies***<br>Different perpectives, understanding the folk. Popular practices in India.<br>Movie: rudali (excerpts) | 3 |
| 4 | ***Print culture***<br>The emergence of the newspaper, print, capitalism and political identify, calendar art and mass production of picture and the middle class ascetic photography and film hoardings.<br>Movie: The post (Excerpts) | 6 |
| 5 | ***Cinema:***<br>The conflict of tradition forms and morden technology, the nation and the home –persistent themes in hindi cinema , the post 90s Hindi cinema imagining the family and NRI cultures | 3 |
| 6 | ***Screening Culture:***<br>Television – Issues of modernity and development , discourse of national integration narrative serials, commercial sponsorship, women oriented narratives , the mythological, global and regional networks , polities after television, popular music and technology , devotional music | 3 |
| 7 | ***Resisting power through the media:***<br>Representative Literary (for example Poetry,speeches,social media posting,Arab uprising Janlokpal Bill etc) | 3 |
| Suggested Reading | | |
| 1 | Niranjana ,Tejaswini, P.sudhir and Vivek, Dhareshwar (Eds) Interrogatiin Modenity: culture and Colonialism in indiacalcutta Seagull Books | |
| 2 | Dwyer,Rachel and Christopher piney (eds) Plesure and the nation , New delhi, Oxford University Press | |
| 3 | Grossberge. L.C. Nelson and P.Treicher(eds)Culture studies London | |
| 4 | Singhal , anvind and Rogers Everett(Eds) India Communication Revolution : From Bullockcarts to cyber marts New delhi Sage | |
| 5 | Edgar , Andrew and Peter Sedgeick(eds) key concepts in culture studies London routledge | |
| 6 | Kapur,Geeta when was modernism Essays on Cotempory culture practice New delhi Tulika | |
| 7 | Prasad Madhava Ideology of Hindi cinema New delhi OUP | |
| 8 | Srivatsan R. conditions of visibility Calcutta stree | |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | FPGA based VLSI Design | |
| Subject code | OSMC102 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• Design different combination and sequential design circuits<br>• Classify and Compare the architecture of programmable logic devices<br>• Implement digital circuits on reconfigurable hardware using Verilog<br>• Apply the concepts of finite state machines for design of synchronous digital circuits | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***Basics of digital System design***<br>Introduction to digital systems , Digital system Design flow , Area under Digital Design | 2 |
| 2 | ***Simple Programmable logic devices***<br>Read –Only Memory (ROM) and variant , Programmable array Logic , Programmable Logic arrays | 5 |
| 3 | ***Complex Programmable Logic Device***<br>CPLD Architectures, FPGA Architectures , FPGA Programming Methods | 5 |
| 4 | ***Harware Description Language***<br>Requirements Oof HDL , HDL Properties, Types of HDL and supported CPLDs Lexial conventions,data types system tasks, compiler directives Modules and Ports, Module definition , Port Declaration, connecting Ports, Hierarchical name | 2 |
| 5 | ***Gate Level and Data Flow style Of Modeling***<br>Modeling using basic Verilog gate primitives , description of and or and buf/not typegates ,rise,fall and turn off delays min max and typical delays , continuous assignments , delay specification , expression , operators, operands, operator types | 3 |
| 6 | ***Behavioral and structural Modelling***<br>Structured procedures, initial and always , blocking and non-blocking statements , delay control, generate a statement , event control, condition statement, Multiway branching , Loops Sequential and parallel blocks. | 9 |
| 7 | ***Finite State Machine and Implementation***<br>Melay Machine, Moore Machine, Over lapped and Non Over lapped sequence detectors, FSM Based design on FPGA | 4 |
| Text Books | | |
| 1 | Charles Routh, Lizy Kurian , Beyong Kil Lee, "Digital system design Using Verilog", Cengage Learning | |
| 2 | Stephen Brown, Zvonkoc Vranesic , "Fundamental Of Digital Logic with Verilog Design" Tata Mc Graw Hill | |
| 3 | Sunggu Lee, "Digital Logic Design using Verilog ," State machine & Synthesis for FPGA," Cengage Learning | |
| 4 | Advanced digital Design Verilog HDL – Michel D.cilettin PHI | |
| 5 | Verilog HDL –Samir Palnikar , Pearson Education | |

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|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Advanced Instrumental Techniques | |
| Subject code | OSMC103 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• Know Nuclear Magnetic Resonance spectroscopy<br>• Knowledge of Thermal Methods of Analysis<br>• Calibration and validation of Instruments | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***Nuclear Magnetic Resonance spectroscopy:***<br>Principles of H-NMR and C-NMR, chemical shift, factors affecting chemical shift, coupling constant, Spin – spin coupling, relaxation, instrumentation and applications<br>Mass Spectrometry- Principles, Fragmentation, Ionization techniques – Electron impact, chemical ionization, MALDI, FAB, Analyzers-Time of flight and Quadrupole, instrumentation, applications | 8 |
| 2 | ***Thermal Methods of Analysis:***<br>Principles, instrumentation and applications of Thermogravimetric Analysis (TGA), Differential Thermal Analysis (DTA), Differential Scanning Calorimetry (DSC)<br>X-Ray Diffraction Methods:<br>Origin of X-rays, basic aspects of crystals, Xray Crystallography, rotating crystal technique, single-crystal diffraction, powder diffraction, structural elucidation and applications. | 8 |
| 3 | ***Calibration and validation-as per ICH and USFDA guidelines:***<br>Calibration of following Instruments Electronic balance, UV-Visible spectrophotometer, IR spectrophotometer, Fluorimeter, Flame Photometer, HPLC and GC | 6 |
| 4 | ***Radio immune assay:*** Importance, various components, Principle, different methods, Limitation and Applications of Radioimmunoassay<br>***Extraction techniques:*** General principle and procedure involved in the solid-phase extraction and liquid-liquid extraction | 6 |
| 5 | ***Hyphenated techniques-LC-MS/MS, GC-MS/MS, HPTLC-MS.*** | 2 |

| Text Books | |
|---|---|
| 1 | Instrumental Methods of Chemical Analysis by B.K Sharma |
| 2 | Organic spectroscopy by Y.R Sharma |
| 3 | Text book of Pharmaceutical Analysis by Kenneth A. Connors |
| 4 | Vogel's Text book of Quantitative Chemical Analysis by A.I. VogelPractical Pharmaceutical Organic Chemistry by I. L. Finar |
| 5 | Chemistry by A.H. Beckett and J.B. Stenlake |
| 6 | Organic spectroscopy byWilliam Kemp |
| 7 | Quantitative Analysis of Drugs by D. C. Garrett |
| 8 | Quantitative Analysis of Drugs in Pharmaceutical Formulations by P. D. Sethi |
| 9 | Spectrophotometric identification of Organic Compounds by Silverstein |

| GANPAT UNIVERSITY | |
|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | |
| Programme | Bachelor of Technology |
| Subject code | OSMC104 |
| Subject Name | International Taxation |

Learning Outcome:

On completion of this course, the student will be able to:

- Understanding of international taxation
- Create strategies for the structuring of cross-border transactions to reduce your overall tax bill
- Advise someone in structuring the global operations of a business to save tax.
- Optimize tax liability for cross-border transactions.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1. | **Introduction to international taxation and transfer pricing** | 03 |
| 2. | **Legal framework for international taxation.** Arms-Length Pricing and methods, Comparable uncontrolled price method (CUP),Resale Price Method, Cost-Plus Method, Transactional net Margin method(TNMM),Profit Split Method, How to choose an appropriate method, Role of an advanced pricing agreement, Associated Enterprises, Permanent Establishment, Taxation of Foreign Companies_ PoEM Rules, Safe Harbour Rules, Place of Effective Management Sample Transfer Pricing Agreement, International Tax Issues in Secondment Arrangements | 08 |
| 3. | **International tax planning** International tax structuring for global businesses, Case study of India - Mauritius DTAA,How Foreign Tax Credit Works, International Tax Structuring and Tax Havens,Tax Structuring, Base Erosion and Profit Shifting (BEPS),Why the amended Mauritius India DTAA will not impact foreign investment, General Anti-Avoidance Rule (GAAR) | 09 |
| 4. | **Penalties & Dispute resolution** Penalties under Indian domestic law Tax avoidance and tax evasion General Anti-Avoidance Rule (GAAR) and Special Anti-Avoidance Rule FATCA Information exchange provisions International cooperation under DTAAs Tax Information Exchange Agreements (TIEAAs) Case study of Switzerland's secrecy norms under DTAAs How to safeguard against future regulatory risks - Authority for Advanced Rulings (AAR) Settlement of disputes with tax authorities Transfer pricing disputes in offshore jurisdictions | 10 |

**Practical content**

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**Reference Books**


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|---|---|
| 1. | 'International Taxation The Indian Perspective" : By Nigam Nuggehalli · 2019 |
| 2. | "International Taxation Handbook Policy, Practice, Standards, and Regulation" by Colin Read, Greg N. Gregoriou, Elsevier Science |
| 3. | Principles of International Taxation By Angharad Miller, Lynne Oats · 2012 |
| 4. | 'International Business Taxation" A Study in the Internationalization of Business Regulation By Sol Picciotto · 1992 |
| 5. | "International Tax as International Law" An Analysis of the International Tax Regime By Reuven S. Avi-Yonah · 2007 |
| 6. | International Financial Management by V.K. Bhalla (Anmol Publications) |
| 7. | Financial Management by Parasanna Chandra (Tata McGraw – Hill Publishing) |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Yoga and Meditation | |
| Subject code | OSMC105 | |

Learning Outcome:

On completion of this course, the student will be able to:

- To achieve overall health of body and mind.
- To overcome stress
- Concentration techniques to overcome mental restlessness;

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1. | **Introduction to Yoga:** Meaning and Definition of Yoga, Astana Yoga: Yama, Niyama, Asana, Pranayama, Prathyahara, Dharana, Dhyana, Samathi. Concept of Yogic Practices: Principles - Breathing -Awareness- Relaxation. SequenceCounter pose –Time – Place – Blanket – Clothes – Bathing - Emptying the bowels – Stomach – Diet - No straining – Age - Contra-indications - Inverted asana – Sunbathing. | 03 |
| 2. | **Yam and Niyam.** Do`s and Don't's in life. Ahinsa, satya, astheya, bramhacharya and aparigraha Shaucha, santosh, tapa, swadhyay, ishwarpranidhan | 07 |
| 3. | **Loosening exercises:** Techniques and benefits.Asanas: Types- Techniques and Benefits. Yogasans and its values. Surya namaskar: Methods and benefits. Pranayama: Types- Methods and benefits. Nadis : Meaning, methods and benefits. Chakras: Major Chakaras - Benefits of clearing and balancing Chakras. | 05 |
| 4. | **Fundamentals of Meditation:** Introduction to Meditation, Basic principles of meditation, Happiness & Meditation Benefits of Meditation Philosophy, physiology, Medicine | 03 |
| 5. | **Concentration and Meditation :** Definitions of concentration The power of concentration Aids of concentration ,Patience in concentration Objects for concentration ,Benefits of concentration | 06 |
| 6. | **The five Concentrations Practice:** Parthivi Dharana (concentration on earth) Ambhasi Dharana (concentration on water) Agneyi Dharana (concentration on fire) Vayviye Dharana (concentration on air) Akashi Dharna (concentration on ether) | 06 |

**Practical content**

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**Reference Books**


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|---|---|
| 1. | 'Yogic Asanas for Group Tarining-Part-I" :Janardan Swami YogabhyasiMandal, Nagpur |
| 2. | "Rajayoga or conquering the Internal Nature" by Swami Vivekananda, AdvaitaAshrama (Publication Department), Kolkata |
| 3. | Authors Guide (2015), International Day of Yoga, Common Yoga Protocol, New Delhi: Ministry of AYUSH, Government of India |
| 4. | Practical yoga Psychology by Bihar School of Yoga |
| 5. | Yoga &Mental Health by R. S. Bhogal |
| 6. | Concentration and Meditation by swami SivanandaSaraswati |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Concept and use of MS word, MS excel & MS power point | |
| Subject code | OSME101 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• Acquire adequate knowledge of the basic concepts of Microsoft office.<br>• Understand the basic knowledge & use of MS word, MS excel & MS power point | | |
| Syllabus - Theory | | |
| Unit | Content | Hrs |
| 1 | ***Introduction to MS Office:***<br>Basics, Features, Installation procedure, Application. | 3 |
| 2 | ***Microsoft word:***<br>Word Basics, Features, Work with Text, Format Documents, Work with Text Objects Work with References | 9 |
| 3 | ***Microsoft Excel***<br>Excel Basics,Features, Work with Cells and Worksheets, Calculate Your Data, Format your Workbook, Add Charts and Graphics, Analyze your Data | 9 |
| 4 | ***Microsoft power point***<br>PowerPoint Basics, Features, Create Presentations, Insert and Modify Text, Work with Graphics and Media, Final Preparations, Deliver a Presentation | 9 |
| Text Books | | |
| 1 | Microsoft Office 2019 Inside Out : BY Joe Habraken | |
| 2. | Learn to use computer, MS Word, Powerpoint and Excel: First Edition) Kindle Edition by Inderjeet Singh | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Introduction to Mechatronics | |
| Subject code | OSME102 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• Understand Mechatronics system.<br>• Understand principles of sensors, actuators its characteristics, interfacing with controller.<br>• Learn and have hands-on experience of Mechatronics and Control. | | |
| Syllabus- Theory | | |
| Unit | Content | Hrs |
| 1 | ***Introduction:***<br>Basic concepts of Mechatronics, Examples and applications. | 2 |
| 2 | ***Sensors:***<br>Performance terminology, Static and dynamic characteristic, Touch sensor, Color sensor, Ultrasonic sensor, Encoder | 8 |
| 3 | ***Actuators:***<br>Dc motor modeling, Dc motor steady-state operations, Pulse width modulation, Solid-state switches, H-circuits, Dc motor dynamics operations, Speakers | 8 |
| 4 | ***Signal Conditioning:***<br>Basic concept, Some basic operational amplifier circuit design, Sampling, A/D converters, D/A converters, Multiplexers | 8 |
| 5 | ***Electromechanical Drives:***<br>Relays and Solenoids, Stepper Motors, DC brushed motors, DC brushless motors – DC servo motors, 4-quadrant servo drives, PWM's, Pulse Width | 7 |
| Text Books | | |
| 1 | Introduction to Mechatronics By Appukuttan, Oxford | |
| 2 | Mechatronics Electronics Control Systems in Mechanical and Electrical Engineering By W Bolton, Pearson. | |
| 3 | Mechatronics Principles concepts & Applications By N.P.Mahalik, Mc Graw Hill | |
| 4. | Introduction to Mechatronics and Measurement by David G. Alciatore, Michael B. Histand, Systems, 4th Edition, McGraw Hill, 2012, ISBN-13: 978-0-07-338023-0 | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Cryogenics Engineering | |
| Subject code | OSME103 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• To present a problem oriented in depth knowledge of Cryogenic Engineering<br>• To understand concepts and methods behind Cryogenic Engineering | | |
| Syllabus - Theory | | |
| Unit | Content | Hrs |
| 1 | ***Introduction:***<br>Introduction, Properties of engineering materials at cryogenic temperatures, mechanical properties, thermal properties, electric & magnetic properties, super conducting materials, thermo electric materials, composite materials, properties of cryogenic fluids, super fluidity of He3 & He 4. | 8 |
| 2 | ***Cryogenic insulation:***<br>Cryogenic insulation - expanded foams, gas filled & fibrous insulation, vacuum insulation, evacuated powder & fibrous insulation, opacified powder insulation, multilayer insulation, comparison of performance of various insulations | 8 |
| 3 | ***Applications of cryogenic systems:***<br>Super conductive devices such as bearings, motors, cryotrons, magnets, D.C. transformers, tunnel diodes, space technology, space simulation, cryogenics in biology and medicine, food preservation and industrial applications, nuclear propulsions, chemical propulsions. | 6 |
| 4 | ***Cryogenic Refrigeration System:***<br>Ideal isothermal and reversible isobaric source refrigeration cycles, Joule Thomson system, cascade or pre-cooled joule–Thomson refrigeration systems, expansion engine and cold gas refrigeration systems, | 8 |
| Text Books | | |
| 1 | Cryogenic Systems, Barron, McGraw Hill Book Co | |
| 2 | Cryogenic systems, R F Barron, Oxford University Press, | |
| 3 | Miniature refrigerators for cryogenic sensors and cold electronics, Graham Walker, Clarendon Press, 1989 | |
| 4 | Cryogenic technology & applications, A R Jha, Butterworth-Heinemann, 2006, | |
| 5 | Cryogenic process engineering, Thomas M Flynn, Informa Health Care, 2004 | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Piping Design Engineering | |
| Subject code | OSME104 | |
| Learning Outcome: | | |
| The syllabus aims to test the student's ability to:<br>• To present a problem oriented in depth knowledge of Piping Design Engineering<br>• To understand concepts basic underground piping system to chemical transfer and carrying other fluid<br>• To equip students with skills, matching up with the requirement of the industry. | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***Introduction:***<br>Introduction, Piping Fundamentals, ASME Codes & Standards, Pipe Fittings, Flanges, Valves, Special Elements, Mechanical/Process Equipment's, Flow Diagrams, Piping Specifications, Piping & Equipment Layout, Piping Isometrics, Piping Spools, Pipe Supports. | 10 |
| 2 | ***Piping & Pipeline Systems Design:***<br>Pressure Design of Process Piping Systems & Pipelines, Hydraulic Design of Liquid Piping Systems & Pipelines. | 6 |
| 3 | ***Pipe Stress Analysis:***<br>Introduction, Pipe Span Calculations, Expansion Loops & Expansion Joints, Layout Solutions for Weight, Thermal, & Wind Loads, Sustained Loads, Flexibility Analysis using Code Equations, Occasional Loads | 8 |
| 4 | ***Software Static Analysis:***<br>Software base practices. | 4 |
| Text Books | | |
| 1 | Introduction to Pipe Stress Analysis by Sam Kannapan | |
| 2 | PROCESS PLANT LAYOUT AND PIPING DESIGN by Hunt and Bausbacher | |
| 3 | THE FUNDAMENTALS OF PIPING DESIGN by Peter Smith | |
| 4 | PIPE STRESS ENGINEERING by Peng | |
| 5 | A Guide to Piping Design and Engineering By Anuj Bhatia | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| FACULTY OF TECHNOLOGY | | |
| Programme | Bachelor of Technology | |
| Subject Name | Power Plant Design | |
| Subject code | OSME105 | |
| Learning Outcome: | | |
| At the end of the course , students will be able to<br>• To study technical requirements and economic principles related to design of power plant, electrical systems, switchyards<br>• To learn about power plant design guidelines | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | **Energy Sources and electric power generation** Renewable and non-renewable energy sources – Technology of geothermal, tidal, wind, solar thermal, solar photovoltaic, thermal, combustion, biothermal, combined cycle, gas turbine and hydro ,Operational characteristics of each of the technologies in power system on the basis of reliability, forced and scheduled outages, availability, on-grid and off-grid operation, operating range, maintainability | 6 |
| 2 | **Integrated System Planning in design approach** Load forecast, system expansion planning, load uncertainties, system security, balancing load, reserve capacity, spinning reserve, Different technologies for stable system operation, benefits of interconnection of regional utilities | 4 |
| 3 | **Hydro Power plant design** Power Plant sitting, hydro-power plant selection, hydro-power plant design guidelines, civil structures and mechanical equipment, location and selection of civil structures, Run of river (ROR), Pondage run of river (PROR), Reservoir and Pumping station – components , operation and characteristics, Discharge exceedance (Q), Plant size and unit size, turbine selection, minimum river discharge and environmental mitigation measures of hydro-projects | 6 |
| 4 | **Electric system design of a power** Electrical Single Line diagram, device symbols and numbers, generator and transformer schemes, scheme selection, Generator and transformer specification, operation and maintenance viewpoint, Governor and Excitation system, mode of operation, brushless and static excitation, Protection systems for generator and transformer in different types of plants, generator neutral grounding, protection standards, LV switchgear and station service, battery characteristics and battery charger operation, fire-fighting ,HV and MV Switchgear in power plants, HV switchyard, Switchyard scheme, bus layout, auxiliary and ancillary systems Fault level calculation, Earthing system design of power station and sub-station, Protection system design of generator Switchyard and synchronizing scheme, Power evacuation & transmission line selection | 14 |

| Suggested Book References | |
|---|---|
| 1 | Engineering and Design of Hydro electric Power Plants – US Army Corps of Engineers |
| 2 | Technical Manual – Electrical Power Plant Design – Department of the US Army. |
| 3 | Guide for Control of Hydroelectric Power plants – IEEE No. 1010-1987 |
| 4 | Guide for safety in AC substation grounding – IEEE No. 80-2000. |
| 5 | Wilenbrock and Thomas 'Planning Engineering and Construction of electric Power Generating Facilities" John Wiley and Sons |
| 6 | Marsh 'Economics of Electric Utility power Generation "Clarendon Press |
| 7 | Dr.P.C. Sharma "Power Plant Engineering" S.K. kataria and Sons |
| 8 | Srivatsan R. conditions of visibility Calcutta stree |
| 9 | Generation and Economic Considerations – J.B. Gupta |
| 10 | Power Plant Engineering – AK Raja, Amit Prakash Srivastava, Manish Dwivedi |

**GANPAT UNIVERSITY**

**FACULTY OF ENGINEERING & TECHNOLOGY**

| | |
|---|---|
| Programme | B.Tech Marine Engineering |
| Subject Name | Leadership Development |
| Subject code | OSMR102 |

Learning Outcome:

On successful completion of the course, the students will be:

- Students will develop critical thinking skills.
- Students will develop an understanding of change processes and be able to think critically about obstacles to change.
- Students will understand and be able to use a process for decision making.
- Students will understand the history of leadership and current leadership theories. In addition, students will understand how leadership models are put into practice personally, locally, and globally.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Leadership and Body Language:** Importance of non-verbal messages for the leader, positive-negative impressions a leader can form with subtle messages perceived by people, guidelines, how not to oversee body language, synchronization of verbal nonverbal messages. This unit involves pictorial demonstrations of different gestures/postures/ signs and their interpretation | 13 |
| 2 | **Inclusive Education for the leaders of tomorrow:** Importance of inclusive society and equitable society. How education can transform the nation, inclusive educational model which is affordable and of a global standard. | 8 |
| 3 | **History and lessons of history in the context of leadership:** This unit is a debate unit where in student's debate whether history can teach or history has not been able to change the world. Students are encouraged to cite examples to support their arguments. | 8 |
| 4 | **Leader of my Choice:** Students are asked to prepare an open question for the exams on the leader of their choice. They are asked to explore leadership strengths and styles of the leader they are selecting. The objective of this unit is to make student study beyond the syllabus and define their idea of a leader. | 7 |

**Books Recommended:**

1. Sham Lal. Indian Realities in Bits and Pieces, Rupa and Co. New Delhi
2. Surendra Kumar & Pradeep Kapur. India of My Dreams, Academic Foundation, New Delhi
3. Nissam, Urlah. India: Economic, Political and Social Issues
4. Drucker, Peter and Maciariello, Joseph: 366 Days of Insight and Motivation for Getting the Right Things Done: Rutledge

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | POSITIVE PSYCHOLOGY | |
| Subject code | OSPCE101 | |
| Learning Outcome: | | |
| The syllabus aims to develop the students' ability to:<br>• To bring an experience marked by predominance of positive emotions and informing them about emerging paradigm of Positive Psychology<br>• • Build relevant competencies for experiencing and sharing happiness as lived experience and its implications | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | **Introduction:**<br>Introduction to Positive Psychology Positive Psychology: Concept, History, Nature, Dimension and scope of Positive Psychology Seligman's PERMA | 6 |
| 2 | **Positive Emotional States and Processes**: Positive Emotions and wellbeing: Hope & Optimism, Love The Positive Psychology of Emotional Intelligence Influence of Positive Emotions | 6 |
| 3 | **Strengths and Virtues**:<br>Character Strengths and Virtues Resilience in the phase of challenge & Loss Empathy and Altruism. | 5 |
| 4 | **Happiness**:<br>Introduction to Psychology of happiness, wellbeing and scope, Types of happiness- eudemonic and Hedonic History of Happiness, Theories, Measures and Positive correlates of happiness Traits associated with Happiness Setting Goals for Life and Happiness | 8 |
| 5 | **Forgiveness and Gratitude**:<br>Forgiveness and Gratitude Personal transformation and Role of suffering Trust and Compassion | 5 |
| Text Books | | |
| 1 | Linley, P.A. and Joseph, S. (2004), Positive Psychology in Practice, New York: John Wiley and Sons.<br>• Peterson, C. (2006), Positive Psychology, New York: Oxford University Press. Goleman & Daniel, Emotional Intelligence<br>• Snyder, C.R., Lopez, S.J. & Pedrotti, J.T. (2011): Positive Psychology: The Scientific and Practical Explorations Of Human Strengths (2nd Ed). Sage Publication, Inc.<br>• Tal Ben-Shahar (2007) Happier: Learn the Secrets to Daily Joy and Lasting Fulfilment. | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | Contributory traits as engineer | |
| Subject code | OSPCE102 | |
| Learning Outcome: | | |
| The syllabus aims to develop the students' ability to:<br>• Understand basic concepts of contributor<br>• Imbibe and improve the level of ethics in professional work as engineer | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | ***Introduction:***<br>Meaning of contributor, Difference between contributor and non-contributor, Essential qualities of contributors. | 4 |
| 2 | **Qualities as Value creator:**<br>Efficient hard working, Valuable difference e.g. innovation, concentrating on most appropriate action for manufacturing industry and user | 6 |
| 3 | **Level of engagement:**<br>Complexity of work, correlation of work, rapid change in technologies, importance of quick and in-depth learning, | 4 |
| 4 | **Involvement & team work:**<br>Constant change in required work type, need and importance to work in team of various department of organisation, sustainable and common goals, attitude for working for the organisation than for self. | 6 |
| 5 | **Humanistic approach & compassion**<br>Humanistic approach to the given task; Need of responding the concerned stack holder(team member, user) as a human being; Humanistic customer centric approach and its importance while designing products, solutions and services; Correlation of humanistic customer centric approach for successful outcome | 4 |
| 6 | **Conduct and Trust correlation**<br>Introduction to the conduct and trust; Trust among team members, higher level authorities and end users; Importance of people with good conduct; Advantages of being trusted. | 6 |
| Text Books | | |
| 1 | Contributor Personality Development - A Comprehensive Approach By Dr. R. S. Patel, Dr. A. K. Adhikary: Publisher: Technical Publications | |

| GANPAT UNIVERSITY | | |
|---|---|---|
| **FACULTY OF ENGINEERING & TECHNOLOGY** | | |
| Programme | Bachelor of Technology | |
| Subject Name | HUMAN RESOURCE MANAGEMENT | |
| Subject code | OSPCE103 | |
| Learning Outcome: | | |
| The syllabus aims:<br>• To become a successful manager of people, students need to understand behavior of human resources in various organizational situations. In a complex world of industry and business, organizational efficiency is largely dependent on the contribution made by the human resources of the organization.<br>• The objective of this course is to sensitize students to various facts of managing people and to create an understanding of the various policies and practices of human resource management. | | |
| Theory syllabus | | |
| Unit | Content | Hrs |
| 1 | **Introduction:**<br>Human Resource Management-. Introduction and Scope, HRD-Concept, Need,<br>Human Resource Planning-Concept, Process, job design-Concept approaches, job analysis, job description, job specification. | 6 |
| 2 | Human Resource Procurement: Recruitment. Selection and induction. Training, Training phases, Need Assessment, Establishment, Establishment of Training Objectives, Training method Lecture, case method, Role-playing. | 6 |
| 3 | Business in Basket T- Group, Incident, Syndicate, Evaluation of a training Program. Performance measurement and reward systems-introduction, performance drivers, leadership and performance, reward management performance appraisals. Discipline. | 7 |
| 4 | The grievance procedure. Employee compensation-purpose and importance, components. non monetary rewards, workers participation in Management Employee. | 7 |
| 5 | Strategic challenges for leadership, career management, SHRM Mergers and acquisitions, Case study | 5 |
| Text Books | | |
| | 1.Human Resource & Personal Management, Aswathappa K, TMH N.D.<br>2.Human Resource Mangement, L.M.Prasad, S.Chand<br>3.Human Resource Management, V.S.P.Rao, Excel books, N.D<br>4.International Human Resource management, Chris Brewster, University Press | |

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

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|---|---|
| **Programme** | B.Tech |
| **Subject Name** | General Studies for Civil Services |
| **Subject code** | OSCSBS101 |

**Learning Outcome:**

On completion of this course, the student will be able to:

- Understand the rich and diverse culture of India.
- Will have knowledge of current affairs.
- Will gain about how country's economy works.
- Will have knowledge about history of India.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **CURRENT AFFAIRS**<br>National symbols , Profile of India , , Latest inventions on science & technology , Eminent personalities & places in news , Sports & games , Books & authors , Awards & honours , Cultural panorama , Policy on environment and ecology , India and its neighbours , Latest terminology , Appointments , who is who? , Latest court verdicts , public opinion , Political parties and political system in India , Public awareness & general administration , Role of voluntary organizations & govt. , Welfare oriented govt. schemes, their utility – Flagship Programmes of Central Government , Mass media & communication | 6 |
| 2 | **HISTORY AND CULTURE OF INDIA**<br>Pre Historic India ,Indus Valley , Vedic Culture ,Sangam Age and Heritage of Tamils ,Jainism ,Buddhism ,Early Political History ,Mauryas and Guptas ,Hindu Revivalism ,Delhi Sultanate ,Bhakti Movement ,Mughal –<br>Impact of British Administration ,Socio Religious Reform Movement –<br>Freedom Struggle ,Dravidian Movement ,Character of Indian Culture –<br>Unity of Diversity ,Development of Science and Technology after Independence. | 6 |
| 3 | **CONSTITUTION OF INDIA**<br>Salient features of Indian constitution Union, State and territory Citizenship Fundamental rights Fundamental duties Union Executive- Union legislature ,State executive and Legislature ,Status of Jammu & Kashmir Local<br>government ,Judiciary in India ,Indian federalism ,centre ,state relations<br>Law-Making Procedure -Emergency provisions Civil services in India<br>Administrative challenges in a welfare state Complexities of district<br>administration Elections Amendments to constitution Anticorruption<br>measures - Central and State Commission Empowerment of women<br>Voluntary organizations and public grievances redressal Human rights<br>charter –Consumer. | 6 |
| 4 | **INDIAN ECONOMY**<br>Nature of Indian economy Five year plan models an assessment Land reforms & agriculture | 6 |

| | | |
|---|---|---|
| | Application of science in agriculture Industrial growth. Capital formation and investment Role of public sector & disinvestment<br>Development of infrastructure Energy Different sources and development<br>Finance Commission Nithi Ayog National Development Council - National income Public finance & fiscal policy Price policy & public distribution<br>Banking, money & monetary policy Role of Foreign Direct Investment (FDI)<br>WTO globalization & privatization Rural welfare oriented programmes Social sector problems ,population, education, health, employment, poverty HRD ,sustainable economic growth. | |
| 5 | **INDIA AND WORLD AFFAIRS**<br>Indian foreign policy- Foreign Affairs with special emphasis on India's relations with neighboring countries and in the region Defence, national security system and terrorism ,World And Regional organizations and Pacts<br>and Summits - Security and defence related matters Nuclear policy, issues and conflicts International law -The Indian Diaspora and its contribution to India and the World ,India and super powers | 6 |
| **References** | | |
| 1 | Dutt and Sundaram. 2016. Indian Economy. S.Chand and Company New Delhi. Fadia B.L. 2017. Indian Government and Politics. Sahitya Bhawan , New Delhi. Fadia B.L. 2017. International Relations, Sahitya Bhawan , New Delhi. India Year Book 2018 , Publication Division, New Delhi. | |
| 2 | Fadia B.L. 2017. Indian Government and Politics. Sahitya Bhawan , New Delhi | |
| 3 | India Year Book 2018 , Publication Division, New Del | |

# GANPAT UNIVERSITY

## FACULTY OF TECHNOLOGY

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|---|---|---|---|---|
| Programme | Bachelor of Technology | | Branch/Spec. | Information and communication Technology |
| Semester | VII | | Version | 1.0.0.0 |
| Subject code | OSICT101 | Subject Name | Laws and Ethics | |

Learning Outcome:

The syllabus aims to test the student's ability to:

- Acquire adequate knowledge of the basic concepts of laws
- Understand the basic knowledge of ethics including allied regulatory compliance and requirements

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | ***Indian Contracts Act, 1872:***<br>Essential elements of a contract, offer and acceptance, Void and voidable agreements, Consideration, legality of object and consideration, Capacity of Parties, free consent Quasi-contracts, Contingent contracts, Performance of contracts, Discharge of contracts<br>Breach of Contract and Remedies for Breach of Contract | 8 |
| 2 | ***Sale of Goods Act, 1930***<br>Definition, Transfer of ownership, Conditions and Warranties, Performance of the Contract of Sale, Rights of Unpaid Vendor, Auction Sales | 8 |
| 3 | ***Negotiable Instruments Act, 1881***<br>Negotiable Instruments–Characteristics of Negotiable Instruments, Definitions of Promissory Note, Bill of Exchange and Cheque, Difference between Promissory Note, Bill of Exchange and Cheque, Crossing – Meaning, Definition and Types of Crossing. | 6 |
| 4 | ***Ethics and Business***<br>Ethics – Meaning, Importance, The "Seven Principles of Public Life" – Selflessness, Integrity, Objectivity, Accountability, Openness, Honesty and Leadership, The relationship between Ethics and La, Ethics in Business | 8 |

Text Books

| | |
|---|---|
| 1 | FUNDAMENTALS OF LAWS AND ETHICS: by ANAND KUMAR SHRIVASTAVA |

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

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|---|---|
| **Programme** | B.Tech |
| **Subject Name** | Technical Writing |
| **Subject code** | 2OS195 |

**Learning Outcome:**

At the end of the course, students will be able to-

- Participate actively in writing activities (individually and in collaboration) that model effective scientific and technical communication in the workplace.
- Understand how to apply technical information and knowledge in practical documents for a variety of a.) Professional audiences (including peers and colleagues or management) and b) public audiences.
- Practice the unique qualities of professional writing style, including sentence conciseness, readability, clarity, accuracy, honesty, avoiding wordiness or ambiguity, previewing, using direct order organization, objectivity, unbiased analyzing, summarizing, coherence and transitional devices.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | An Introduction to Technical Writing<br>Technical writing vs. General writing b. Purpose, importance and characteristics of technical writing, Objectives of technical writing: Clarity, conciseness, accuracy, organization, ethics, Audience recognition and involvement: High tech audience, low- tech. audience, gender neutral language. | 8 |
| 2 | Memorandum<br>Objectives, difference between memos, letters and emails. Criteria and format for writing and memos. | 2 |
| 3 | Technical description<br>Criteria and process, Technical instructions for user's manual | 2 |
| 4 | Report Writing<br>Characteristics, types and writing of various reports: feasibility reports, inventory report, mishap report, progress report, laboratory report | 5 |
| 5 | Letter- writing<br>Business letters- order, complaint, inquiry, Job-applications, Resume Business Proposals 05<br>Types & formats | 4 |
| 6 | Graphic representation of Technical Data, SOP writing, Promotional Writings<br>Technical Brochure designing ,Content writing for Websites (For promotional and troubleshooting purposes), Writing Fliers and Newsletters | 4 |
| 7 | Academic Writing 05<br>Summaries, abstracts and instructions, Case studies on Technical Writing | 5 |

**Reference Books**

| | |
|---|---|
| 1 | SharonJ.GersonandStevenM.Gerson,Technicalwriting–processandproduct,Pearson Education Asia . |
| 2 | AndreaJ.Ratherford,BasicCommunicationSkillsforTechnology,PearsonEducationAsia |
| 3 | Pfeiffer, W.S. and T.V.S. Padmaja. Technical Communication. Pearson. |
| 4 | Muralikrishna and Sunita Mishra. Communication Skills for Engineers. Pearson |
| 5 | CharlesW.Knisely and KarinI.Knisely.Engineering Communication. Cengage |

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

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|---|---|
| **Programme** | B.Tech |
| **Subject Name** | MATLAB for Engineers |
| **Subject code** | 2OS194 |

**Learning Outcome:**

Upon course completion, a student will be able to:

- Use basic commands and graphics in MATLAB.
- Apply MATLAB in solving algebra and calculus problems.
- Create simple MATLAB programs in engineering applications.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **MATLAB basics –**<br>The MATLAB environment - Basic computer programming - Variables and constants, operators and simple calculations - Formulas and functions - MATLAB toolboxes | 5 |
| 2 | **Matrices and vectors –**<br>Matrix and linear algebra review - Vectors and matrices in MATLAB - Matrix operations and functions in MATLAB | 6 |
| 3 | **Computer programming** –<br>Algorithms and structures - MATLAB scripts and functions (m-files) - Simple sequential algorithms - Control structures (if…then, loops)<br>MATLAB programming - Reading and writing data, file handling - Personalized functions - Toolbox structure - MATLAB graphic functions | 8 |
| 4 | **Numerical simulations** –<br>Numerical methods and simulations - Random number generation - Montecarlo methods | 5 |
| 5 | **Hands-on session**<br>Interactive hands-on-session where the whole class will develop one or more MATLAB scripts that solve an assigned problem | 6 |

**Reference Books**


| | |
|---|---|
| 1 | MATLAB Getting Started Guide http://www.mathworks.com/help/pdf_doc/matlab/getstart.pdf |
| 2 | MATLAB Central (script, toolbox, blog, newsgroup) http://www.mathworks.com/matlabcentral/ MATLAB Newsletters |
| 3 | http://www.mathworks.com/company/newsletters |

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

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|---|---|
| **Programme** | B.Tech |
| **Subject Name** | Health and Nutrition |
| **Subject code** | 2OS193 |

**Learning Outcome:**

After successful completion of the course student will be able to:

1. Remember the fundamentals of health and nutrition
2. Cite examples of food labelling
3. Describe significance of macronutrients and micronutrients
4. Discuss importance of functional foods
5. Explain indicators of nutritional status

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to the basic concepts of health and nutrition** | 4 |
| 2 | **Nutrition**<br>• Macronutrients: Carbohydrates (including dietary fibers), fats and proteins • Micronutrients: Vitamins, minerals, anti-oxidants, gut flora<br>• Significance of macronutrients and micronutrients for optimal health | 6 |
| 3 | **Meal Planning**<br>• Functional foods: Definition of functional foods, Role of functional ingredients and food in nutrition, Health attributes of functional foods<br>• Health attributes of nutrition: Diet and disease, Diet with respect to special population (elderly, pediatric and pregnant women),<br>• Indicators for maintenance of nutritional status: Nutrition Balance Indicator, Satiety Index, Fullness factor, Glycemic index and insulin index | 10 |
| 4 | **Food Labelling (Food service management)**<br>• Nutrition Facts Panel<br>• Serving Size<br>• Calories<br>• Ingredients list<br>• Quantitative indications<br>• Food additives<br>• The percent daily value<br>• Allergan labelling | 10 |

**Reference Books**


| | |
|---|---|
| 1 | Nutritional Sciences: From fundamental to food. By Michelle McGuire and Kathy Beerman. Publisher: Yolanda Cassio. ISBN-13: 978-0840058201 |
| 2 | Pressman, Alan H., Sheila Buff, and Gary Null. The Complete Idiot's Guide to Vitamins and Minerals. New York: Alpha Books. |

| | |
|---|---|
| 3 | Focus on Pathophysiology, Barbara A. Bullock and Reet L. Henze Lippincott Williams & Wilkins, Philadelphia |
| 4 | Lehninger Principles of Biochemistry, 3rd ed London : Macmillan Press Ltd. |
| 5 | 5. Tortora G.J. and Anagnodokos, N.P. Principles of Anatomy and Physiology (Harper and Colling Publishers, New York) |
| 6 | Advanced Nutrition: Macronutrients, Micronutrients, and Metabolism By: Carolyn D. Berdanier, Lynnette A. Berdanier, Janos Zempleni. Publisher: CRC Press. ISBN 9781420055528 |
| 7 | Functional Foods and Nutraceuticals By: Aluko, Rotimi E. Publisher: Springer |
| 8 | B. Srilakshmi. Food science. India, New Age International (P) Limited. |
| 9 | Kumud Khanna, Sharda Gupta, Santosh Jain Passi, Rama Seth, Ranjana Mahna & Seema Puri . Textbook of Nutrition and Dietetics. India, Elite Publishers. |
| 10 | C.Gopalan. Nutritive Value of Indian Foods, India, ICMR publications. University Electives |

# GANPAT UNIVERSITY

## FACULTY OF TECHNOLOGY

| | | | |
|---|---|---|---|
| Programme | Bachelor of Technology | Branch/Spec. | Computer Science and Engineering (CBA/CS/BDA) |
| Semester | IV | Version | 1.1.1.1 |
| Subject code | 2OS119 | Subject Name | PROFESSIONAL SKILL BUILDING-II |

Learning Outcome:

On successful completion of the course the students will be able to:

- Solve various questions based on quantitative ability and logical reasoning.
- Handle oneself in a given professional setting though effective communication skills
- Face HR and Behaviour Interviews
- Write a professional CV and further be able to plan the profile development for remaining course
- Ability to follow and execute the code of conduct in a professional environment
- Stand tall in corporate with professional etiquettes

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Quantitative Abilities<br>Problems on Permutations and Combinations, Problems on Probability<br>Problems on Probability<br>Problems on Stocks and Shares<br>Problems on Calendar<br>Problem Square Root and Cube Root<br>Problem Area and Volume | 8 |
| 2 | Logical Reasoning<br>Logical Deductive Reasoning<br>Statement and Argument | 6 |
| 3 | Communication Skills<br>Learning Communication through Role Plays<br>Learning Persuasion and Convincing skills | 6 |
| 4 | Life Skills [Corporate Skills]<br>Campus to Company | 4 |
| 5 | Personality Development<br>Learning HR Skills<br>Profile [CV] Building Workshop | 4 |
| 6 | Learning Professional Etiquettes | 2 |

Text Books

| | |
|---|---|
| 1 | |

| Reference Books | |
|---|---|
| 1 | Quantitative abilities by Arun Sharma |
| 2 | Verbal and Non-Verbal reasoning by R S Agrawal |
| 3 | The “Art of Winning” by M Ashraf Rizvi |
| 4 | The Magic of Thinking Big by David Schwartz |

# GANPAT UNIVERSITY

## FACULTY OF TECHNOLOGY

| | | | |
|---|---|---|---|
| Programme | Bachelor of Technology | Branch/Spec. | Computer Science & Engineering (CBA/BDA/CS) |
| Semester | III | Version | 1.1.1.1 |
| Subject code | 2OS118 | Subject Name | PROFESSIONAL SKILL BUILDING-I |

Learning Outcome:

- Face One- to-One Interview
- Present oneself [Personality Development]
- Solve various questions based on quantitative ability, logical reasoning and data interpretation.
- Learn skills involved in developing enriching interpersonal relationships
- Handle emotions of largely self and others
- Understand the necessity and importance of working together as a team
- Deal with stress
- Able to create a first-hand bio-data for self

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Higher Quantitative Abilities<br>Problems on Time and Work<br>Problems on Allegation and Mixtures<br>Problems on Partnership<br>Problems on Set Theory | 6 |
| 2 | Non Verbal Logical Reasoning<br>Coding – Decoding<br>Blood Relations | 4 |
| 3 | Data Interpretations<br>Tables<br>Pie Charts<br>Bar Chart<br>Line Chart | 4 |
| 4 | Life Skills<br>Learning Time Management Skills<br>Learning Team Building Skills<br>Learning Stress Management Skills | 6 |
| 5 | Personality Development<br>Profile [CV] Building [Workshop] | 4 |
| 6 | Soft Skills<br>Learning Interview Facing Skills | 2 |
| 7 | Mock Interviews | 4 |

Text Books

| | |
|---|---|
| 1 | Verbal and Non-Verbal reasoning by R S Agrawal |

Reference Books

| | |
|---|---|
| 1 | Quantitative abilities by Arun Sharma |

| | |
|---|---|
| 2 | The Magic of Thinking Big by David Schwartz |

# GANPAT UNIVERSITY

## FACULTY OF TECHNOLOGY

| | | | | |
|---|---|---|---|---|
| Programme | Bachelor of Technology | | Branch/Spec. | Computer Science & Engineering (CBA/CS/BDA) |
| Semester | II | | Version | 1.1.1.1 |
| Subject code | 2OS117 | Subject Name | CAREER DEVELOPMENT PROGRAM-II | |

Learning Outcome:

On successful completion of the course the students will be able to:

- Develop and Present Professional Presentations
- Develop discussion skills and further participate in discussions
- Develop Reasoning Skills in Discussion
- Plan primary CV with a view to develop it further in upcoming semesters
- Asses himself/herself in various career related assessments

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Learning Presentation Skills**<br>What is Presentation<br>Key elements of Presentation<br>Presentation Delivery<br>Rules of a professional Presentation<br>Positive and Nervous making Factors<br>Tips for dynamic Deliveries<br>Dealing with questions in Presentation | 4 |
| 2 | **Mock Presentation**<br>Delivering Presentation | 4 |
| 3 | **Learning Group Discussion Skills**<br>What is Group Discussion?<br>Personality Qualities in Group Discussion<br>Need of Group Discussion in Industry / Organization<br>Organization's Group Discussion Perspective<br>Aspects of Group Discussion<br>Types of Topics<br>Managing Score Cards in Group Discussion<br>Techniques to Imitate Group Discussion<br>Do's and Don'ts in Group Discussion<br>Positive and Negative factors in Group Discussion | 6 |

| | | |
|---|---|---|
| 4 | **Profile Development**<br>Learning CV Building Skills<br>Planning Profile Building Factors<br>Execution Strategies for Profile Building | 4 |
| 5 | **Personality Skills**<br>Learning through Professional Role Plays<br>Learning Situation Reactions<br>Picture & Word Perceptions | 4 |
| 6 | **Personality Assessments**<br>Career Advancement Assessment<br>Attention Disorder Assessment<br>Comm. Skill Assessment<br>Employability Skills Assessment | 4 |
| 7 | **Mock Group Discussions**<br>Group Discussion on Factual & Abstract Topics | 4 |

| Text Books | |
|---|---|
| 1 | Computer System Architecture By M. MorrisMano, Pearson Publlication |
| 2 | Computer Architecture and OrganizationBy Hayes, Tata McGraw Hill |
| Reference Books | |
| 1 | Structured Computer Organization: By Tanenbaum |
| 2 | Computer Organization and ArchitectureBy Stallings, Pearson Publication |
| 3 | Computer Organization and Design by P. Pal Chaudhury, PHI Publication |

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

| | | | | |
|---|---|---|---|---|
| Programme | Bachelor of Technology | | Branch/Spec. | Computer Science Engineering (CBA/CS/BDA) |
| Semester | I | | Version | 1.1.1.1 |
| Subject code | 2OS116 | Subject Name | CAREER DEVELOPMENT PROGRAM-I | |

Learning Outcome:

On successful completion of the course the students will be able to:

- Learning basics of communication & grammar
- Developing reading, writing and listening skills
- Identify ones flaw in English pronunciation and have an individual plan to rectify the same
- Adapt speech organs to get near-perfect native English pronunciation.
- Enhance knowledge and skills to develop life-long goal to perform in globally competitive service industry
- Understand the very need of "Basic Etiquettes" in Corporate

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Basics of Communication:**<br>Definition, Principles, Process, Functions, and Forms of communication (Formal – Informal, Verbal – Non-verbal, Electronic and Visual)<br>Barriers to Communication with Remedies<br>All eight Parts of Speech, Tenses, Active and passive Voice | **6** |
| 2 | **Introduction to Functional Grammar in English**<br>Verb Forms, Collocations, Homophones and Homonyms, Conjunctions, Abbreviations &Acronyms and Introduction to English Sounds | **6** |
| 3 | **Receptive Language Skills [Listening and Reading Skills]**<br>**A. Listening Skill:**<br>Definition and process of listening skill<br>Pre-requisites of effective listening<br>Modes of listening<br>Causes of poor listening<br>Tips for effective listening<br>Traits of a good listening<br>**B. Reading Skill**:<br>Definition and types of reading<br>Techniques for effective reading comprehension<br>Purposes of Reading | **6** |
| 4 | **Productive Language Skills (Written Communication)**<br>**Basic Writing Skills**<br>Significance of written communication for professionals<br>Fundamentals of good writing | **6** |

| | | |
|---|---|---|
| | Guidelines for effective writing – Selection of words<br>Improving Technical vocabulary<br>Framing sentences and composing paragraphs.<br>Precise writing<br><br>**Letter Writing**<br>Structure and layout of a business letter / emails<br>Types of business letters – inquiry, reply, complaint and adjustment letter, salespromotion, Job application with resume<br>Error free writing, Improving word power and fast writing<br>**Advertisement / PR Writing**<br>Advertisement drafts with special reference to engineering & technology<br>Writing PR drafts for events & activities | |
| 5 | **Learning Basic Etiquettes**<br>What is Etiquette<br>Why Etiquettes are needed?<br>Dressing and Grooming Etiquette<br>Wishing, Meeting and Parting Etiquette<br>Standing Tall Etiquette<br>Interview Ethics Etiquette<br>Being Polite Etiquette<br>General Office Manners Etiquette<br>Telephone Etiquette / Mobile Etiquette | **6** |
| Text Books | | |
| 1 | - | |
| Reference Books | | |
| 1 | Business Communication by V. K. Jain and OmprakashBiyani (S. Chand & Company) | |
| 2 | A Communicative Grammar of English by Geoffery Leech and Fan Svartvik (Pearson Longman) | |
| 3 | Oxford English for Careers: Technology 1: Student's Book by Eric Glendinning | |
| 4 | English for Specific Purposes (Resource Books for Teachers) by Keith Harding | |
| 5 | Word Power Made Easy by Norman Lewis | |
| 6 | English Grammar by Wren & Martin | |
| 7 | Nautical Miles by IMS | |

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA14VD1: LIFE SKILLS DEVELOPMENT

**Learning Outcome:**
On successful completion of the course, the students will be:

- Able To Learn Life Skills
- Familiar With Self-Awareness And Effectiveness
- Understand The Thinking And Coping Skills
- Aware About Problem Solving And Decision Making
- Acquire Knowledge About Life Skills And Career

**Contact Hours: 30**

**Unit 1: LIFE SKILL (7)**

- Definition and Importance of LifeSkills
- Life SkillsEducation,
- Life Skills Approach in Education andTraining
- Classification of Life Skills - Generic, Problem Specific and Area Specific Skills, Social&
- Negotiation Skills

**Unit 2: SELF-AWARENESS AND EFFECTIVENESS (7)**

- **Self-Awareness:** Definition, Importance, Dimensions, Components
  Methods and Strategies for nurturingSelf-Awareness
- **Self-Effectiveness:** Body Image, Self Esteem, Punctuality, Honesty, Loyalty, Dependability, Reliability

**Unit 3: THINKING AND COPING SKILLS (7)**

Nature, Elements of Thought and Types of Thinking

- **Creative and CriticalThinking**
  Definition, Nature, Stages
- **Problem Solving and DecisionMaking**
  Introduction of Problem Solving and Decision Making process
- **CopingSkills**
  Coping with Emotions: Definition, Characteristics
  Coping with stress: Definition, Sources of Stress, Strategies to Manage Stress

**Unit 4: LIFE SKILLS AND CAREER (9)**

**Education**

- Goal Setting
- TimeManagement
- Effective Learning: Study Skills and MemoryTechniques
- ExaminationPreparation

**Work/Career**

- Factors Influencing CareerChoice
- Career Planning: Importance,Steps
- Interview: Types, Preparation, Do's andDon'ts
- Life Skills for Effective Learning, Successful Career Planning & Development andInterview

**Text Book**

Life Skills Education by Dr. K. RavikanthRao, Dr. P. Dinakar- Neelkamal Publications Pvt. Ltd.

**Reference Books:**


1. Personality Development and soft skills by Barun KMitra-OXFORD
2. *Career Counselling: A Handbook by* Arulmani. G. and ArulmaniSonali Nag- Tata McGraw Hill PublishingCo
3. *Psychology for Living- Adjustment, Growth and BehaviourToday*(8th Edn.), *by* Duffy Grover Karen, Atwater Eastwood Pearson Education Inc, NewDelhi.

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA14VD2 :QUANTITATIVE APTITUDE AND LOGICAL REASONING

**Learning Outcome:**
On successful completion of the course, the students will be:

- Familiar With Operations On Numbers, H.C.F. & L.C.M Of Numbers, Decimal Fractions
- Understand The Simplification Of Numbers
- Aware About Average, Problems On Numbers, Problems On Ages And Percentage And Simple Interest
- Acquire Knowledge About Permutation & Combinations And Probability
- Able To Learn Time & Work, Time & Distance And Odd Man Out & Series

**Contact Hours: 30**

**UNIT-1:**
**OPERATIONS ON NUMBERS, H.C.F. & L.C.M OF NUMBERS, DECIMAL FRACTIONS(7)**

- Face value & PlaceValue,
- Types of numbers, Even & Odd numbers, Prime numbers, Tests ofdivisibility,
- Factors & Multiples, HCF or GCM or GCD, LCM, Product of HCF & LCM, Co primes, HCF & LCM of Fractions, Conversion of Decimal into Vulgar Fraction, Operations &Comparison on decimal fractions, Recurring Decimal, Basic Formulae for decimalfractions

**UNIT-2:**
**SIMPLIFICATION OF NUMBERS(2)**

- Square Roots & Cube Roots BODMASRule,
- Modulus of a real number, Facts and Formulae of square roots and cuberoots

**AVERAGE, PROBLEMS ON NUMBERS, PROBLEMS ON AGES AND PERCENTAGE(3)**

- Facts and Formulae of Average Concept ofPercentage,
- Express x% as fraction, Express a/b as percent, Results onPopulation

**SIMPLE INTEREST (3)**

- Concept of principal andinterest
- Facts and formulae for simpleinterest

**UNIT-3:**
**PERMUTATION &COMBINATIONS(3)**

- Factorial notation, Number of permutations, Number ofcombinations,
- Facts and formulae of permutation andcombinations

**PROBABILITY(4)**

- Experiment and Random experiment, Samplespace
- Probability of Occurrence of an event, Results onprobability

**UNIT-4:**
**TIME & WORK, TIME &DISTANCE(3)**

- Facts and formulae for time andwork,
- Facts and formulae for time anddistance

**ODD MAN OUT &SERIES(5)**

- Facts, exercises and solutions for odd manout,
- Facts, exercises and solutions for seriesproblems

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

**TextBook**

*QUANTITATIVE APTITUDE for competitive examinations by Dr.R.S. Aggarwal, S.CHAND publication*

**Reference Books:**

1. *QUANTITATIVE APTITUDE for competitive examinations by ABHIJIT GUHA, McGrawHill Education*
2. *GENERAL INTELLIGENCE AND TEST OF REASONING, Vikas PublishingHouse*

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA14VD3: ETHICS & VALUES

**Learning Outcome:**
On successful completion of the course, the students will be:

- Understand The Human Values
- Aware About Engineering Ethics
- Acquire Knowledge About Engineering As Social Experimentation
- Able To Learn Safety, Responsibilities And Right
- Familiar With Global Issues

**Total Sessions:30**

**Human Values:**
Morals, Values and Ethics – Integrity – Work Ethic – Honesty – Courage –Empathy – Self-Confidence – Character = Continuous Happiness and Prosperity- A look at basic Human Aspirations, Understanding and living in harmony at various levels

**Engineering Ethics:**
Senses of 'Engineering Ethics' - variety of moral issued - types of inquiry - moral dilemmas - moral autonomy - Kohlberg's theory - Gilligan's theory - consensus and controversy – Models of Professional Roles - theories about right action - Self-interest - customs and religion - uses of ethical theories. Valuing Time – Co-operation –Commitment

**Engineering as Social Experimentation:**
Engineering as experimentation - engineers as responsible experimenters - codes of ethics - a balanced outlook on law - the challenger casestudy

**Safety, Responsibilities and Right:**
Safety and risk - assessment of safety and risk - risk benefit analysis and reducing risk - the Three Mile Island and Chernobyl case studies, Collegiality and Loyalty - respect for Authority – collective Bargaining - confidentiality - Conflicts of Interest – Professional rights - EmployeeRights.

**Global Issues:**
Multinational corporations - Environmental ethics - computer ethics - weapons development - engineers as managers-consulting engineers-engineers as expert witnesses and advisors -moral Leadership

**ReferenceBooks:**


1) A Textbook on Professional Ethics and Human Values by Naagarazan, R.S, New Age Pub.
2) Ethics in Engineering by Mike Martin and Roland Schinzinger, McGraw-Hill, New York
3) Engineering Ethics by Govindarajan M, Natarajan S, Senthil Kumar V. S, Prentice Hall

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA15VD4: CREATIVE & CRITICAL THINKING

**Learning Outcome:**
On successful completion of the course, the students will be:

- Aware About Creative & Critical Thinking
- Acquire Knowledge About Thinking Styles And Common Mistakes
- Able To Learn Techniques For Improving Creativity
- Familiar With Evaluating Arguments
- Understand The Creativity In Problem Solving

**Total Sessions:30**

Introduction to Creativity and Innovation, Differentiation between creative and critical thinking

Thinking styles and common mistakes in thinking

Thinking about information and emotions, truth and knowledge

Evaluating arguments by asking the right questions about issues, conclusions, reasons, assumptions, evidence, etc.

**Techniques for improving Creativity :**
Brainstorming, Lateral Thinking, List of Mental Associations, Random Combinations, Matrix of Ideas, Use of Manipulative verbs, Tree of Possibilities, Abstraction, Transformation, Use of mind stimulation: games, brain-twisters andpuzzles

**Creativity in problem solving:**
Problem Definition, Understanding, Representing, Pattern Breaking, Thinking differently, Changing your point of view, Watching for paradigm shift, Challenging conventional wisdom, Lateral thinking, etc.

**ReferenceBooks:**


1) Asking the right Questions by M. Neil Browne & Stuart M. Keeley, Pearson, Prentice Hall
2) Teach Yourself to Think by Edward de Bono, Penguin
3) Lateral Thinking by Edward de Bono, Penguin
4) Six Thinking Hats by Edward de Bono, Penguin
5) Selected videos showcasing cases and arguments

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA15VD5 : BASIC PYTHON PROGRAMMING

**Learning Outcome:**

On successful completion of the course, the students will be:

- Acquire Knowledge About Basic Python Programming
- Able To Learn Installation And Features Of Python
- Familiar With Modules And Data Structures
- Understand The Object-Oriented Programming
- Aware About String And File Manipulation

**Total Sessions: 30 (20 Theory+10 Practical)**

Required the knowledge of basic programming concepts.

**Introduction to Python:**

Installation and working with Python, Features of Python, The Basics: Literal Constants, Numbers, Strings, Variables, Identifier Naming, Data Types, Objects, Logical and Physical Lines, Indentation, Operators and Expressions, Control Flow statements: if, while loop, for loop, break, continue, Library: NumPy, Pandas

**Using Modules and Data Structures:**

Modules: Introduction, the from.Import statement, Creating your own Modules, Data Structures: List, Tuple, Dictionary, Sequences, Object-Oriented Programming: classes, objects, The Self, object Methods, The initmethod, Class and Object Variables, Inheritance, polymorphism, Exceptions: Errors, Handling Exceptions, Raising Exceptions, Using Finally

**String and File Manipulation:**

String Functions, Manipulating files and directories, Text files: reading/writing text and numbers from/to a file, creating and reading a formatted file.

**Reference Books:**


(1) Fundamental of Python: First Programs By Kenneth A.Lambert
(2) Programming Python By MarkLutz

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA15VD6: BASIC CONCEPT OF DIGITAL MEDIA MARKETING

**Learning Outcome:**
On successful completion of the course, the students will be:

- Able To Learn Basic Concept Of Digital Media Marketing
- Familiar With Different Ways For Digital Marketing
- Understand The Digital Marketing Strategies
- Aware About Social Media Marketing
- Acquire Knowledge About E-Mail & Mobile Marketing

**Total Sessions: 30**

Required Basic knowledge of Internet and Social Media..

**Digital Media Marketing:**
Overview of the digital marketing, Digital and traditional marketing, Need of digital marketing, Objective of digital marketing, Different ways for digital marketing, Online marketing plan, Digital marketing strategies, promote business online, Introduction to online advertising -Email, Website, Blog, Blog posting, Blog integration with social media.

**Social Media Marketing:**
Social networking, Social Media channels, Bookmarking, SMM tools, Content writing, Building brand, Lead generation, Facebook marketing, Facebook insight, Instagram and Linkedin marketing, Twitter, Building followers, Social media strategies.

**E-Mail & Mobile Marketing:** Overview of E-mail marketing, Email strategy and planning, Email Campion, Email Tools, Mail Chimp, Email Scheduling, Email Automation, Mobile Commerce, Mobile Integration, Mobile analytics.

**Reference Books:**


(1) eMarketing, The Essential guide to marketing in a digital world, Rob stokes, Minds , 5th Edition,Publication-Quirk
(2) Digital marketing for Dummies , Ryan Deiss and Russ Hennesberry,2017

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA16VD7: IMAGE PROCESSING

**Learning Outcome:**
On successful completion of the course, the students will be:

- Familiar With Image Processing
- Understand The Fundamentals Of Digital Image
- Aware About Image Enhancements In The Spatial Domain
- Acquire Knowledge About Image Restoration And Image Segmentation
- Able To Learn Image Segmentation

**Contact Hours: 30**

**Unit 1: INTRODUCTION (06)**

- What Is Digital Image Processing? The Origins of Digital ImageProcessing,
- Examples of Fields that Use Digital ImageProcessing,
- Fundamental Steps in Digital ImageProcessing,
- Components of an Image ProcessingSystem.

**Unit 2: DIGITAL IMAGE FUNDAMENTALS (07)**

- Elements of Visual Perception, Light and the Electromagnetic Spectrum, Image Sensing andAcquisition
- Basic Concepts in Sampling andQuantization,
- Some Basic Relationships Between Pixels, An Introduction to the Mathematical Tools Used in Digital ImageProcessing.

**Unit 3: IMAGE ENHANCEMENTS IN THE SPATIAL DOMAIN (05)**

- Background, Some Basic Intensity TransformationFunctions,
- HistogramProcessing,
- Fundamentals of Basics of SpatialFiltering
- Smoothing and Sharpening SpatialFilters

**Unit 4: IMAGE RESTORATION AND IMAGE SEGMENTATION (07)**

- A model of the Image Degradation/RestorationProcess,
- Noise Models, Restoration in the Presence of Noisy Only-SpatialFiltering
- Periodic Noise Reduction by Frequency DomainFiltering
- Linear, Position-Invariant Degradations, Estimating the DegradationFunction,
- Geometric Mean Filter, Image Reconstruction fromProjections.

**Unit5: IMAGE SEGMENTATION(05)**

- Fundamentals, Point, Line and EdgeDetection
- Thresholding , Region BasedSegmentation
- Segmentation Using MorphologicalWatersheds

**Text Book**

*Digital Image Processing by Rafael C. Gonzalez and Richard E. Woods.*

**Reference Books:**


1. *Digital Image Processing by S. Sridhar Oxford UniversityPress*
2. *Fundamentals of Image Processing by Anil KJain*
3. *The Image Processing Handbook by John C Russ, CRC & IEEEPress*
4. *Digital Image Processing using MATLAB by Rafael C. Gonzalez, Richard E. Woods,Steven*

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA17VD8: MOBILE APPLICATION CONCEPT

**Learning Outcome:**
On successful completion of the course, the students will be:

- Understand The Basics Of Mobile Technology
- Aware About Mobile Application Architectures And Devices
- Acquire Knowledge About Android Basic & Its Components
- Able To Learn Features Of Android
- Familiar With Styles And Themes, Shapes & Animation

**Total Sessions: 30 (20 Theory+10 Practical)**

Required the knowledge of core java, database concepts & Programming knowledge.

**Basic of mobile technology**
**Mobile Devices -** Definition, m-commerce, m-business, component of wireless environment, why go mobile, input mechanisms, wireless communication, mobile device classification
**Mobile Application Architectures -** Choosing architecture, messaging, advantages of messaging

**Introduction to Android Basic & Its components**
**Introduction to Android -** History of android, The Open Handset Alliance, Android SDK installation, Android SDK & their codenames, Advantages of android, The Android O/S Architecture, Over view of IDE for Android application, What is AVD, How to launch and start the AVD (android virtual device)
**Managing Application Resources -** What are resources, resource value types, storing different resource values types (string, string arrays, Boolean, colors, integer, animation, &menus)
**Android Application Components -** Activities & its life cycle, Services & its life cycle, Broadcast receiver, Content provider, Intents, shutting down component ,Android Manifest File in detail ,Use of Intent Filter

**Features of android**
**Various Layouts -** What is layout, two of declaring layout, layout file structure, layouts common attribute, types of layout (linear layout, relative layout, table layout, frame layout ,tab layout )
**Styles and Themes -** Basic styles & themes in XML layout
**Using Data-Driven Containers -** List View, Grid View, and Gallery View (Using the Array Adapter)
**Working with Shapes & Animation -** Drawing basic shapes, frame by frame animation, tweened animation
**App widgets -** What is app widget, its framework, step to create, creating app widget configuration activity.

**Reference Books:**
(1) Android wireless application development, second edition by shaneconder ,Lauren darcey – Addison - Welsey

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA18VD9: BASIC CONCEPT OF SEO

**Learning Outcome:**
On successful completion of the course, the students will be:

- Aware About Basic Concept Of Seo
- Acquire Knowledge About How The Search Engine Works?
- Able To Learn Search Engine Architecture
- Familiar With Link Building, Google Business Listing, Seo Audits
- Understand The Search Engine Algorithms

**Total Sessions: 30**

Required Basic knowledge of Internet and Social Media..

**Search engine optimization:**
SEO Introduction, Importance of Search Engines, How the search engine works?, Using Search Operators, Google Search Engine Architecture, Indexing and Crawling, Keyword research, Keyword Planner tools, Organic search, Paid search, On page SEO, Off Page SEO

Link building, Google Business listing, SEO audits, Tools and Measurements, Search engine algorithm, Directory submission, robot.txt, Inbound Link, Link Building.

**Search engine marketing:**
SEM Introduction, Google Ad Words, Ad Sense, Campaign types, Display network, Mobile AD, YouTube Campaign, Landing page, Ecommerce listing, Affiliate marketing, Pinterest, Social Bookmarking.

**Reference Books:**


(1) Search Engine Optimization All in one for Dummies, Bruce Clay, Susan Esparza, 2ndEdition ,Publication Wiley
(2) Inbound Marketing, Get Found Using Google, Social Media, and Blogs 1st Edition, BrianHalligan ,Dharmesh Shah.

# GANPAT UNIVERSITY
## ACHARYA MOTIBHAI PATEL INSTITUTE OF COMPUTER STUDIES
## DEPARTMENT OF COMPUTER SCIENCE

### FCA19VD10: GENDER PERSPECTIVE-SOCIETY, EDUCATION AND ECONOMICS

**Learning Outcome:**
On successful completion of the course, the students will be:

- Acquire Knowledge About Gender Perspective-Society, Education And Economics
- Able To Learn Gender, Family And Social Dynamics
- Familiar With Gender And Education
- Understand The Gender And Economics
- Aware About Gender Roles

**Contact Hours: 30**

**Unit 1: Introduction**

- Gender roles: Biological vs. culturaldeterminism
- Private vs. publicdichotomy
- Existential foundation of gender-powerrelations
- Human development indicators and genderdisparity

**Unit 2 : Gender, Family and Social Dynamics**

- Gender andFamily
- Gender role socialization and formation ofidentity
- Psychoanalysis, social constructionist and discursive analysis ofgender
- Social Dynamics of Gender : Patriarchy and Gender-power, Capitalism and Gender, Caste, Class andGender

**Unit 3 : Gender and Education**

- Gender disparity ineducation
- Gender bias in schoolcurriculum
- Andro-centric construction ofknowledge
- Education goals from genderperspective

**Unit 4 : Gender and Economics**

- Women and work: unpaid, underpaid and casualwork
- Women in primary, secondary and tertiarysectors
- Invisibility of women's work, problems inmeasurement
- Women's participation in organized and unorganizedsector
- Globalization and its impact ongender

**Text Book**
Towards Gender Equality: India's Experience, N. Linga Murthy

**Reference Books:**

1. J. Gender roles and power. Lipman-Blumen New Jersey:Prentice-Hall.
2. Why Gender Matters in Economics, MukeshEswaran
3. Gender Justice, Education and Equality: Creating Capabilities for Girls' andWomen's Development, FirdevsMelisCin

# COURSE BROCHURE

GANPAT UNIVERSITY ॥ विद्यया समाजोत्कर्षः ॥ DEPARTMENT OF COMPUTER SCIENCE

GANPAT UNIVERSITY ॥ विद्यया समाजोत्कर्षः ॥

GANPAT UNIVERSITY ॥ विद्यया समाजोत्कर्षः ॥ A M PATEL INSTITUTE OF COMPUTER STUDIES

# LIFE SKILLS DEVELOPMENT




## About The Course

Life skills training equip people with the social and interpersonal skills that enable them to cope with the demands of everyday life. The objectives of this training are to build self-confidence, encourage critical thinking, foster independence and help people to communicate more effectively.

A primary objective of life skills training that focus on personal development is to promote confidence and well-being in young people and adults. It helps participants become more assertive, communicate effectively with others by developing good listening skills and learn to handle stress and deal with disappointments and setbacks. Such classes help people to explore their beliefs and attitudes through group discussions and confidence building techniques such as positive visualization. They encourage people to play to their strengths by engaging in creative activities and following a healthy lifestyle.

## Important Information

- As per the host Institute and instruction from FCA, the course consisting of 30 lectures credits. This credit can be included in the student's marks for seminar/presentation/college tour or any other suitable subject as per the participating Institute/ College rules and regulation.
- Students will be provided course material covering the entire course.

## Organized By

Faculty of Computer Application
(AMPICS/DCS)
Ganpat University
Ganpat Vidyanagar-384012 (Gujarat) India
Phone No: 02762-289039

# COURSE BROCHURE

GANPAT UNIVERSITY
॥ विद्यया समाजोत्कर्षः ॥
DEPARTMENT OF COMPUTER SCIENCE

GANPAT UNIVERSITY
॥ विद्यया समाजोत्कर्षः ॥

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॥ विद्यया समाजोत्कर्षः ॥
A M PATEL INSTITUTE OF COMPUTER STUDIES

# CREATIVE & CRITICAL THINKING






## About The Course

The **aim** of this **course** is to introduce you to the steps in **creative** and **critical thinking** process, which you can then apply in personal and workplace situations.

Critical and creative thinking are two of the top, in-demand workplace skills. Critical and creative thinking skills are crucial to the process of decision-making, in both business settings and personal situations.

This Creative and Critical thinking course will :

- Explain Techniques for improving Creativity
- Explain Creativity in problem solving

## Important Information

- As per the host Institute and instruction from FCA, the course consisting of 30 lectures credits. This credit can be included in the student's marks for seminar/presentation/college tour or any other suitable subject as per the participating Institute/ College rules and regulation.
- Students will be provided course material covering the entire course.

## Organized By

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(AMPICS/DCS)
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# ETHICS & VALUES




## About The Course

**Ethics and values** are a liberating force, enabling higher performance, better quality relationships and an expanded sense of purpose and identity. This syllabus **aims** to present a framework for understanding human **values** and their role in life, work, business and leadership.
A value is one of our most important and enduring beliefs, whether that be about a thing or a behavior
The main aim of this course is to Human Values, Engineering Ethics, Engineering as Social Experimentation, safety, responsibility, rights and related global issues.

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# COURSE BROCHURE










# MOBILE APPLICATION CONCEPT

## About The Corse

Required the basic knowledge of core java, database concepts & Programming knowledge.A mobile application is a software program that is designed to run on specific hardware, namely mobile handheld computing devices such as tablets and smartphones. They are the programs that execute when you press an icon on your mobile device, such as an iPad or Android phone etc.

## About Faculty of Computer Applications (FCA)

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# DIGITAL MEDIA MARKETING

## About The Corse

Required Basic knowledge of Internet and Social Media. One of the most important things for the business is to make sure that they are able to have some amazing leads for their businesses. Leads will help your website get the most relevant traffic. Some brands might focus on getting more customers and some would focus on other things. But the main agenda here is to make sure that people become more and more interested in the business which is very important.

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# PYTHON PROGRAMMING







## About The Course

Python Programming is intended for software engineers, systems analysts, program managers and user support personnel who wish to learn the Python programming language.

**Learning Objectives**

- To understand why Python is a useful scripting language for developers.
- To learn how to design and program Python applications.
- To learn how to use lists, tuples, and dictionaries in Python programs.
- To learn how to identify Python object types.
- To define the structure and components of a Python program.

## Important Information

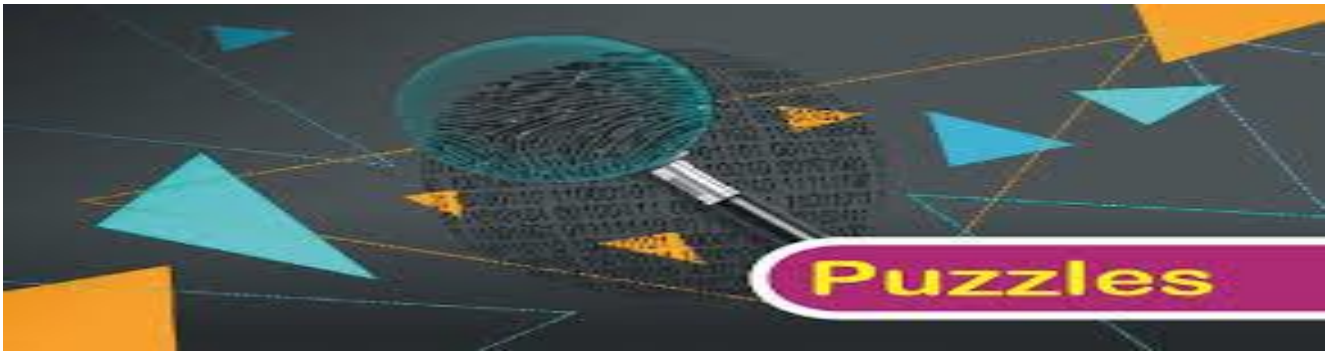
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# COURSE BROCHURE

# QUANTITATIVE APTITUDE AND LOGICAL REASONING




## About The Course

Students will be able to critique and evaluate **quantitative** arguments that utilize mathematical, statistical, and **quantitative** information.

This objective aims to ensure that students learn to think critically about mathematical models for relationships between different quantities and use those models effectively and accurately to solve problems and reach sound conclusions about them. Students should be able to comprehend, work with, and apply general mathematical techniques and models to different situations, not just plug problem-specific data into a given formula.

On successful completion of the course the students will be able to:

- Understand the basic concepts of operations and simplifications on numbers.
- Understand the basic concepts of permutation & combinations, probability.
- Understand the basic concepts of time & work, time & distance.

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# SEARCH ENGINE OPTIMIZATION (SEO)

## About The Corse

Required Basic knowledge of Internet and Social Media. The optimization of the website can be done properly by creating the keyword targeted content. Good quality content on the website provides ultimate results in very less time. It drives direct traffic from the search engines to your website. SEO is that helps you generate relevant traffic to your e-commerce website which often leads to the generation of sales. The branding is another powerful tool for the application of SEO. It uses various social media profiles, public relations, press releases, etc for this task.

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# IMAGE PROCESSING






## About The Course

- This course is an introduction to the fundamental concepts and techniques in basic digital image processing and their applications to solve real life problems. To study the image fundamentals and mathematical transforms necessary for image processing.
- The topics covered include Digital Image Fundamentals, Image Transforms, Image Enhancement in spatial domain, Image Restoration and Image Segmentation.
- After the completion of this course, students will be familiar with basic image processing techniques for solving real problems.

## Important Information

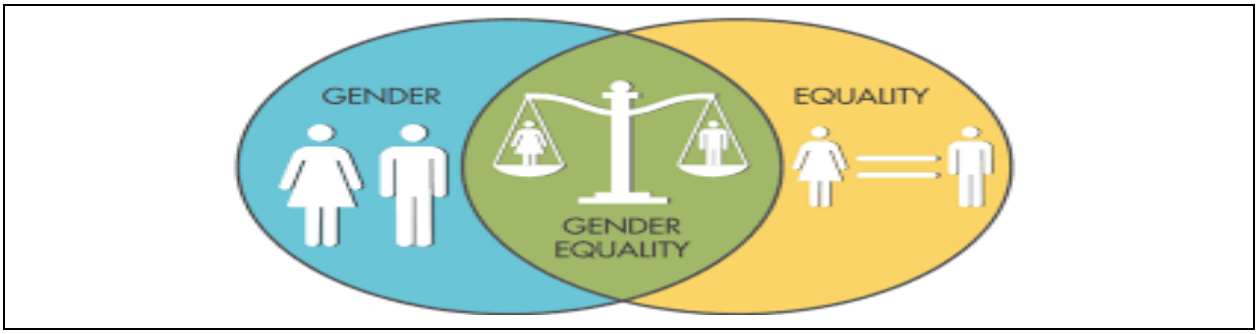
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# COURSE BROCHURE

# GENDER PERSPECTIVE-SOCIETY, EDUCATION AND ECONOMICS




## About The Course

- Women and girls represent half of the world's population and, therefore, also half of its potential. Gender equality, besides being a fundamental human right, is essential to achieve peaceful societies, with full human potential and sustainable development. Moreover, it has been shown that empowering women spurs productivity and economic growth.
- Unfortunately, there is still a long way to go to achieve full equality of rights and opportunities between men and women. Therefore, it is of paramount importance to end the multiple forms of gender violence and secure equal access to quality education and health, economic resources and participation in political life for both women and girls and men and boys. It is also essential to achieve equal opportunities in access to employment and to positions of leadership and decision-making at all levels.

## Important Information

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Phone No: 02762-289039

# Ganpat University

## Shree S. K. Patel College of Pharmaceutical Education & Research

### VALUE ADDITION PROGAMS - "Programs that Enhance the Skill"

**Objective:**

The value added courses offered beyond the working hours of the institute. The value added courses are a blend of theory classes/experimental learning/project based learning/activity based learning. The students have option to choose the courses according to their desires and inclinations. To provide value added course in order to equip them to enhance their curriculum and gain knowledge which will enable them to face the formidable challenges of the future.

**Following Value Added Courses offered by Institute:**

| Sr. No. | Name of Value Added Courses Offered | Course Code | Year of Introduction |
|---|---|---|---|
| 1 | Creative and Critical Thinking | PVC01 | 2014-15 |
| 2 | Ethics and Human Values | PVC02 | 2014-15 |
| 3 | Effective Writing and Presentation Skill | PVC03 | 2014-15 |
| 4 | Environmental Studies and Disaster Management | PVC04 | 2015-16 |
| 5 | Innovation & Entrepreneurship | PVC05 | 2016-17 |
| 6 | Ethics in Research | PVC06 | 2017-18 |
| 7 | Pharmacovigilance | PVC07 | 2018-19 |
| 8 | Personality Development | PVC08 | 2018-19 |
| 9 | Data Analysis Using Spreadsheet | PVC09 | 2018-19 |
| 10 | Green Chemistry | PVC10 | 2018-19 |
| 11 | Functional Food and Nutraceuticals | PVC11 | 2019-20 |
| 12 | Hospital Management | PVC12 | 2019-20 |
| 13 | Herbal Cosmetics | PVC13 | 2019-20 |
| 14 | Integrated personality Development Course - I | UHV-I | 2020-21 |
| 15 | Discover Yourself Through Bhagvad Gita - I | UHV-I | 2020-21 |
| 16 | Integrated Personality Development Course - II | UHV-II | 2020-21 |
| 17 | Discover Yourself Through Bhagvad Gita - II | UHV-II | 2020-21 |

**Contact Hours:** 30 Hours

**Eligibility:** Courses are open for all Pharmacy students.

**Registration:** Submit the registration form duly filled by participants. Final list of participants is to be displayed on the notice board.

Dr. S. S. Pancholi
Principal
S. K. Patel College of
Pharmaceutical Education & Research
Ganpat University

# Ganpat University

**Shree S.K. Patel College of Pharmaceutical Education & Research**

# VALUE ADDED COURSES

# Syllabus

# GANPAT UNIVERSITY

## FACULTY OF PHARMACY

| | |
|---|---|
| **Programme** | Pharmacy |
| **Effective for the batch Admitted in** | 2014-2015 |
| **Subject Name** | Creative and Critical Thinking |
| **Subject code** | PVC01 |

**Learning Outcome:**

On successful completion of the course, the students will be:

- able to enhance their creative and innovative thinking skills
- familiar with processes and methods of creative problem solving: observation, definition, representation, ideation, evaluation and decision making
- able to take better decisions
- able to evaluate facts in an argument
- learn the Art of Questioning
- able to be better thinkers

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Initial Considerations: Exploring Thinking In General 1. Ascertain personal thinking strengths and weaknesses 2. Compare personal thinking habits to those of others 3. Compose personal goals for thinking skills improvement | 6 |
| 2 | Introduction to creativity and innovation, differentiation between creative and critical thinking, thinking styles and common mistakes of thinking, thinking about information and emotions, truth and knowledge, evaluating knowledge by asking the right questions about issues, conclusions, reasons, assumptions and evidence etc. | 8 |
| 3 | Techniques for improving creativity: Brainstorming, lateral thinking, list of mental associations, random considerations, matrix of ideas, use of manipulative verbs, tree of possibilities, abstractions, transformation, use of mind stimulation: games, brain twisters and puzzles. | 8 |
| 4 | Creativity in Problem Solving: Problem definition, understanding, representing, pattern bracketing, thinking differently, changing your point of view, watching for paradigm shift, challenging conventional wisdom, lateral thinking etc | 8 |

**References**


| | |
|---|---|
| 1 | Asking the Right Questions by M. Neil Browne, Stuart M. Keeley |
| 2 | Teach Yourself to Think by Edward Ee Bono |
| 3 | Lateral thinking by Edward Ee Bono |

# GANPAT UNIVERSITY

## FACULTY OF PHARMACY

| | |
|---|---|
| **Programme** | Pharmacy |
| **Effective for the batch Admitted in** | 2014-2015 |
| **Subject Name** | Ethics and Human Values |
| **Subject code** | PVC02 |

**Learning Outcome:**

On completion of the course, learner will be able to–

- Understood human values, their significance and role in life.
- Promote self-reflection and critical inquiry that foster critical thinking of one's value and the values of others.
- Practice respect for human rights and democratic principles.
- Familiarized with various living and non-living organisms and their interaction with environment.
- Understood the basics regarding the leadership and to become a conscious professional.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction of Value Education: Definition, Need, Content, Process and relevance to present day. Concept of Human Values, self introspection. | 3 |
| 2 | Salient values for life: Truth, commitment, honesty and integrity, forgiveness and love, empathy and ability to sacrifice, care, unity, punctuality, Interpersonal and Intra personal relationship, Team work , Positive and creative thinking. | 6 |
| 3 | Human Rights: Universal Declaration of Human Rights, Right to Information Act -2005, National Integration, Peace and non-violence, Dr. A P J Kalam's ten points for enlightened Citizenship. The role of media in value building. | 6 |
| 4 | Environment and Ecology: Ecological balance, interdependence of all beings – living and non-living. Man and nature, Environment conservation and enrichment... | 6 |
| 5 | Social values & Ethical values:<br>Social values - Social consciousness and responsibility, Consumer rights and responsibilities.<br>Ethical values - Professional ethics, Code of ethics of engineers, Influence of ethics on family life, Leadership qualities and Personality development. | 9 |

**References**


| | |
|---|---|
| 1 | R R Gaur, R Sangal, G P Bagaria, 2009, A Foundation Course in Human Values and Professional Ethics |
| 2 | A N Tripathy, 2003, Human Values, New Age International Publishers. |
| 3 | B P Banerjee, 2005, Foundations of Ethics and Management, Excel Books. |

# GANPAT UNIVERSITY

## FACULTY OF PHARMACY

| | |
|---|---|
| **Program** | Pharmacy |
| **Effective for the batch Admitted in** | 2014-2015 |
| **Subject Name** | Effective Writing and presentation skills |
| **Subject code** | PVC03 |

**Scope and Objectives:**

Upon completion of the course student shall be able to

- Apply six fundamentals of effective writing.
- Demonstrate the ability to write effectively in a variety of modes, including oral presentations, recommendations and policy documents
- Write an academic research paper/report on complex topic.

**Learning Outcome:**

- Identifying core component of effective writing and presentation skills
- Writing reports, Projects and present academic paper

**Syllabus- Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Writing basics:** reading, topic selection, analytical, expository and argumentative style ,parts of writing- introduction, body and conclusion, reading comprehension, clarity and effective writing, organizing thoughts, precise writing, essay thesis, unified and coherently developed paragraphs, asynchronous presentation, discussion. | 04 |
| 2 | **Grammar basics:** Reading, grammar revisions, Tenses, articles, verbs, prepositions, daily conversation English, common English phrases and expressions, active and passive voice, basic sentence structure, subject-verb agreement, clause, audio linguism, categorization, conjunctive adverbs, sentence joining, direct and indirect quotations, discussion. | 05 |
| 3 | **Communication basics:** Voice mail greeting, email subject line, message body, personal process, formal and informal network, hierarchy level, process of communication, body language, Uses of English in academic and non-academic situations in India, Note taking tips, International phonetic alphabet (IPA) symbols, Offering and responding to offers, Requesting and responding to requests. | 05 |
| 4 | **Presentation:** Presentation media terminology and concepts, basics of Microsoft power point, presentation of ideas, connection with audience, deliver core message, effective compositions and style, text alignment, structuring the presentation, slide designing, graphics use, bibliography, language, Getting Started and Speaking Technique, Personal Speech, Impromptu and Timed Speaking, Persuasive Speech, Informative speech. | 08 |
| 5 | **Research paper work writing:** Independent work, abstract writing, formulating outline of paper, presentation of data in research paper, Discriminate between primary and secondary research, Synthesize original ideas with information gathered from outside sources, Using the writing process formulate a research paper that analyzes or documents a topic and is appropriate to audience and purpose, Evaluation of both print and non-print research sources, Designing and preparing a research plan. | 08 |
| **References:** | | |
| 1 | How to talk to anyone by Leil Lowndes | |
| 2 | Raman, Meenakshi & Sangeeta Sharma. Technical Communication: Principles and Practice. | |
| 3 | Oxford Guide to Effective Writing and Speaking: How to Communicate Clearly Paperback by John Seely | |

# GANPAT UNIVERSITY

## FACULTY OF PHARMACY

| | |
|---|---|
| **Programme** | Pharmacy |
| **Effective for the batch Admitted in** | 2015-2016 |
| **Subject Name** | Environmental Studies and Disaster Management |
| **Subject code** | PVC04 |

**Course Objective:**

This course attempt to discuss the meaning of disasters, their impact on human life and development, Sustainable Development and the idea of Disaster Risk Reduction and the objectives and challenges of disaster management.

**Learning Outcome:**

Upon completion of this course, students will acquire knowledge about

- Understand the natural environment and its relationships with human activities.
- Characterize and analyze human impacts on the environment.
- Integrate facts, concepts, and methods from multiple disciplines and apply to environmental problems.
- Capacity to integrate knowledge and to analyse, evaluate and manage the different public health aspects of disaster events at a local and global levels.

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Environment:** Definition, Components of Environment, Relationship between different components, Man-Environment relationship, Impact of Technology on the environment, Environmental Degradation, Sustainable Development, Environmental Education. | 5 |
| 2 | **Ecology & Ecosystems:** Introduction: Ecology- Objectives and Classification, Concepts of an ecosystem- structure & function of ecosystem, Components of ecosystem- Producers, Consumers, Decomposers, Energy flow in the ecosystem - Ecological succession. - Food chains, food webs and ecological pyramids. - Introduction, types, characteristic features, structure and function of the following ecosystem: Forest ecosystem, Grassland ecosystem **,** Desert ecosystem, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries) | 6 |
| 3 | **Environmental Pollution:**<br>**Air Pollution:** Composition of air, Structure of atmosphere, Ambient Air Quality Standards, Classification of air pollutants, Sources of common air pollutants like SPM, $SO_2$, $NO_X$.<br>**Noise Pollution:** Introduction, Sound and Noise measurements, Sources of Noise Pollution, Ambient noise levels, Effects of noise pollution, Noise pollution control measures.<br>**Water Pollution:** Introduction **–** Water Quality Standards, Sources of Water Pollution, Classification of water pollutants, Effects of water pollutants<br>**Current Environmental Global Issues:** Global Warming and Green Houses Effect, Acid Rain, Depletion of Ozone Layer. | 6 |
| 4 | **Energy Resources:** Renewable Resources, Nonrenewable Resources, Indian Scenario, Destruction versus Conservation. | 5 |
| 5 | **Types of Disaster**: Introduction, Types of Natural Disasters, Accidental Disasters, Impact of Disasters on Trade and International Trade | 5 |
| 6 | **Natural Technological & Social Disasters and Management:** Introduction, Earthquakes, Tornadoes, Floods, Tsunami, Volcanoes, , Forest Fires, Severe, Landslides, Epidemics and Insect Infestations, Types of Technological Hazards, Social Disasters, Components of Disaster Management, Government's Role in Disaster Management through Control of Information, Actors in Disaster Management. | 5 |

**References**


| | |
|---|---|
| 1 | Basics of Environmental Studies by Dr. N. S. Varandani, Books India Publications. |
| 2 | Disaster Management by MukeshDhunna, Vayu Education of India, Delhi Publication |
| 3 | Environmental Studies by R. Rajagopalan, Oxford University Press Publication. |
| 4 | Environmental Science by Richard T Wright & Bernard J Nebel, Prentice Hall India Publication. |

| GANPAT UNIVERSITY | |
|---|---|
| **FACULTY OF PHARMACY** | |
| **Program** | Pharmacy |
| **Effective for the batch Admitted in** | 2016-2017 |
| **Subject Name** | Innovation and Entrepreneurship |
| **Subject code** | PVC05 |

**Scope and Objectives:**

Upon completion of the course student shall be able to

- Appreciate the role of business enterprise based on the pharmacy in national and global economy.
- Understand the dynamics of motivation and concepts of entrepreneurship.
- Identify the demands and challenges of growth strategies and networking.

**Learning Outcome:**

- Basic concepts involved in innovation, entrepreneurship and business enterprise advancements.
- To know about the characteristics and types of entrepreneurship and applicability of entrepreneurship principles in the profession of pharmacy.
- To gain knowledge about strategies for the development of new ventures, scale up, business models, fund raising.

**Syllabus- Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Entrepreneurship:** Entrepreneurs; entrepreneurial personality and intentions - characteristics, traits and behavioral; entrepreneurial challenges. Entrepreneurial motivation – dynamics of motivation. Entrepreneurial competency –Concepts. Developing Entrepreneurial competencies - requirements and understanding the process of entrepreneurship development | 6 |
| 2 | **Conceptual Frame Work:** Concept need and process in entrepreneurship development. Role of enterprise in national and global economy. Types of enterprise – Merits and Demerits. Government policies and schemes for enterprise development. Institutional support in enterprise development and management. | 4 |
| 3 | **Entrepreneurial Process and Decision Making:** Entrepreneurial ecosystem, Ideation, development and exploitation of opportunities; Negotiation, decision making process and approaches, Effectuation and Causation.<br>**Crafting business models and Start-ups:** Introduction to business models; Creating value propositions-conventional industry logic, value innovation logic; customer focused innovation; building and analyzing business models; Business model canvas, Introduction to lean startups, Business Pitching. | 8 |
| 4 | **Launching and Organizing an Enterprise:** Environment scanning – Information, sources, schemes of assistance, problems. Enterprise selection, market assessment, enterprise feasibility study, SWOT Analysis. Resource mobilization - finance, technology, raw material, site and manpower. Costing and marketing management and quality control. Feedback, monitoring and evaluation. | 6 |
| 5 | **Growth Strategies And Networking:** Performance appraisal and assessment. Profitability and control measures, demands and challenges. Need for diversification. Future Growth – Techniques of expansion and diversification, vision strategies. Concept and dynamics. Methods, Joint venture, co-ordination and feasibility study. | 6 |

**References**


| | |
|---|---|
| 1 | Prasad, Rohit (2013), Start-up sutra: what the angels won't tell you about business and life, Hachette India. |
| 2 | Blank, Steve (2013), The Startup Owner's Manual: The Step by Step Guide for Building a Great Company, K&S Ranch. |
| 3 | S. Carter and D. Jones-Evans, Enterprise and small business- Principal Practice and Policy, Pearson Education (2006) |

| FACULTY OF PHARMACY | |
|---|---|
| **Program** | Pharmacy |
| **Effective for the batch Admitted in** | 2017-2018 |
| **Subject Name** | Ethics in Research |
| **Subject code** | PVC06 |

**Learning Outcome:**

- To be able to describe and apply theories and methods in ethics and research ethics
- To acquire an overview of important issues in research ethics, like responsibility for research, ethical vetting, and scientific misconduct.
- To acquire skills of presenting arguments and results of ethical inquiries.

**Syllabus- Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to ethics and research ethics**. Overview of theories and methods in ethics and research ethics. | 5 |
| 2 | **How to handle data.** The meaning of secrecy and confidentiality. | 5 |
| 3 | **Good research practice, research integrity and scientific misconduct**. Criteria and principles for good research practice. Meaning of scientific misconduct and fraud. Cases and procedures for establishing misconduct, preventions and sanctions. | 7 |
| 4 | **Responsibility for the results of research**. Responsibility for research and the results and consequences of research. The limits of responsibility. Risks and the precautionary principle. | 7 |
| 5 | **Ethical vetting of research.** Different kinds of vetting of research, procedures and ethical principles guiding research on human beings and animals. | 6 |

**References:**


| | |
|---|---|
| 1 | De Peol & Royakkers 2011, Ethics, Technology and Engineering, 8.3 The Engineers Responsibility for Safety (pp 223-238) |
| 2 | Good research practice, Vetenskapsrådets rapportserie, 3:2011 |
| 3 | The Uppsala Code of Ethics for Scientists, Journal of Peace Research 4/1984 |
| 4 | The European Code of Conduct for Research Integrity http://www.esf.org/ fileadmin/ Public _ documents/Publications/Code_Conduct_ResearchIntegrity.pdf |

# GANPAT UNIVERSITY

## FACULTY OF PHARMACY

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|---|---|
| **Program** | Pharmacy |
| **Effective for the batch Admitted in** | 2018-2019 |
| **Subject Name** | Pharmacovigilance |
| **Subject code** | PVC07 |

**Learning Outcome:**

- To be able to detect ADR signals and assess risk of any drug.
- To acquire an overview of important issues in identification, reporting of ADRs to respective government agencies.
- To acquire skills of presenting arguments and results of ethical inquiries.

**Syllabus- Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to Pharmacology, Clinical Trials and Pharmacovigilance | **5** |
| 2 | Adverse Drug Reactions and Safety Reports, Methodologies in Pharmacovigilance | **5** |
| 3 | Management Systems and Drug Dictionaries in Pharmacovigilance (Argus, ArisG, MedWatch, MedRA, WHODD etc.) | **7** |
| 4 | Seriousness & Expectedness & Causality Assessment Criteria, Aggregate Safety Reports | **7** |
| 5 | Pharmacovigilance Regulations in Various Countries, Pharmacovigilance Programme in India (PVPI), Signal Detection and Data Mining, | **6** |

**References:**


| | |
|---|---|
| 1 | Mann's phramacovigilance by editors Elizabeth B. Andrews, Nicholas Moore, 3rd edition. |
| 2 | Highlights on pharmacovigilance by P. G. Yeole and Dhanlakshmi Iyer |
| 3 | Essentials of Pharmacovigilance by Himanshu Baweja. |

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|---|---|
| **FACULTY OF PHARMACY** | |
| **Programme** | Pharmacy |
| **Effective for the batch Admitted in** | 2018-2019 |
| **Subject Name** | Personality Development |
| **Subject code** | PVC08 |

**Course Objective:**

This course makes the students groom their personality and prove themselves as good Samaritans of the Society. The students will develop confidence and ability to conduct themselves in a mature manner when they interact with the people

**Learning Outcome:**

Upon completion of this course, students will acquire knowledge about

- Develop and exhibit and accurate sense of self
- Develop and nurture a deep understanding of personal motivation
- Develop an understanding of and practice personal and professional responsibility
- Demonstrate knowledge of personal beliefs and values and a commitment to continuing personal reflection and reassessment

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Personality**: Definition and basics of personality, analysing strength and weakness, increasing vocabulary and preparation of self introduction<br>**Personal Grooming**: Personal Hygiene, Social Effectiveness, Business Etiquettes (Power Dressing) | 5 |
| 2 | Techniques in personality development stage I: Communication skill, building self esteem and self confidence, working on attitudes | 6 |
| 3 | Techniques in personality development stage II: Introduction to leadership, leadership styles, team building | |
| 4 | Techniques in personality development stage III: Interpersonal relationship and stress management | 6 |
| 5 | Techniques in personality development stage IV: Conflict management and time management | 5 |
| 6 | Personality and Career Choice: Matching your career and personality, why it matters, Self efficacy. | 5 |

**References**


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|---|---|
| 1 | Personality development and soft skills by Barun Mitra. |
| 2 | Personality development by Swami Vivekanada. |

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| **FACULTY OF PHARMACY** | | |
| **Programme** | Pharmacy | |
| **Effective for the batch Admitted in** | 2018-19 | |
| **Subject Name** | Introduction to Data Analysis Using Spreadsheet | |
| **Subject code** | PVC09 | |
| | • To develop the Data Processing skill in MS Excel. | |
| | • To develop the Data Processing skill in MS Excel. | |
| **Learning Outcome:** | | |
| At the end of the course students have strong understanding of theoretical and practical aspects of following areas | | |
| | • Identify the different components of the Excel worksheet. | |
| | • Enter text and formulas in to an Excel spreadsheet. | |
| | • Learn about create formulas and functions; use formatting features; and generate charts, graphs, and reports. | |
| **Syllabus- Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | Introduction to Excel: About Excel & Microsoft, Uses of Excel, Excel software, Spreadsheet window pane, Title Bar, Menu Bar, Standard Toolbar, Formatting Toolbar, the Ribbon, File Tab and Backstage View, Formula Bar, Workbook Window, Status Bar, Task Pane, Workbook & sheets | 3 |
| 2 | Columns & Rows: Selecting Columns & Rows, Changing Column Width & Row Height, Autofitting Columns & Rows, Hiding/Unhiding Columns & Rows, Inserting & Deleting Columns & Rows, Cell, Address of a cell, Components of a cell – Format, value, formula, Use of paste and paste special.<br>Creating Formulas: Using Formulas, Formula Functions – Sum, Average, if, Count, max, min, Proper, Upper, Lower, Using AutoSum | 7 |
| 3 | Spreadsheet Charts: Creating Charts, Different types of chart, Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table.<br>Data Analysis: Sorting, Filter, Text to Column, Data Validation | 7 |
| 4 | PivotTables: Creating PivotTables, Manipulating a PivotTable, Using the PivotTable Toolbar, Changing Data Field, Properties, Displaying a PivotChart, Setting PivotTable Options, . Adding Subtotals to PivotTables | 5 |
| 5 | Spreadsheet Tools: Moving between Spreadsheets, Selecting Multiple Spreadsheets, Inserting and Deleting Spreadsheets Renaming Spreadsheets, Splitting the Screen, Freezing Panes, Copying and Pasting Data between Spreadsheets, Hiding , Protecting worksheets | 5 |
| **References:** | | |
| 1. | Microsoft Excel 2016 Step by Step by Curtis Frye | |
| 2. | Microsoft Excel Functions & Formulas by Bernd Held | |

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|---|---|---|
| **FACULTY OF PHARMACY** | | |
| **Programme** | Pharmacy | |
| **Effective for the batch Admitted in** | 2018-2019 | |
| **Subject Name** | Green Chemistry | |
| **Subject code** | PVC10 | |
| **Course Objective:** | | |
| This course deals with the design of chemical products and processes that reduce or eliminate the use or generation of hazardous substances. | | |
| **Learning Outcome:** | | |
| Upon completion of this course, students will acquire knowledge about<br>• To explain the environment pollution factors and the concerns.<br>• Understand the different greener approaches along with their principles.<br>• Importance of various green chemical synthesis | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | **Introduction to green chemistry:** history and development, Principles of green chemistry: description with examples. Synthetic approaches of green chemistry: in water, solvent less, microwave, ultrasonic, catalytic and synthesis. | 6 |
| 2 | **In water and solvent less, organic reactions:** In water reactions, principle and process involved in the Michael reaction and Wurtz synthesis Solvent less organic synthesis: Alternative solvents used in green chemistry strategies. | 6 |
| | **Microwave and ultrasonic mediated reactions:** Introduction, principles and applications of Microwave, Ultrasonic mediated reactions: principles and process involved in the Fries rearrangement, Diels Alder reaction and Metal halide reduction, Ultrasonic reaction: principle and process involved in the Strecker and Reformatsky reactions | 6 |
| 3 | **Catalytic and solid supported reactions**: Principles and applications of Catalytic reactions, principle and process involved in the reactions catalysed by metal catalysts, ionic liquids and bio catalysts, Solid supported reactions: principles and process Alternative reagents used in green chemistry strategies. | 6 |
| 4 | **Greener synthesis of pharmaceuticals:** Principle and procedure of the following synthesis Nicotinic acid, Ibuprofen, paracetamol, Aspirin Future trends in Green chemistry. | 6 |
| **References** | | |
| 1 | New trends in green chemistry by Alluwalia V.K, M. Kidwai, 2nd edn, Anamaya Publishers, New Delhi, 2004. | |
| 2 | Green chemistry: theory and practice by Paul T Anastas, John Charles Warmer, Oxford university Press, 1988 | |
| 3 | Green chemistry: environmentally benign reactions by V.K, Alluwalia, 2nd edn, Ane Books Pvt Ltd, New Delhi, 2012. | |
| 4 | Green Chemistry: An Introduction by Sujata Sengupta, Prestige Publishers (2019). | |
| 5 | Handbook of Green Chemistry: Green Products by Paul T Anastas, Wiley Publications, 2012. | |

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| FACULTY OF PHARMACY | | |
| **Programme** | Pharmacy | |
| **Effective for the batch Admitted in** | 2019-2020 | |
| **Subject Name** | Functional Food and Nutraceuticals | |
| **Subject code** | PVC11 | |
| **Course Objective:** | | |
| • The subject involves the fundamentals of nutraceuticals and functional food such as their definition, classification, market value and regulatory requirements | | |
| **Learning Outcome:** | | |
| • Describe functional food and nutraceuticals | | |
| • Understand the evolution of nutraceutical market | | |
| • Explain Probiotics and prebiotics | | |
| • Understand isolation of phytoconstituents | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| 1 | • Nutraceuticals and functional Foods –Definition, concept, history and market; Evolution of nutraceuticals and functional foods market.<br>• Classification of nutraceuticals and functional foods.<br>• Significance and relevance of nutraceuticals and functional foods in the management of diseases and disorders. | 6 |
| 2 | • Natural occurrence of certain phytochemicals- Antioxidants and flavonoids: omega – 3 fatty acids, carotenoids, dietary fiber, phytoestrogens; glucosinates; organosulphur compounds.<br>• Dosage for effective control of disease or health benefit with adequate safety; studies with animals and humans; acute and chronic studies.<br>• Regulatory issues. | 6 |
| | • Isolation of phytochemicals from plant materials: Care in handling and storage of raw materials with minimal damage to sensitive bioactive compounds;<br>• Extractive methods for maximum recovery and minimal recovery and minimal destruction of active material<br>• Recent developments in the isolation, purification and delivery of phytochemicals. | 6 |
| 3 | • Probiotics: Definition, types and relevance; Usefulness in gastro intestinal health and other health benefits; development of a probiotic products; recent advances in probiotics; Challenges and regulatory issues related to probiotic products.<br>• Prebiotics: Prebiotic ingredients in foods; types of prebiotics and their effects on gut microbes; health benefits of prebiotics; recent development in prebiotics. | 6 |
| 4 | •Functional foods - Definition, development of functional foods, use of bioactive compounds in appropriate form with protective substances and activators<br>•Effects of processing conditions and storage | 6 |
| **References** | | |
| 1 | Wildman, Robert. Nutraceuticals and Functional Foods, second edition. Taylor and Francis Group. 2007. | |
| 2 | Gibson GR & William CM. Functional Foods - Concept to Product. 2000. | |
| 3 | Goldberg I. Functional Foods: Designer Foods, Pharma Foods. 1994. | |
| 4 | Brigelius-Flohé, J & Joost HG. Nutritional Genomics: Impact on Health and Disease. Wiley VCH. 2006 | |
| 5 | Cupp J & Tracy TS. Dietary Supplements: Toxicology and Clinical Pharmacology. Humana Press. 2003. | |

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| **Programme** | Pharmacy | |
| **Effective for the batch Admitted in** | 2019-2020 | |
| **Subject Name** | Hospital Management | |
| **Subject code** | PVC12 | |
| **Course Objective:** | | |
| The subject involves how health care institutions are organized and governed, the role of the management staff, physicians, nurses and other clinical and support staff in the organizations, and the management systems designed for their efficient and effective operations. | | |
| **Learning Outcome:** | | |
| • Upon completion of this course, students will acquire knowledge about | | |
| • Learn the concepts and theories in health care management | | |
| • Develop skills in using materials tools and/or technology central to health care management | | |
| • Understand the perspectives and values of health care management; | | |
| • Develop the basic management skills and ability to work productively with others | | |
| **Syllabus - Theory** | | |
| **Unit** | **Content** | **Hrs** |
| **1** | **Fundamentals of healthcare administration:** Definition, functions and structure of healthcare administration | 5 |
| **2** | **Healthcare policies and regulations** | 4 |
| | **Administration of hospitals and health care planning:** Objectives, planning and management | 7 |
| **3** | **Financial management and inventory control in hospitals:** Direct and indirect cost, allocation of overhead cost, analysis of marginal costing and unit costing, aims, objectives and scope of inventory control | 7 |
| **4** | **Organization and management of hospitals:** Unique features of hospital management functions, organizational concepts and processes, behavioral concepts and theories | 7 |
| **References** | | |
| 1 | Introduction to healthcare management by Sharon B, Buchbinder and Nancy H. Shanks | |
| 2 | The strategic management of healthcare organization by Ptere M. Ginter, 7th edtion | |
| 3 | Understanding the health policy by Thomas Bodenheimer and Kevin Gruhmbach 6th edition. | |

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| **FACULTY OF PHARMACY** | |
| **Programme** | Pharmacy |
| **Effective for the batch Admitted in** | 2019-2020 |
| **Subject Name** | Herbal Cosmetics |
| **Subject code** | PVC13 |

**Course Objective:**

The subject involves the fundamentals of herbal cosmetics such her used in skin & hair care, extraction and incorporation of extract in cosmetics, standardization and analysis of herbal cosmetics and regulatory requirements.

**Learning Outcome:**

Upon completion of this course, students will acquire knowledge about

- Understand the skin and hair anatomy ,physiology and their diseases
- Know various herbs used for skin & hair care
- Explain methods of extraction, standardization of extract and incorporation of that in formulations
- Understand regulatory requirements for herbal cosmetics manufacture as well as import-Export

**Syllabus - Theory**

| Unit | Content | Hrs |
|---|---|---|
| 1 | i) Skin: Anatomy and Physiology of skin and appendages. Hair, Nail, Sebaceous Gland, Sweat Gland.<br>ii) Common Dermatological Diseases and Therapy : Acne, Alopecia, Dermatitis (Atopjc Contact), Dry skin, Hyperpigmentation and Hypopigmentation, dermatitis and Dandruff, Sun reaction and protection | 6 |
| 2 | i) Commonly used herbal, raw materials, preservatives, surfactants, humectants, oils, colors, and some functional herbs<br>ii) Aloe, Tulsi, Neem, Brahmi, Manjistha, Jatamansi, Hibuscus, Amla Heena, Bhringaraja , Ritha, Shikakai, Almond oil, Coconut oil, Olive oil, , Wheat Germ Oil, | 8 |
| | i) Extraction of active principles of herbs by various methods<br>ii) Standardization and evaluation of prepared extracts | 6 |
| 3 | i) Incorporation of prepared extracts in various cosmetics formulations like creams, lotions, powders & other cosmetics formulations.<br>ii) Evaluation of herbal cosmetics such as cream, lotion, shampoo, toothpaste etc. | 6 |
| 4 | i) Regulatory Provisions Relation to Manufacture of Cosmetics License, GMP, offences & Penalties,<br>ii) Import & Export of Herbal/natural cosmetics,<br>iii) Industries involved in the production of Herbal/natural cosmetics | 4 |

**References**


| | |
|---|---|
| 1 | New trends in green chemistry by Alluwalia V.K, M. Kidwai, 2nd edn, Anamaya Publishers, New Delhi, 2004. |
| 2 | Green chemistry: theory and practice by Paul T Anastas, John Charles Warmer, Oxford university Press, 1988 |
| 3 | Green chemistry: environmentally benign reactions by V.K, Alluwalia, 2nd edn, Ane Books Pvt Ltd, New Delhi, 2012. |
| 4 | Green Chemistry: An Introduction by Sujata Sengupta, Prestige Publishers (2019). |
| 5 | Handbook of Green Chemistry: Green Products by Paul T Anastas, Wiley Publications, 2012. |

## Schedule - A
# IPDC Course Introduction

### The Integrated Personality Development Course – An Introduction

The Integrated Personality Development Course has been designed, by the BAPS Swaminarayan Sanstha, to help prepare college students in their holistic development. This course supports the requirements of the New Education Policy (NEP), to *"build character, enable learners to be ethical, rational, compassionate, and caring, while at the same time prepare them for gainful, fulfilling employment"*. Easily integrated into students' university syllabus, IPDC effectively teaches essential values, develops inner character, strengthens morality, and nourishes constructive and creative thinking. Through this course, students can enjoy, understand, and practice priceless lessons, giving them the tools to build a brighter future.

**Envisioned by Students, for Students**
Our IPDC developers surveyed many students to understand the learning needs of students today. "Exciting", "relatable", "interactive", "enjoyable", "tangible" – this is what they wanted and so that is exactly what we are delivering.

**Value-Based Transformation**
We believe that along with academics and practical skills, a student's holistic development should be built on a strong foundation of core character values such as positivity, resilience, humility, and responsibility. This empowers youths to successfully progress in all aspects of their lives.

**Engaging Modern Mediums**
We have replaced the traditional lecture style with a high-tech learning experience. Our expert team of producers has introduced captivating short films, interactive visuals, dramatic narratives, and ultra-high-definition (4K) shots, enabling students to effectively engage with every topic.

**Trusted & Effective Content**
What do you get when you combine decades of experience and research, along with a passion for youth development? You get IPDC! The IPDC content, design, and development was a global undertaking, bringing together a team of academics and youth development experts from around the world. The content has been curated especially for students, with the purpose of life-long retention and application.

**IPDC Logo –**

**IPDC Tagline –**

Unleashing Inner Potential.

## Introductory Resources

IPDC in 2 Minutes| [ https://baps.app.box.com/v/ipdc-intro-video ]

Lecturer Glimpse | IPDC - YouTube

IPDC Impact 2020 - 1 | IPDC - YouTube

## Rationale

IPDC aims to prepare students for the modern challenges they face in their daily lives. Promoting fortitude in the face of failures, unity amongst family discord, self-discipline amidst distractions, and many more priceless lessons.
The course focuses on morality and character development at the core of student growth, to enable students to become self-aware, sincere, and successful in their many roles - as an ambitious student, dependable employee, caring family member, and considerate citizen.

## Course Outcomes

- To provide students with a holistic value-based education that will enable them to be successful in their academic, professional, and social lives.
- To give the students the tools to develop effective habits, promote personal growth, and improve their wellbeing, stability, and productivity.
- To allow students to establish a stronger connection with their family through critical thinking and the development of qualities such as unity, forgiveness, empathy, and effective communication.
- To provide students with soft skills that complement their hard skills, making them more marketable when entering the workforce.
- To enhance awareness of India's glory and global values, and to create considerate citizens who strive for the betterment of their family, college, workforce, and nation.
- To inspire students to strive for a higher sense of character by learning from role models who have lived principled, disciplined, and value-based lives.

## Course Structure

The Integrated Personality Development Course (IPDC) will be conducted over two semesters, with each semester containing, 30 lecture hours. The course will be credit-based – with each semester worth two credits. This course should start from the second or third semester of the university degree.

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## IPDC Syllabus –

## IPDC-1 (Semester-1)

| Lecture No. | Module -Lecture | Lecture Description |
|---|---|---|
| Induction | The Need for Values | Students will learn about the need for values as part of their holistic development to become successful in their many roles - as ambitious students, reliable employees, caring family members, and considerate citizens. |
| 1 | **Remaking Yourself** - Restructuring Yourself | Students learn how self-improvement enables them to secure a bright future for themselves. They will learn 6 powerful thought-processes that can develop their intellectual, physical, emotional, and spiritual quotients. |
| 2 | **Remaking Yourself** - Power of Habit | Students will undergo a study of how habits work, the habits of successful professionals, and the practical techniques that can be used to develop good habits in their life. |
| 3 | **Learning from Legends-** Tendulkar & Tata | Students will learn from the inspirational lives of India's two legends, Sachin Tendulkar and Ratan Tata. They will implement these lessons through relatable case studies. |
| 4 | **From House to Home-** Listening & Understanding | Active listening is an essential part of academic progress and communications. Students will learn to listen with their eyes, ears, mind, and heart. |
| 5 | **Facing Failures-** Failures are not Always Bad | Failure can be a daily source of fear, negativity, and depression. Through the study of successful figures, students will learn to see failures from a positive perspective. |
| 6 | **Facing Failures-** Significance of Failures | Life's challenges and struggles can be harnessed as formative learning experiences. Students will be given constructive skills to achieve this. |
| 7 | **My India My Pride-** Glorious Past - Part 1 | India's ancient Rishis, scholars, and intellectuals have made tremendous contributions to the world, they developed an advanced, sophisticated culture and civilization which began thousands of years ago. Students will learn the importance of studying India's glorious past so that they could develop a strong passion and pride for our nation. |
| 8 | **My India My Pride-** Glorious Past - Part 2 | Our ancient concepts can be used to seek revolutionary ideas and to generate inspiration. Students will develop a deeper interest in India's Glorious Past – by appreciating the need to read about it, research it, write about it, and share it. |
| 9 | **Learning from Legends-** A.P.J. Abdul Kalam | Dr. Kalam's inspirational life displayed legendary qualities which apply to students (1) Dare to Dream (2) Work Hard (3) Get Good Guidance (4) Humility (5) Use Your Talents for the Benefit of Others |
| 10 | **Soft Skills-** Networking & Leadership | Students are taught the means of building a professional network and developing a leadership attitude. |
| 11 | **Soft Skills-** Project Management | Students will learn the secrets of project management through the Akshardham case study. They will then practice these skills through an activity relevant to student life. |
| 12 | **Remaking Yourself-** Handling Social Media | Students will learn how social media can become addictive and they will imbibe simple methods to take back control. |
| 13 | **Facing Failures-** Power of Faith | Students will learn about the power and necessity of faith in our daily lives. |
| 14 | **From House to Home-** Bonding the Family | Students will understand the importance of strong family relationships. They will learn how to overcome the generation gap and connect with their family more. |
| 15 | **Selfless Service-** Seva | Students will learn that performing Seva is beneficial to one's health, wellbeing, and happiness. It also benefits and inspires others. |

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## IPDC-2 (Semester-2)

| Lecture No. | Module -Lecture | Lecture Description |
|---|---|---|
| 16 | **Remaking Yourself-** Begin with the End in Mind | Students will learn to visualize their future goals and will structure their lives through smart goals to give themselves direction and ultimately take them to where they want to go. |
| 17 | **Remaking Yourself-** Being Addiction-Free | Students will explore the detrimental effects of addictions on one's health, personal life, and family life. They will learn how to take control of their life by becoming addiction free. |
| 18 | **Selfless Service-** Case Study: Disaster Relief Work | Students will apply previous lessons of Seva, to analyze the case study of the Bhuj earthquake relief work. |
| 19 | **Soft Skills-** Teamwork & Harmony | Students will learn the six steps of teamwork and harmony that are essential for students' professional and daily life. |
| 20 | **My India My Pride-** Present Scenario | To implement the transformation of India from a developing country into a developed country it is necessary to have a value-based citizen. Students will see how the transformation to a greater India relies on the vision and efforts of themselves as a youth. |
| 21 | **Learning from Legends-** Leading Without Leading | Students will explore a new approach to leadership, through humility. |
| 22 | **My India My Pride-** An Ideal Citizen - 1 | Students will learn that to become value-based citizens, they must first develop good values in their lives. They start by exploring the values of responsibility and integrity. |
| 23 | **My India My Pride-** An Ideal Citizen - 2 | Students will learn that by developing the values of loyalty, sincerity, and punctuality; they become indispensable and can leave a strong impression. They will start developing these values by trying to keep perfection in every small task and by looking at the bigger picture. |
| 24 | **Facing Failures** Timeless Wisdom for Daily Life | Students will learn the role wisdom plays in finding long-term stability. They will use ancient wisdom to solve their modern-day challenges. |
| 25 | **From House to Home-** Forgive & Forget | Students will understand the importance and benefits that forgiveness plays in their personal and professional life. They will learn to apply this knowledge in realistic situations. |
| 26 | **Remaking Yourself-** Stress Management | Students will learn to cope with current and future causes of stress. |
| 27 | **Remaking Yourself-** Better Health Better Future | A healthy body prevents disease and stress; increases positivity, productivity, and brainpower. Students will learn to maintain good health through regular exercise, healthy eating habits, and regular and sufficient sleep. |
| 28 | **Learning from Legends -** Words of Wisdom | A panel of learned and experienced mentors will personally answer practical questions that students face in their daily life. |
| 29 | **Soft Skills –** Financial Planning | Students will develop a variety of practical financial skills that prepare them to become financially stable throughout their future careers. |
| 30 | **Remaking Yourself** Impact of Company | Students will understand that the type of company that we keep, has a crucial role in determining who we are and who we will become. They will develop the ability to create a positive environment around them. |
| | | |
| Concluding | **Life After IPDC** | This concluding lecture encourages students to keep practicing these priceless lessons and prepares them for the next steps in their lives. |

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## Lecture Structure

The IPDC lectures will take place in the college classrooms and will be hosted by a university-appointed course instructor. The resources will be provided by BAPS. Each lecture has four components as shown below:

**Introductory Film**
Each lecture begins with a short film that introduces the topic through modern production. The original content displays relatable scenarios and visuals that captivate the students' attention and stimulates their curiosity to learn more.

**Lecture Video**
Students watch a lecture video presented by a dynamic speaker. The lecture reinforces the significance and necessity of fundamental principles and skills. The experience of the speaker, eloquence of presentation, and use of interactive visuals collectively create a profound impact on each student's mind and heart.

**Student Interaction**
Student interaction sessions promote stimulating discussion and conversation and help create safe spaces for the healthy exchange of ideas. Thus, each session provides a forum in which students can openly express their emotions and thoughts.

**Workbook Activities**
Workbooks assist students to begin implementing the values taught in the lecture into their personal lives. Reliable research, priceless experience, practical scenarios, and reflective questions are innovatively depicted, motivating students to contemplate and think creatively.

## Teaching and Examination Scheme**:

| Teaching Scheme | | | Credits | Examination Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|
| | | | | Theory Marks | | Practical Marks | | |
| L | T | P | C | CE | SEE | CE | SEE | |
| 2 | 0 | 0 | 2 | 100 | 00 | 00 | 00 | 100 |

L- Lectures; T- Tutorial/Teacher Guided Student Activity; P- Practical; CE-Continuous Evaluation; SEE- Semester End Examination;

*** Both semesters (IPDC-1 and IPDC-2) have same teaching and examination scheme.*

The assessments should include both continuous evaluation and end-of-semester examinations. The weightage of which will be according to the university's recommendation. The assessment scheme should include student attendance and involvement, assignments, mid-term exams, viva, workbook submission, and end-of-semester examinations.

## COURSE MATERIAL / MAIN COURSE WORKBOOK -

** There will be one workbook for each semester.*

1. IPDC Workbook-1
2. IPDC Workbook-2

* NOTARY * NIRAV J. MODI CITY AHMEDABAD GUJARAT STATE REG NO.: 18757/2020 GOVERNMENT OF INDIA

## IPDC REFERENCES –

These are the reference material for the IPDC lectures.

| Module No. | Module | Lectures | References |
|---|---|---|---|
| 1 | Facing Failures | 1. Failures are not Always Bad<br>2. Significance of Failures<br>3. Power of Faith<br>4. Timeless Wisdom for Daily Life | 1. Thomas Edison's factory burns down, New York Times Archives, Page 1, 10/12/1914<br>2. Lincoln Financial Foundation, Abraham Lincoln's "Failures": Critiques, Forgotten Books, 2017<br>3. J.K. Rowling Harvard Commencement Speech \| Harvard University Commencement, 2008<br>4. Born Again on the Mountain: A Story of Losing Everything and Finding It Back, Arunima Sinha, Penguin, 2014<br>5. Failing Forward: Turning Mistakes Into Stepping Stones for Success, John C. Maxwell, Thomas Nelson, 2007<br>6. Steve Jobs: The Exclusive Biography Paperback, Walter Isaacson, Abacus, 2015<br>7. Failing Forward: Turning Mistakes Into Stepping Stones for Success, John C. Maxwell, Thomas Nelson, 2007 |
| 2 | Learning from Legends | 1.Tendulkar & Tata<br>2.Leading Without Leading<br>3. A.P.J. Abdul Kalam<br>4. Words of Wisdom | 1. Chase Your Dreams: My Autobiography, Sachin Tendulkar, Hachette India, 2017<br>2. Playing It My Way: My Autobiography, Sachin Tendulkar, Hodder & Stoughton, 2014<br>3. The Wit and Wisdom of Ratan Tata, Ratan Tata, Hay House, 2018<br>4. The Tata Group: From Torchbearers to Trailblazers, Shashank Shah, Penguin Portfolio, 2018<br>5. The Leader Who Had No Title, Robin Sharma, Jaico Publishing House, 2010<br>6. In the Joy of Others: A Life-Sketch of Pramukh Swami Maharaj, Mohanlal Patel and BAPS Sadhus, Swaminarayan Aksharpith, 2013 |
| 3 | My India My Pride | 1.Glorious Past - 1<br>2.Glorious Past - 2<br>3.Present Scenario<br>4.An Ideal Citizen - 1<br>5.An Ideal Citizen - 2 | 1. Rishis, Mystics, and Heroes of India, Sadhu Mukundcharandas, Swaminarayan Aksharpith, 2011<br>2. Physics in Ancient India, Narayan Dongre, Shankar Nene, National Book Trust, 2016<br>3. The Rise of Civilization in India and Pakistan, Raymond Allchin, Bridget Allchin, Cambridge University Press, 1982<br>4. The Āryabha□īya of Āryabha□a: An Ancient Indian Work on Mathematics and Astronomy (1930), Walter Eugene Clark, University of Chicago Press, reprint, Kessinger Publishing, 2006 |
| 4 | Remaking Yourself | 1.Restructuring Yourself<br>2.Power of Habit<br>3.Being Addiction-Free<br>4.Begin with the End in Mind<br>5.Handling the Devil – Social Media<br>6.Impact of Company | 1. Power of Habit, Charles Duhigg, Random House Trade Paperbacks, 2014<br>2. Change Your Habit, Change Your Life, Tom Corley, North Loop Books, 2016<br>3. The Seven Habits of Highly Effective People, Stephen Covey, Simon & Schuster, 2013<br>4. Seven Habits of Highly Effective Teens, Sean Covey, Simon & Schuster, 2012<br>5. Atomic Habits, James Clear, Random House, 2018<br>6. How a handful of tech companies control billions of minds every day, Tristan Harris, TED Talk, 2017 |

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| | | | |
|---|---|---|---|
| 5 | From House to Home | 1.Bonding the Family<br>2.Forgive & Forget<br>3.Listening & Understanding | 1. "What Makes a Good Life? Lessons from the Longest Study on Happiness", R. Waldinger, Ted Talks, 2015<br>2. Long Walk To Freedom, Nelson Mandela, Back Bay Books, 1995<br>3. Outliers, Malcolm Gladwell, Back Bay Books, 2011 |
| 6 | Soft Skills | 1.Teamwork & Harmony<br>2.Networking & Leadership<br>3.Stress Management<br>4. Financial Planning<br>5. Project Management | 1. The 17 Indisputable Laws of Teamwork, John Maxwell, HarperCollins, 2013<br>2. Team of Teams: New Rules of Engagement for a Complex World, Stanley McChrystal, Portfolio, 2015<br>3. Predictably Irrational, Revised and Expanded Edition: The Hidden Forces That Shape Our Decisions, Dan Ariely, Harper Perennial, 2010 |
| 7 | Selfless Service | 1.Seva<br>2.Case Study: Disaster Relief Work | 1. Open: An Autobiography, Andre Agassi, Vintage, 10 August 2010<br>2. The Physiological Power of Altruism [online], James Hamblin, The Atlantic, December 30, 2015, https://www.theatlantic.com/health/archive/2015/12/altruism-for-a-better-body/422280/ [last accessed June 10, 2020]<br>3. TBI Blogs: From Entrepreneurs to Doorkeepers, Everybody Serves with Love & Warmth at This Ahmedabad Café [online], The People Place Project, The Better India, May 29, 2017, https://www.thebetterindia.com/102551/small-way-serve-ahmedabad-seva-cafe/, [last accessed June 10, 2020] |

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GANPAT UNIVERSITY
॥ विद्यया समाजोत्कर्षः ॥

# Confirmation of Acceptance of IPDC Course

We are pleased to inform you that we would like to consider the IPDC course at our University as the course will be very supportive in enriching the character of our students who are the future of this country.

At Ganpat University we always aim for the overall development of our students. After going through the presentations and course structure of IPDC, we believe that this course can be a great direction to our students in strengthening their career morally and ethically in the society.

With the consideration of following points -

- University would like to introduce IPDC course with students who will be enrolled from next semester in streams of B.E, B.Pharm., BCA, BBA, B.Com., LLB, B.Sc., Diploma, D.Pharm, in colleges 13 with approximate students strength of 500.

- University assures of providing full support in implementing the IPDC course which includes all Technical parameters such as -audio-video set up for productive learning and habitual local support in rolling out the course from time to time.
- For the optimistic outcome of the course we will be recruiting ideal candidate who believes in value based education and is engrossed in building the character of student by promoting and helping students to imbibe the significance of values in interactive manner, along with good communication and convincing skills. Our candidate will sincerely attend the training provided by IPDC team for better outcome of the course.
- As discussed earlier in the meeting BAPS will provide all IPDC Literature (Videos and Workbooks) for running course at university. For joining the course we are ready to pay the charges as per following -
  Course registration fees (i.e. 150 Rs. per semester per student),
  Course material i.e. IPDC Workbook cost as per quantity.
  Expenses for 'Train the trainer' program for course Instructor.

We would like to go ahead with the next step of signing a Memorandum of Understanding (MOU) between both the parties.

**Dr. Mahendra S. Sharma**
**Pro Chancellor & Director General**
**Ganpat University**

GANPAT UNIVERSITY ★ विद्यया समाजोत्कर्षः ★

Ganpat Vidyanagar - 384 012, Mehsana-Gozaria Highway, District: Mehsana, Gujarat, INDIA.
Phone: +91-2762-226000, Fax : +91-2762-286080, Toll Free No.: 180023312345
Email: info@ganpatuniversity.ac.in | Website: www.ganpatuniversity.ac.in

# UNIVERSAL HUMAN VALUE

| | |
|---|---|
| **TYPE of AWARD** | **EXTRA CREDIT IN MARKSHEET** |
| **TITLE** | 1. UNIVERSAL HUMAN VALUE (INTEGRATED PERSONALITY DEVELOPMENT COURSE-1)<br>**2.** UNIVERSAL HUMAN VALUE (INTEGRATED PERSONALITY DEVELOPMENT COURSE-2) |
| **SHORT CODE** | UHV1IPDC1<br>UHV2IPDC2 |
| **DURATION** | **30 Hrs. per Semester** |
| **MINIMUM BATCH SIZE** | **20** |
| **COMMENCEMENT OF BATCH** | **Semester 2 and Semester 3 of Every Diploma and UG Program** |
| **COURSE FEE** | **Rs. 150/- per semester course registration fee** |
| **LOCATION** | **GANPAT UNIVERSITY** |
| **LECTURE TIMING** | **As prescribed in the Time-table** |
| **IN ASSOCIATION WITH** | **BAPS Swaminarayan Sanstha** |
| **RESOURCE PERSON(S)** **(Concise profile need to be annexed in copiable content format)** | **Please refer the Annexure** |
| **FINANCIAL SHARING** (from **SURPLUS OF THE COURSE**) | **Not Applicable** |

**OBJECTIVE & SCOPE**

This course aims to prepare students for the modern challenges they face in their daily lives. Promoting fortitude in the face of failures, unity amongst family discord, self-discipline amidst distractions, and many more priceless lessons. This two-semester, credit-based course, focuses on moral and character development at the core of student growth, to enable students to become self-aware and sincere in their many roles - as an ambitious student, dependable employee, caring family member, and considerate citizen.

**COURSE COVERAGE**

The program covers key topics of Remaking Yourself, Soft Skills, Learning from Legends, Facing Failures, From House to Home, My India My Pride and Selfless Service. Students are inspired to give up bad habits such as

laziness and overuse of social media through the growth of effective habits. This module will inspire growth through time management, positive thinking, self-reliance, foresight, and an active lifestyle. Through the teachings of constructive communication, teamwork, effective planning, self-awareness, and dedication, students become fully prepared to implement their role in any collaborative network. The lives and works of legends, such as Ratan Tata and Abdul Kalam, leave an everlasting impression. Their principled, disciplined, and value-based lives, inspiring youth to strive for a higher sense of character. This module also includes a session with a panel of experts, who will answer practical questions that students face in their daily lives. Failure is a student's daily source of fear, negativity, and depression. Through the study of successful figures such as Disney, Lincoln and Bachchan, this module enables youth to persevere, self-improve, and keep faith. An enlightening revelation of the glory of India's past and current achievements, invigorates the youth to become ideal citizens while practicing a value-based life for the betterment of their life, family, college, career, and nation. The students explore the phenomenon of Seva – selfless acts of kindness, the tradition of giving, and the joy of bringing happiness to others. These concepts are brought to life through the study of awe-inspiring and heart-touching acts of humanitarian relief provided during the 2001 Gujarat earthquake. The students are taught to establish a stronger connection with their family through critical thinking and devolvement of qualities such as unity, forgiveness, empathy, and effective communication.

## LEARNING OUTCOME OF THE COURSE

- To provide students with a holistic value-based education that will enable them to be successful in their academic, professional, and social lives.
- To give the students the tools to develop effective habits, promote personal growth, and improve their wellbeing, stability, and productivity.
- To allow students to establish a stronger connection with their family through critical thinking and devolvement of qualities such as unity, forgiveness, empathy, and effective communication.
- To provide students with soft skills that complement their hard skills, making them more marketable when entering the workforce.
- To enhance awareness of India's glory and global values, and to create considerate citizens who strive for the betterment of their family, college, workforce, and nation.
- To inspire students to strive for a higher sense of character by learning from role models who have lived principled, disciplined, and value-based lives.

## CAREER OPPORTUNITIES

Participants will get a chance to lead the industries in the area of project management and to help the organization to minimize time overrun and cost overrun at the same time ensuring the quality.

## TEACHING METHOD / PEDAGOGY

The methodology throughout this course will be a blend of key theoretical concepts and practical aspects of it.
The training flow will have an interactive sessions based on real-life examples.

| | | |
|---|---|---|
| Introductory Film | Each lecture begins with a short film that introduces the topic through a modern production. The original content displays relatable scenarios and visuals that captivate the students' attention and stimulates their curiosity to learn more. | 5% of the entire lecture |
| Lecture Video | Students watch a lecture video presented by a dynamic speaker. The lecture reinforces the significance and necessity of fundamental principles and skills. The experience of the speaker, eloquence of presentation, and use of interactive visuals collectively create a profound impact on each student's mind and heart. | 40% of the entire lecture |
| Student Interactions | Interactive sessions promote stimulating discussion and conversation, and help create safe spaces for healthy exchange of ideas. Each session provides a forum in which students are able to openly express their emotions and thoughts. | 30% of the entire lecture |
| Workbook Activities | Workbooks assist students to begin implementing the values taught in the lecture into their personal lives. Reliable research, priceless experience, practical scenarios, and reflective questions are innovatively depicted, motivating students to contemplate and think creatively. | 25% of the entire lecture |

**CONTENT (UNITS)**

**IPDC: 1**

| Unit No | Topic Name | Total No of Hours |
|---|---|---|
| 01 | Restructuring yourself | **02** |
| 02 | Power of habit | **02** |
| 03 | Learning from Legends- Tendulkar & Tata | **02** |
| 04 | Project management | **02** |
| 05 | Affectionate relationships | **02** |
| 06 | Forgive and Forget | **02** |
| 07 | Failures are not always bad | **02** |
| 08 | Factors affecting failures | **02** |
| 09 | Being addiction free | **02** |

| | | |
|---|---|---|
| 10 | Teamwork and Harmony | **02** |
| 11 | Handling the devil – Social media | **02** |
| 12 | Listening & Understanding | **02** |
| 13 | Basic of Financial Planning | **02** |
| 14 | Networking, Decision making, Leadership | **02** |
| 15 | Life after IPDC | **02** |
| | **Total Hours** | **30** |

**IPDC: 2**

| Unit No | Topic Name | Total No of Hours |
|---|---|---|
| 01 | Insignificance of failures | **02** |
| 02 | The power of faith | **02** |
| 03 | Practicing faith | **02** |
| 04 | Bonding the family | **02** |
| 05 | Leading without leading | **02** |
| 06 | Words of wisdom | **02** |
| 07 | Glorious Pas: Part 1 | **02** |
| 08 | Glorious Pas: Part 2 | **02** |
| 09 | Present scenario | **02** |
| 10 | Begin with the end in mind | **02** |

| | | |
|---|---|---|
| 11 | An ideal citizen : 1 | **02** |
| 12 | An ideal citizen : 2 | **02** |
| 13 | APJ Abdul Kalam | **02** |
| 14 | Writing a Resume | **02** |
| 15 | Student Voice | **02** |
| | **Total Hours** | **30** |

**ELIGIBILITY OF THE PARTICIPANTS**
Ganpat University Full time Enrolled Student

**ASSESSMENT**

## Teaching and Examination Scheme**:

| Teaching Scheme | | | Credits | Examination Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|
| | | | | Theory Marks | | Practical Marks | | |
| L | T | P | C | CE | SEE | CE | SEE | |
| 2 | 0 | 0 | 2 | 100 | 00 | 00 | 00 | 100 |

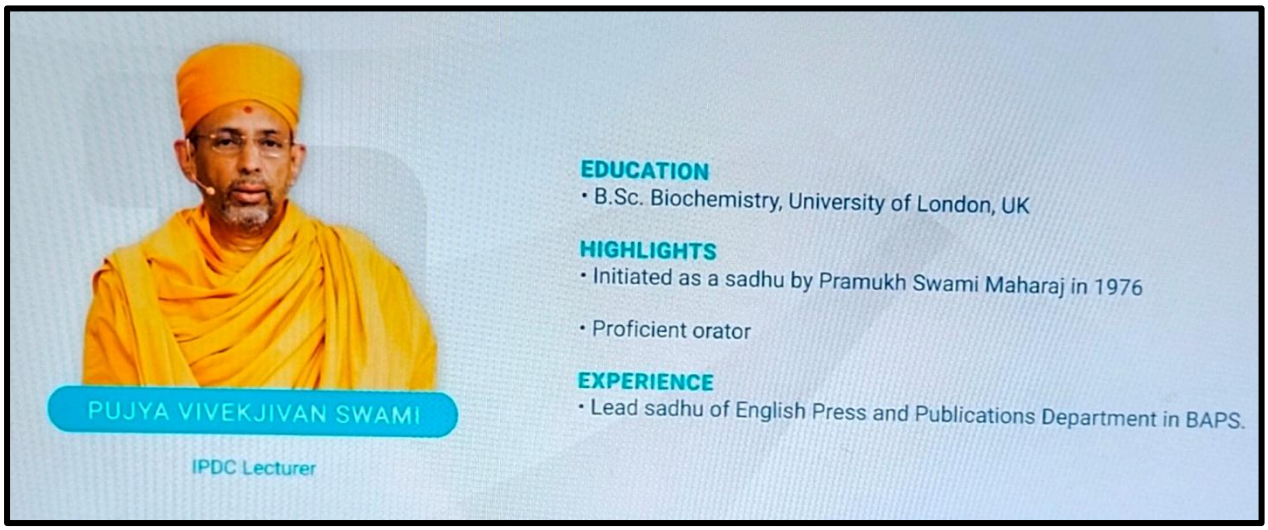
L- Lectures; T- Tutorial/Teacher Guided Student Activity; P- Practical; CE-Continuous Evaluation; SEE- Semester End Examination;

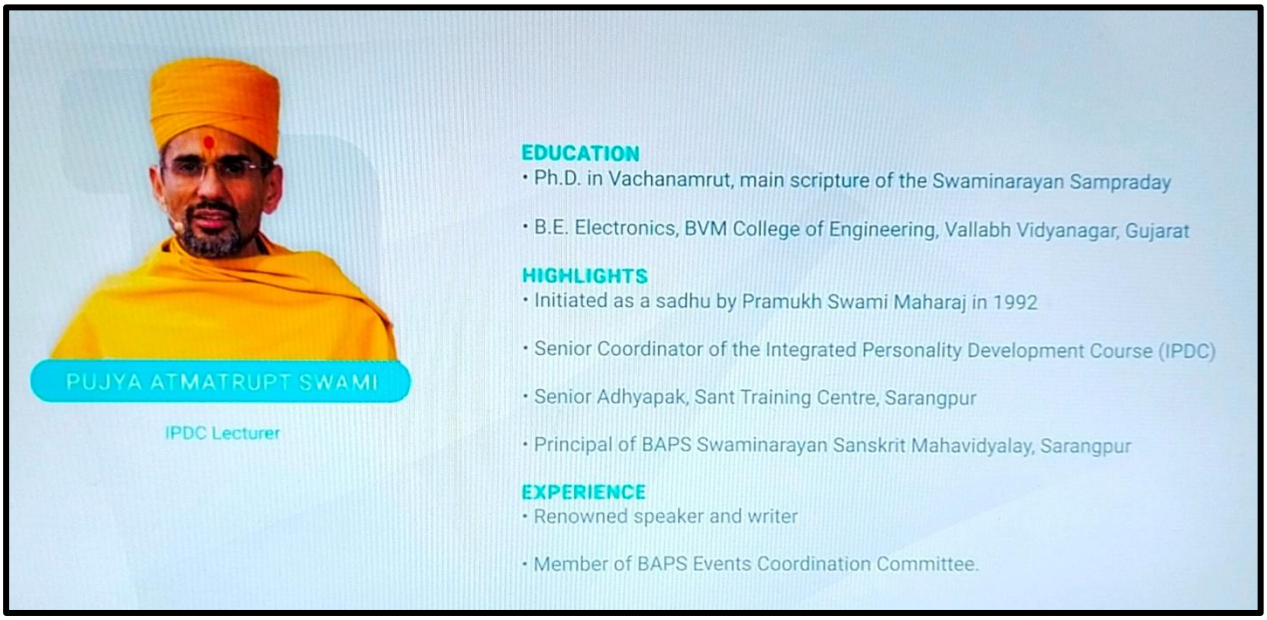
*** Both semesters (IPDC-1 and IPDC-2) have same teaching and examination scheme.*

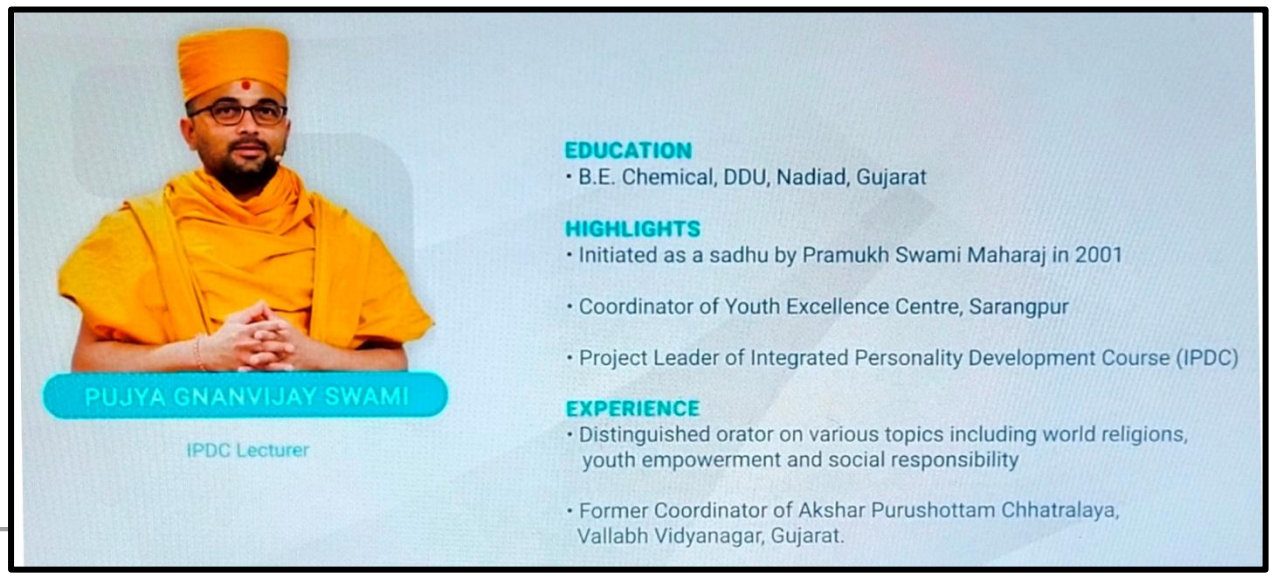
**Hands on Project:** Participants will get a chance to have hands on practice through Workbook Activities.

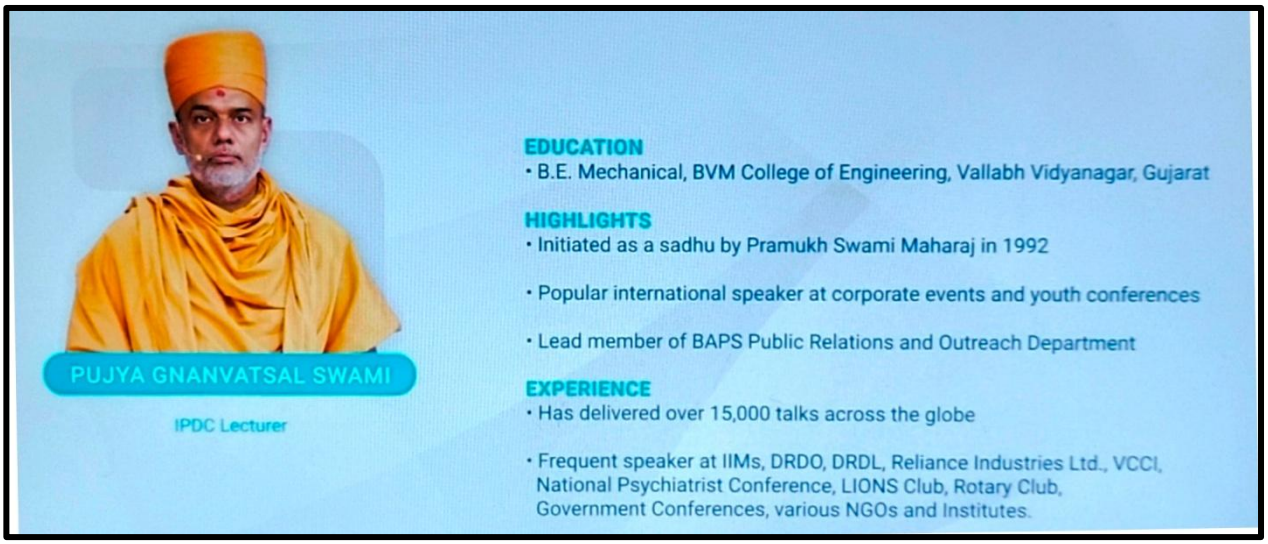
# UNIVERSAL HUMAN VALUE

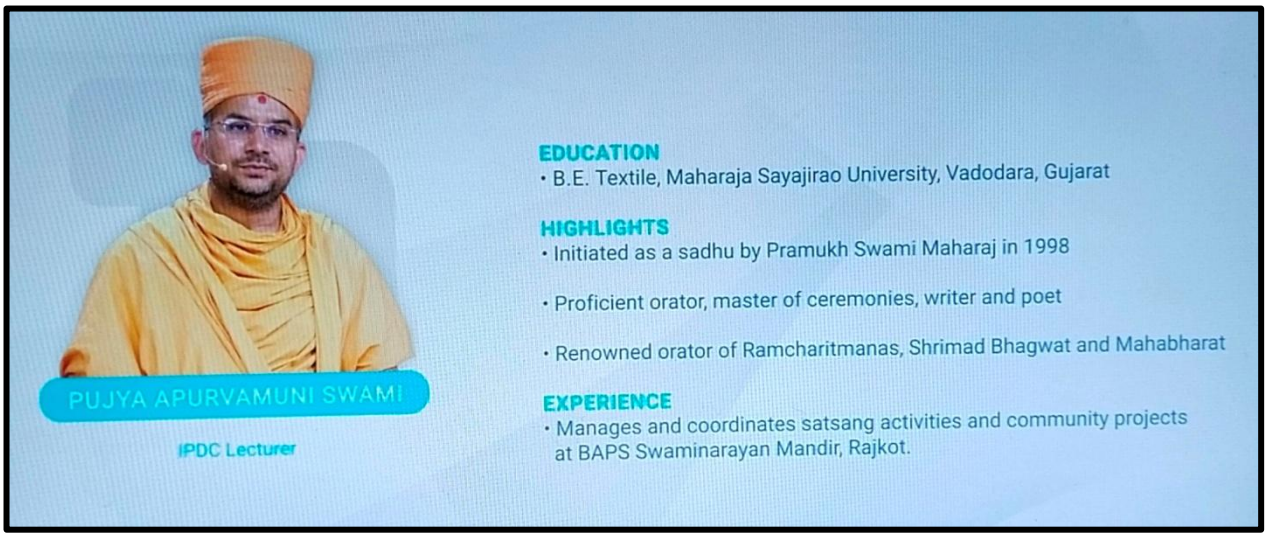
## PROFILE OF RESOURCE PERSON

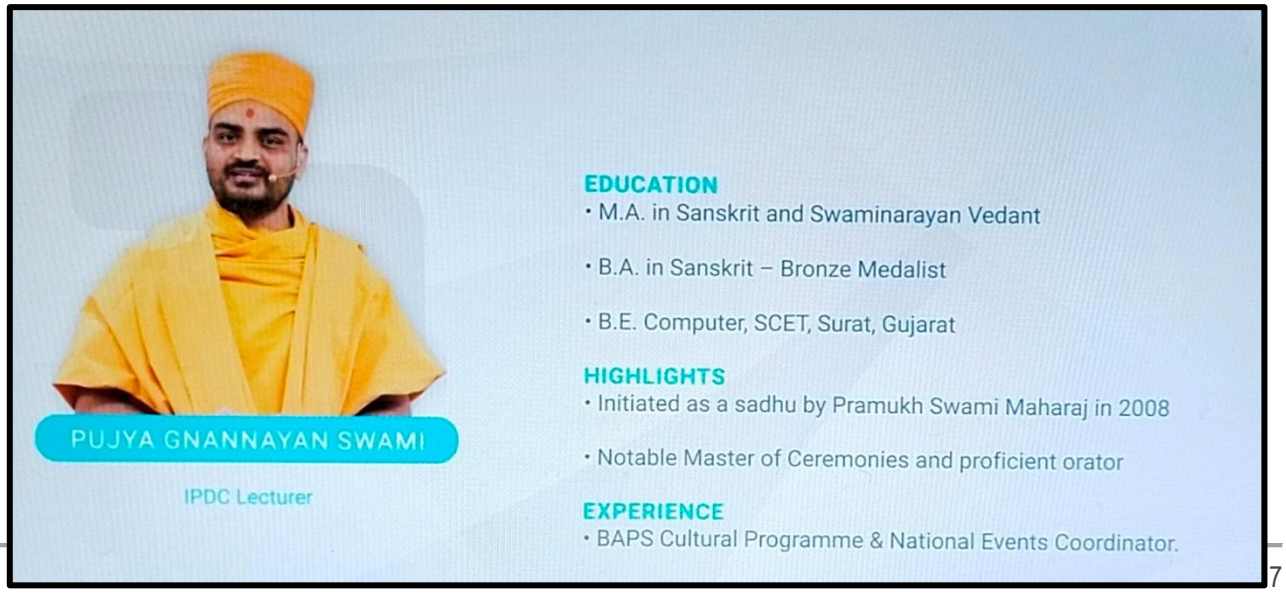


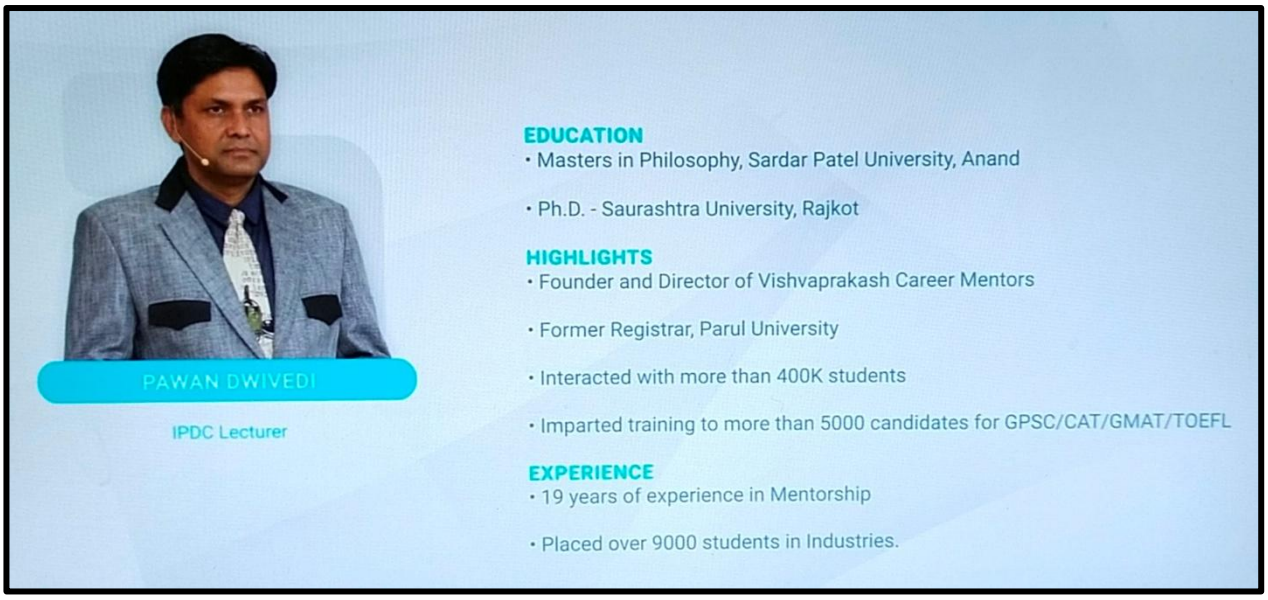



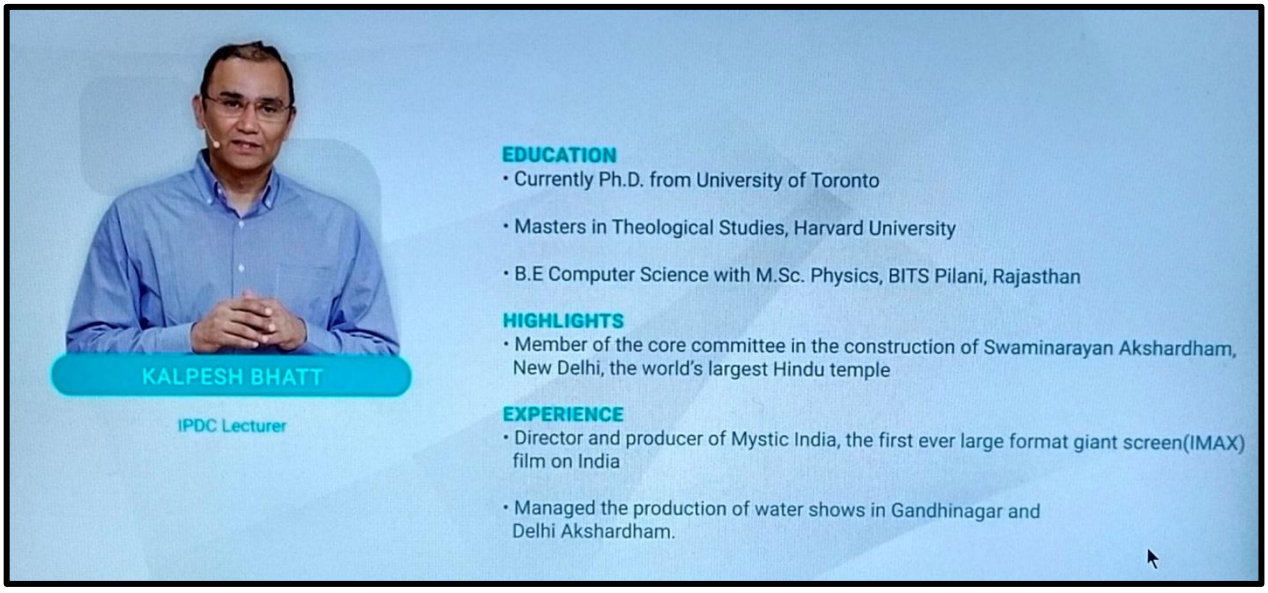

PUJYA GNANVATSAL SWAMI
IPDC Lecturer
EDUCATION
• B.E. Mechanical, BVM College of Engineering, Vallabh Vidyanagar, Gujarat
HIGHLIGHTS
• Initiated as a sadhu by Pramukh Swami Maharaj in 1992
• Popular international speaker at corporate events and youth conferences
• Lead member of BAPS Public Relations and Outreach Department
EXPERIENCE
• Has delivered over 15,000 talks across the globe
• Frequent speaker at IIMs, DRDO, DRDL, Reliance Industries Ltd., VCCI, National Psychiatrist Conference, LIONS Club, Rotary Club, Government Conferences, various NGOs and Institutes.

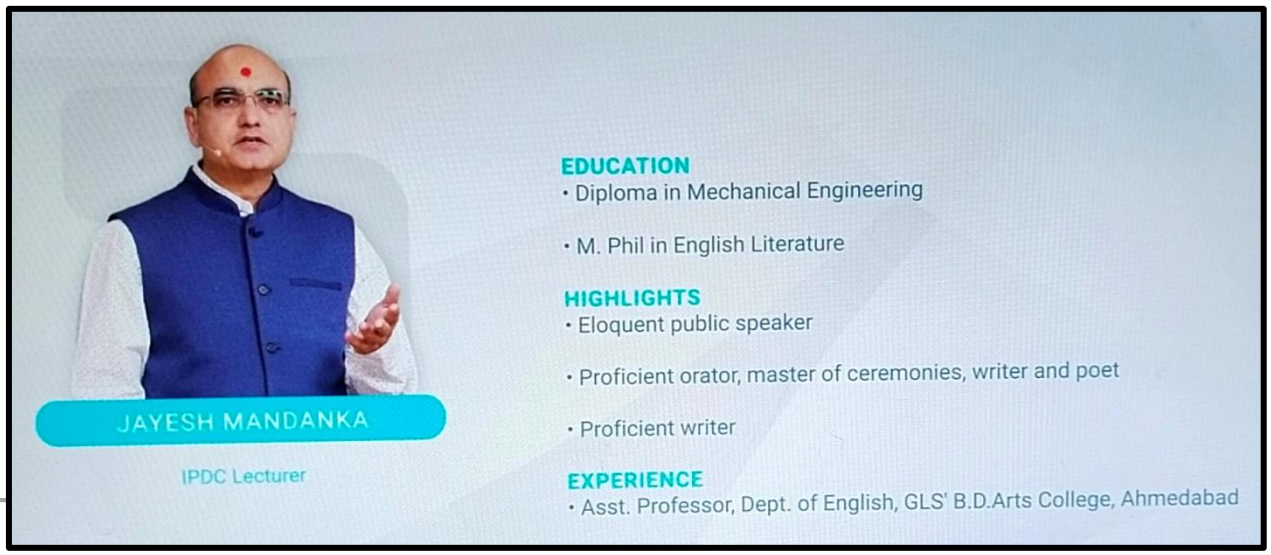

PUJYA APURVAMUNI SWAMI
IPDC Lecturer
EDUCATION
• B.E. Textile, Maharaja Sayajirao University, Vadodara, Gujarat
HIGHLIGHTS
• Initiated as a sadhu by Pramukh Swami Maharaj in 1998
• Proficient orator, master of ceremonies, writer and poet
• Renowned orator of Ramcharitmanas, Shrimad Bhagwat and Mahabharat
EXPERIENCE
• Manages and coordinates satsang activities and community projects at BAPS Swaminarayan Mandir, Rajkot.

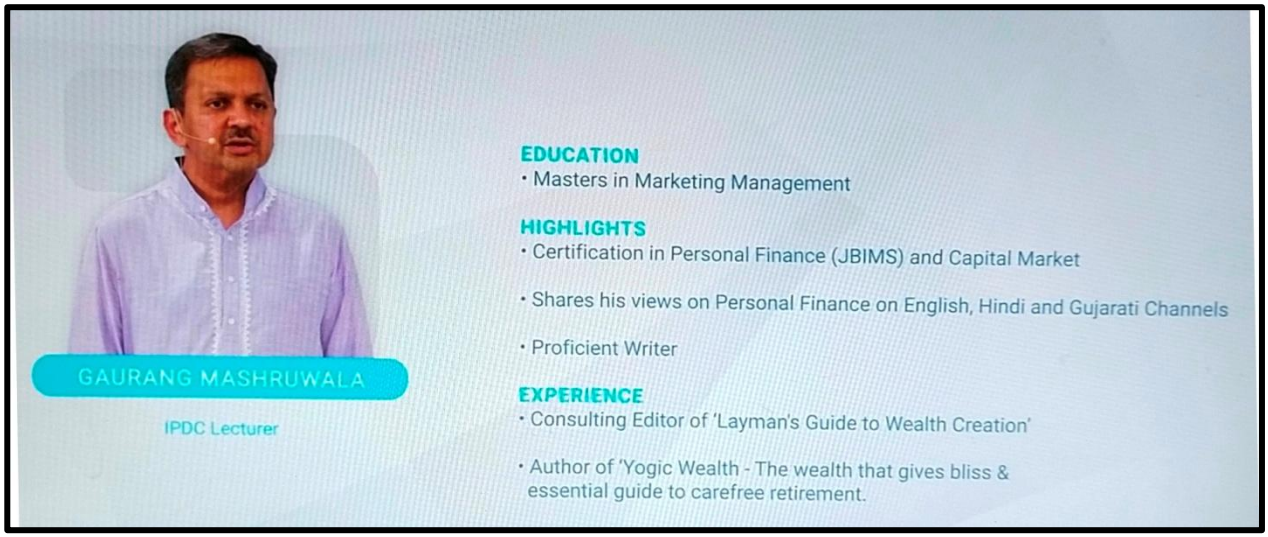

PUJYA GNANNAYAN SWAMI
IPDC Lecturer
EDUCATION
• M.A. in Sanskrit and Swaminarayan Vedant
• B.A. in Sanskrit – Bronze Medalist
• B.E. Computer, SCET, Surat, Gujarat
HIGHLIGHTS
• Initiated as a sadhu by Pramukh Swami Maharaj in 2008
• Notable Master of Ceremonies and proficient orator
EXPERIENCE
• BAPS Cultural Programme & National Events Coordinator.

# UNIVERSAL HUMAN VALUE




GAURANG MASHRUWALA
IPDC Lecturer
EDUCATION
• Masters in Marketing Management
HIGHLIGHTS
• Certification in Personal Finance (JBIMS) and Capital Market
• Shares his views on Personal Finance on English, Hindi and Gujarati Channels
• Proficient Writer
EXPERIENCE
• Consulting Editor of 'Layman's Guide to Wealth Creation'
• Author of 'Yogic Wealth - The wealth that gives bliss & essential guide to carefree retirement.

ISKCON

Ganpat University
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# Distinguished Lecture
# &
# *EOI Signing Ceremony*
# "Bhagavad Gita and It's role in Modern Education"

**on Friday, February 26, 2021**
**02:00 PM to 03:00 PM**

## Program Schedule

| Time | Particular |
|---|---|
| 02:00 PM to 02:05 PM | Welcome & Program Introduction |
| 02:05 PM to 02:15 PM | Ceremonial Address By<br><br>**Dr. Mahendra S. Sharma**<br>Hon. Pro Chancellor & Director General<br>Ganpat University |
| 02:15 PM to 02:20 PM | *MOU Signing Ceremony* |
| 02:20 PM to 02:50 PM | Distinguished Lecture By<br><br>**His Holiness Gopal Krishna Goswami Maharaj**<br>GBC (Governing Body Commissioner) of<br>***ISKCON – India & International***<br>***"Topic: Bhagavad Gita and It's role in Modern Education"*** |
| 02:50 PM to 02:55 PM | Vote of Thanks |
| 02:55 PM to 03:00 PM | University Song |

Ganpat University
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ISKCON

# Expression of Interest

Between

## Ganpat University (GUNI)

And

## ISKCON (International Society for Krishna Consciousness)

### To offer Academic Courses/Programmes related to Bhagavad Gita

We wish to express our interests to form a joint effort as GUNI ISKCON TEACHING ARM (G.I.T.A.) to explore possible areas of research, collaboration and scholarly exchange among students, members, faculty members, departments, and research institutes for inculcating ethics and values in society with following points:

1. Ganpat University and the township of Ganpat Vidyanagar, a high-tech education campus is a joint initiative, purely philanthropic in nature, by a large number of industrialists and technocrats, noble farmers and affluent businessmen for the mission of "Social Upliftment through Education". The University is established by the State Government by enactment of Act No.19/2005 on 12th April, 2005. In consideration of its contribution to the Education in a short period of time, the University has been given Permanent Membership of other Associations, such as: Association of Indian Universities (AIU), Member of Association of Commonwealth Universities (ACU), Federation of Indian Chambers of Commerce and Industry(FICCI), All India Management Association (AIMA),Confederation of Indian Industry(CII), Member of International Association of Universities (IAU), Recognized by Department of Scientific and Industrial Research (DSIR); and Govt. of Gujarat appointed Start-up Nodal Institute, Membership of Association of the Universities of Asia and the Pacific (AUAP).

2. Whereas the International Society for Krishna Consciousness (ISKCON), otherwise known as the Hare Krishna movement, includes Seven hundred major centres, temples and rural communities, nearly one hundred affiliated vegetarian restaurants, thousands of *namahattas* or local meeting groups, a wide variety of community projects, and millions of congregational members worldwide. Although just fifty years on the global stage, ISKCON has expanded widely since its founding by His Divine Grace A. C. Bhaktivedanta Swami Prabhupada in New York City in 1966.Philosophically it is based on the age old Indian Vedic Sanskrit literature specially *Bhagavad-Gītā and Srimad Bhagavatam,* wherein **Universal Principles for the ultimate welfare of humankind** are revealed. ISKCON believes that the God is known across the world by many names including Allah, Jehovah, Yahweh, Rama, etc. and promote the Love of God for **Spreading the Message of Love** among all the souls irrespective of Cast, Colour, Nationality, Religion etc.

3. The Vision, Mission and Quality Statement of GUNI is attached herewith **(Enclosure-I)**

4. The Seven Purposes of ISKCON are attached herewith. (Enclosure II)

5. While acknowledging and respecting the differences in each other's speciality, arena , priority and manners , both GUNI and ISKCON also acknowledges the common areas and manners wherein their scope allows them to work together for the overall welfare of Society through Education.

6. We agree in working together for those common scope as mentioned in GUNI's key concepts-Inculcation of values (Vision), Symbiotic Emergence (Mission) and Accountable for national Values ( Quality Statement ) & ISKCON 's Prime Purpose : To systematically propagate spiritual knowledge to society at large and to educate all people in the techniques of spiritual life in order to check the imbalance of values in life and to achieve real unity and peace in the world.

7. To meet the understanding as mentioned in above both GUNI and ISKCON expresses their interest to design, develop and implement various programs/ courses in phase wise manners as expressed in **Enclosure III.**

8. A Committee for the above purpose will be formed with six members- 3 members from GUNI, 3 from ISKCON. The Committee will discuss, plan, overview, advise, guide, and decide for the important issues like sharing of GUNI's infrastructure, ISKCON's faculty of educators and other important issues. The committee will meet quarterly for execution of this purpose.

9. It is desirable that ISKCON will promote Ethics and Values among students by its specific involvement and at the same time It is desirable that GUNI will nurture Ethics & Values through teachings and Leanings from the lessons of Bhagavad Gita (As it is) among students, staff and all other stake holders.

10. Both the parties are committed for their best endeavour of the underlying cause. This cause is universal in its very nature, develops respect to Environment, Ecology and Consciousness of inner nature. This leads to the understanding that the entire world is a big family and promote living in cooperation with nature instead of its exploitation. These values are, promoted in Bhagavad Gita.

11. Any of the two parties, if override each other's interest, the above Expression Agreement will become automatically null and invalid. Nothing in this Eol will establish an exclusive relationship between the parties and each party may freely elect to engage in research and other initiatives with others.

12. The Agreement is being made with Trust in God and good faith in each other for the pleasure of Almighty, leading to holistic welfare of Students, faculty, and staff of GUNI and both the parties pray to the Almighty for His blessings in this joint endeavour.

**Enclosure I:** GUNI's Vision, Mission and Quality Statement

**Enclosure II:** ISKCON's Seven Purposes

**Enclosure III:** Phase wise List of Programmes offered jointly by GUNI and ISKCON

**On behalf of Ganpat University**

**Dr. Mahendra Sharma,**
**Pro Chancellor & Director General**

**On Behalf of ISKCON**

**His Holiness Gopal Krishna Goswami,**
**GBC – ISKCON**

**February 26, 2021**

## ENCLOSURE I: GUNI's Vision, Mission and Quality Statement

### VISION:

"It shall be the constant endeavour of Ganpat University to meet the education needs of the youth in the areas of professional studies and provide state-of-the-art learning opportunities along with inculcation of values of commitment and uprightness."

### MISSION:

"Seek search and offer programs that lead to symbiotic emergence of 'academic excellence' and 'industrial relevance' in education and research."

### QUALITY STATEMENT

"It shall be the constant endeavour of the University to deliver global standards of excellence in all its core and allied operations and remaining accountable for national values and objectives of establishment through process of self evaluation and continuous improvement."

## ENCLOSURE II: SEVEN PURPOSES OF ISKCON

1. To systematically propagate spiritual knowledge to society at large and to educate all people in the techniques of spiritual life in order to check the imbalance of values in life and to achieve real unity and peace in the world.
2. To propagate a consciousness of Krishna (God), as it is revealed in the great scriptures of India, Bhagavad-Gita and Srimad-Bhagavatam.
3. To bring the members of the Society together with each other and nearer to Krishna, the prime entity, thus developing the idea within the members, and humanity at large, that each soul is part and parcel of the quality of Godhead (Krishna).
4. To teach and encourage the sankirtana movement, congregational chanting of the holy name of God, as revealed in the teachings of Lord Sri Caitanya Mahaprabhu.
5. To erect for the members and for society at large a holy place of transcendental pastimes dedicated to the personality of Krishna.
6. To bring the members closer together for the purpose of teaching a simpler, more natural way of life.
7. With a view towards achieving the aforementioned purposes, to publish and distribute periodicals, magazines, books and other writings.

**ENCLOSURE III: Phase wise List of Programs offered jointly by GUNI and ISKCON through G.I.T.A. (Guni Iskcon Teaching Arm)**

| Enclosure III: GANPAT UNIVERSITY - ISKCON TEACHING ARM (G.I.T.A.) | | | |
|---|---|---|---|
| **S No.** | **NAME OF THE COURSE** | **FACULTY** | **In Collaboration with** |
| | **PHASE I** | | |
| 1 | Executive Diploma in Bhagavad Gita for Lifestyle Management (Ex D-BGLM) | Management Studies | Iskcon Ahmedabad and Iskcon Mehsana |
| 2 | UHV, Open Elective and Skill Enhancement Courses as per Model AICTE and UGC norms (8 Courses are offered as per **Annexure I** ) | Common for all Faculties | Iskcon Ahmedabad and Iskcon Mehsana |
| | **PHASE II** | | |
| 3 | Executive MBA in Bhagavad Gita for Leadership Management (ExMBA-BGLM) | Management Studies | Iskcon Ahmedabad and Iskcon Mehsana |
| 4 | Certificate, Diploma, BS and MS Programs in Consciousness Science, reincarnation Science, Semantic Science etc. | Science | Bhaktivedanta Institute, Iskcon Juhu, Mumbai |
| 5 | PhD Programs | Management, Engineering, Science and Social Science | Bhaktivedanta Research Centre (ISKCON-Wada- Eco Village) |

| Annexure I: GANPAT UNIVERSITY - ISKCON TEACHING ARM (G.I.T.A.) | | |
|---|---|---|
| **S No.** | **Name of the Course Offered** | **Meeting to which options of Model AICTE and UGC Syllabus** |
| 1 | UHV-I & UHV-II along with DYS-BG (Discover Your Self through BHAGVAD GITA) | UHV-I as Mandatory Course & UHV-II as credited Elective for UG and Diploma Students. |
| 2 | 6 M Certificate Course in BHAGAVAD GITA for Interpersonal Development (BGID) | Audit / Open Electives / for busy professionals |
| 3 to 6 | Essence of Bhagavad Gita Series for Personality Development: Spiritual Scientist, Positive Thinker, Self-Management and Proactive Leader (BGPD) | As four of the Mandatory Audit/ Elective Subjects for AICTE UG students to develop **Universal Citizenship Values** |
| 7 | Essence of Indian Knowledge Traditions (EIKT) | As one of the Mandatory subjects for the AICTE UG -PG-Diploma students |
| 8 | Ethical Values for Holistic Life (EVHL) | As one of HSMC/ SEC Subjects for the students of AICTE UG or UGC UG /AICTE PG & Diploma |

# Confirmation of Acceptance :

Link of EoI between GUNI and ISKCON

# UNIVERSAL HUMAN VALUE

| | |
|---|---|
| **TYPE of AWARD** | **EXTRA CREDIT IN MARKSHEET** |
| **TITLE** | 1. UNIVERSAL HUMAN VALUE (Discover Yourself through Bhgavad Gita -1)<br>**2.** UNIVERSAL HUMAN VALUE (Discover Yourself through Bhgavad Gita -2) |
| **SHORT CODE** | UHV3DYSBG1<br>UHV4DYSBG2 |
| **DURATION** | **30 Hrs. per Semester** |
| **MINIMUM BATCH SIZE** | **20** |
| **COMMENCEMENT OF BATCH** | **Semester 2 and Semester 3 of Every Diploma and UG Program** |
| **COURSE FEE** | **NIL** |
| **LOCATION** | **GANPAT UNIVERSITY** |
| **LECTURE TIMING** | **As prescribed in the Time-table** |
| **IN ASSOCIATION WITH** | **ISKCON (** International Society for Krishna Consciousness ) |
| **RESOURCE PERSON(S)** **(Concise profile need to be annexed in copiable content format)** | **Resource Persons involve a blend of regular faculties and Visiting Faculties . All the faculties are chosen who have developed a holistic attitude and try their best to implement the principles in their own life. Thus teaching by example is the prime purpose alongwith lectures.**<br><br>**Regular Facilitators :**<br>**1. G.K.Tejra ,Professor Ganpat University**<br>**2. 3. Dr. Alpana Patidar**<br>**4. Mr. Gaurav Kumar**<br>**5. Mr. Navin Pandey**<br>**6. Dr. K.D.Patel**<br><br>**Expert Visiting Faculties :**<br>**1. Adwait Acharya Das, President Iskcon Mehsna**<br>**2. Kalanath Chaitanya Das, President Iskcon Ahmedabad**<br>**3. Akshyanand Das B.E.** |
| **FINANCIAL SHARING** (from **SURPLUS OF THE COURSE**) | **Not Applicable** |

## OBJECTIVE & SCOPE

**Besides the objective and scope as mentioned in the UHV web site (http://www.uhv.org.in/uhv-1 and http://www.uhv.org.in/uhv-2 )there are the higher objectives and scopes in line with the spirit of AICTE's model syllabus' portion about Orientation _ Induction Guide and courses on Humanity, Social Sciences and Management ( HSSM) .**

## DISCOVER YOURSELF Through Bhagavad Gita

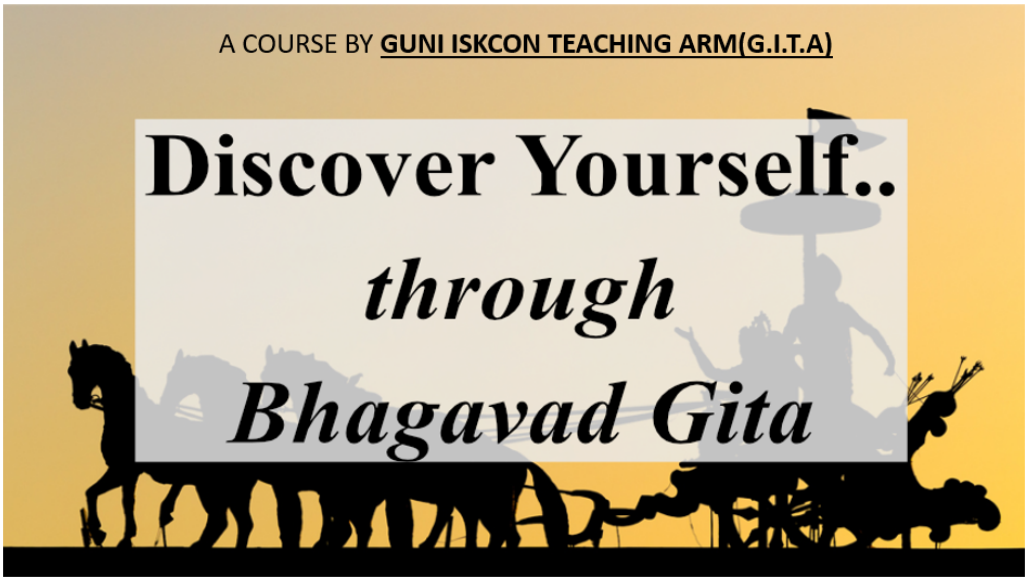



Universal Adoption of Bhagavad Gita as a Life Book of Practical wisdom , beyond boundary of religion, nation , cast or creed

Bhagavad Gita in AICTE & UGC Model Syllalbus

AtmaNirbhar Bharat and Role of Bhagavad Gita

**The course is a fundamental one in a series of courses offered as "Discover Yourself".It's in essence a breakthrough into a joyous journey of life covering a variety of topics from its roots. The biggest joy in one's life is when one finds oneself ! Thus the course digs inside us and first solves the biggest mystery of WHO AM I? One who has found oneself, the entire cosmos belongs to the one and at the same time the one belongs to the entire cosmos. It makes a holistic approach through the time tested spiritual literatures specially the globally acknowledged wisdom book - Bhagavad Gita . This is done without entangling them into narrow religious or sectarian belief and instead adopting their scientific temper as acknowledged by the great people of the world. This leads not only to the universal appeal of Universal love regardless of cast, creed and nation but also clarity of vision and mission of one's life . Finally transforming one into a true Indian citizen with real universal human values.**




## PROGRAM OBJECTIVES ( PO ) : UHV through DYSBG

| Program Objective : The link for details of Program objectives | | | |
|---|---|---|---|
| **S.N.** | **Key Concept of PO** | **Blooms's Triangle** | **Acronyme - KRISHNA** |
| 1 | ***Scientific knowledge of BG in a Systematic way*** | Remember | **K**nowledge |
| 2 | ***Responsibility of Learning by Respecting Authority*** | Understand | **R**ealisation |
| 3 | ***Understanding to Realization*** | | |
| 4 | ***Developing Spiritual Attitude*** | Apply | **Implementation** |
| 5 | **Personal Application with Academic and Moral Integrity** | | |
| 6 | **Theological Application** | | |
| 7 | ***Class for Mass ( Social Service )*** | | |

| | | | |
|---|---|---|---|
| 8 | **Rising to Faith through Evaluation** | Analyze and Evaluation | |
| 9 | ***Harmony with Nature ( Holistic Life )*** | Create | **S**imple-living |
| 10 | ***Holy Association ( Team Spirit)*** | | **H**igh-thinking |
| 11 | ***Vision to Mission via Preaching application ( Continuous Improvement )*** | | **N**and-ke-ghar |
| 12 | ***Joy of Giving ( Self Realization )*** | | **A**nand |

**Holistic Education : A journey from Trust to Love : 20 Knowledge Processes to Acquire 9 Values**

| 9 Values of UHV | 9 Stages of Spiritual Science | BG Chapters | 20 Knowledge Processes as per BG 13.8-12 | Types of Values |
|---|---|---|---|---|
| 1. Trust (foundation value) | श्रद्धा | 1 | अमानित्वं Humility | Learning Values |
| | | 2A | स्थैर्यं Steadiness ( Detemination ) | |
| | | 2B | अन्भिश्वन्ग: पुत्रदारगृह अदिशु Freedom from entanglement with children, home , wife and the rest ( Witness Attitude ) | |
| 2. Respect | साधुसंग | 3 | अत्म्विनिग्रह Self Control | |
| | | 4 | आचार्योपासनं Approaching a bonafide Spiritual master ( Discipline ) | |
| 3.Guidance | भजनक्रिया | 5 | विवक्त देश सेवित्वाम Aspirng to live in a solitary place ( Solitude - Soul Attitude ) | |
| | | 6 | इन्द्रिया अर्थेशु वैराग्यं Renunciation of the objects of Sense gratification ( Service Attitude ) | |
| 4. Care | अनर्थ निवृत्ति | 7 | सम चितात्वं इष्ट अनिष्ट उप पतिशु Even mindedness amidts pleasant and unpleasant events ( Soberness ) | |
| | | 8 | शौचं Cleanliness | |

| | | | | |
|---|---|---|---|---|
| 5.Reverence | निष्ठा | 9 | आर्जवं Simplicity | |
| | | 10 | अध्यात्म ज्ञान नित्यत्वं Accepting the importance of Self Realisation ( Adopting a Holistic Education System ) | Loving Values |
| 6. Affection | रूचि | 11 | क्षान्ति Tolerance | |
| | | 12 | मयी च भक्तिअव्यभिचारिणी: Constant and Unalloyed Devotional service to Supreme ( CUDS) :Central Value or the best value around which all other values develop : Developing Loving Service Attutude | |
| 7. Glory | आसक्ति | 13 | अन्हंकार Absence of False Ego | |
| | | 14 | असक्ति Detachment | |
| 8. Gratitude | भाव | 15 | अरतिः जन संसंदी, Detachment from the general mass of people | |
| | | 16 | अदम्भित्वं Pridelessness | |
| 9. Love (complete value) | प्रेम | 17 | जन्म जरा व्याधि दुख दोस्शानुदार्शम | Giving Values |
| | | 18A | तत्व-ज्ञानार्थ -दर्शनं Philosophical search for the Absolute Truth. | |
| | | 18B | अहिंसा Non violence ( Edu-CUDS) : Giving or educating others with the Best Value | |

| Attributes in Education | Present Issue | Modern Trend | Theme in BG |
|---|---|---|---|
| KNOWLEDGE | Environmental Pollution | Sustainable Knowledge | राज विद्या राज गुह्यं (BG 9.2) |
| SKILL | Mismatching of University Graduate with Modern Industry | OBE ( Output Based Education ) | योगः कर्मसु कौशलम ( ( BG2.49) |

| VALUE | Lack of Character | Holistic Development | निर्द्वन्द्वो मतिर्मम ( BG 18.78) |
|---|---|---|---|

| ATTRIBUTES of Holistic Education | Program Objectives | | | | |
|---|---|---|---|---|---|
| KNOWLEDGE | PO 1 | PO3 | PO4 | | |
| SKILL | PO5 | PO6 | PO7 | PO10 | PO11 |
| VALUE | PO2 | PO8 | PO9 | PO12 | |

**LEARNING OUTCOME OF THE COURSE ( CO: Course Objectives )**

1. Highlight the advantages of having understanding of a life in terms of ethical human conduct leading to a **mutually fulfilling human behavior with Self,Family , Society and Nature**.
2. To facilitate the development of a **Holistic Perspective** which forms the basis of universal human values and movement towards value based living in a natural way .
3. **Saving** teenagers from self destructive habits.
4. Creating a class of people of **high character** through spirituality and of high competence through self excellence skills with basic and higher principles of Consciousness Science .
5. Creating a class of people who respect , trust and love each other , living as **vehicles of practical wisdom**.

## Teaching and Examination Scheme**:

| Teaching Scheme | | | Credits | Examination Marks | | | | Total Marks |
|---|---|---|---|---|---|---|---|---|
| | | | | Theory Marks | | Practical Marks | | |
| L | T | P | C | CE | SEE | CE | SEE | |
| 2 | 0 | 0 | 2 | 100 | 00 | 00 | 00 | 100 |

L- Lectures; T- Tutorial/Teacher Guided Student Activity; P- Practical; CE-Continuous Evaluation; SEE- Semester End Examination;

** *Both semesters (IPDC-1 and IPDC-2) have same teaching and examination scheme.*

**Hands on Project:** Participants will get a chance to have hands-on practice through Workbook Activities.

Syllabus : UHV1 Syllabus link DYSBG1

UHV2 Syllabus link DYSBG2

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

| | | | |
|---|---|---|---|
| Programme | Bachelor of Technology/ Diploma / PG | Branch/Spec. | All Branches of Engineering , Pharmacy , Science and other UG courses |
| Semester | I/ II | Version | 1.0.0.0 |
| Effective from Academic Year | 2020-21 | Effective for the batch Admitted in | Nov 2020 |
| Subject code | UHV 3DYS BG1 | Subject Name | **Discover Yourself** through Bhagavad Gita DYS-BG 1 |

| Teaching scheme (Per week) | | | | | | Examination scheme (Marks) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE ( Open Book Assmt & CLosed Book Assmt ) | Total |
| | L | TU | P | TW | | | | | |
| Credit | 2 | 0 | 0 | 0 | 2 | Theory | 100 | 0 | 100 |
| Hours | 2 | 0 | 0 | 0 | 2 | Practical | 0 | 0 | 0 |

Pre-requisites: Interest in self development along with welfare of others

Objectives of the Course:

1. To facilitate the development of a holistic perspective which forms the basis of universal human values and movement towards value based living in a natural way .
2. Creating a class of people of high character through spirituality and of high competence through self excellence skills.
3. Saving teenagers from self destructive habits.
4. Highlight the advantages of having understanding of a life in terms of ethical human conduct leading to a mutually fulfilling human behaviour.
5. Creating a class of people who respect , trust and love each other , living as vehicles of wisdom.

Theory Syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Value education :**<br>a. Introduction : Need , Guideline & Content ; Value of an entity<br>b. Basic requirement for fulfillment of human aspiration:Development of Human Consciousness,Role of Education- Sanskar,The Sanskar to transform Consciousness from animal to humane<br>c. Process of Value Education: Self Exploration<br>d. Exploring the meaning of happiness and prosperity :Realizing Existence as Coexistence at All Levels | 2 |
| | **Explore Values :** Art of Concentration , Respect for all religions and Nonviolence | 2 |
| | **Practical Tip** 1 -Introduction to Practical tips for Value Education: Goal of Education, Major Benefit of Value Education to Students and to professional institutes. DEFAULTER & its reversing . | 2 |

| | | |
|---|---|---|
| | The modern Challenge : Covid 19 _ Why this ? Way ahead ?<br>Case study : Disrobing the Kauravas. | |
| 2 | **Harmony in Human Being:**<br>1. Understanding the human being as a coexistence of Self and body<br>2. Understanding harmony in the Self : Self as a Consciousness entity and body as the material entity<br>3. Gross Misunderstanding : Assuming Human being to be only the Body<br>4. Understanding Harmony in human being<br>**5.** Understanding the Harmony of the Self with the Body | 2 |
| | **Explore Values :** Self Control , Our Blissful Identity | 2 |
| | Practical Tip 2 - Dealing with Habits : Types of Habits - Good Habits and Bad Habits, Additions - Causes, Right perception , Power of Good habits. | 2 |
| 3 | **Harmony in the Family** : Intention and Competence : Journey From Trust to Love ….<br>1. Understanding the Relationship<br>2. Trust - The foundation value in Relationship<br>3. Respect - As the Right Evaluation<br>4. Other naturally acceptable feelings in Relationship<br>5. Justice in the Relationship | 2 |
| | Practical Tip 3 - Lightening up Values: Value Based Life, Present day materialistic approach , Balance Life wheel , Wisdom Tree, Good foundation to excel in life , Compassion, Love gives but greed takes , Perfect Charity , Contentment , Humility , Love means to give and by giving we receive , Attitude , Failures are the stepping stones for the success, Self Confidence, | 2 |
| | Explore Values : Cleanliness / | 2 |
| 4 | **Harmony in Society** :<br>1. Understanding Human Goal<br>2. Dimension (Systems) of Human Order<br>3. Universal Human Order - Harmony from Family order to world family Order<br>4. Process of Development of a Child in an environment of Relationship<br><br>Five Dimensions of Human Order …. Tendency to Control and Rule ( Domination Vs Developing and valuing Inter Relationships … | 2 |
| | Practical Tip 4 -Professional Ethics : What is Ethics, Need of Ethics, Educational Ethics , Missing thing in modern education, Healing the wounded modern world, Values are real valuables, Values for the modern generation. Integrating spirituality with education , Positive and negative attitudes of professionals, Ideal Attitude at work, Step to make your work as worship , Case study : Kansaness and Krishnaness . | 2 |
| | Explore Values : Tolerance and Forgiveness , Secret of Smart work | 2 |
| 5 | **Harmony in Nature and Existence :**<br>**1. Understanding Harmony in Nature**<br>**2. Realising Existence as Coexistence at all levels**<br>**3. The Holistic perception of Harmony in Existence**<br>**4. Program of Individual Action : Self Exploration , self Awareness and Self Evaluation** | 2 |
| | Practical Tip 5 - True Friendship and Love : Who is a friend , Qualities of good friend , Real Friend , Examples of True Friendship , What is Love , True Love means to give , Smiley faces but crying & empty hearts , Love and Lust , Message of Love | 2 |

| | | |
|---|---|---|
| | Explore Values :Big brain behind the Universe , Divine Knowledge | 2 |
| Practical Content | | |
| Drama , Visit, Literary , meeting personalities of special field and other orientation activities based on above concepts | | |
| Text Books | | |
| 1 | Value Education for Young Leaders by Prof( Dr.) P . Harikrishna ,NIT -Warangal | |
| 2 | Discover Yourself by Radheshyam Das , M.Tech , IIT - Mumbai | |
| Work Book :Value Education by Center for Value Education ( CVE ) - Pune | | |
| Reference Books | | |
| 1 | Bhagavad Gita As IT Is by ACBVS Prabhupad | |
| 2 | Voice your Choice by Govidn Das | |
| 3 | Leadership Lessons from the Bhagavad Gita by Ace V . Simpson , Brunel University , London | |
| ICT/MOOCs Reference | | |
| 1 | | |
| | | |
| Course Outcomes: | | |
| COs | At the end of the course Students will be able to : | |
| CO1 | Highlight the advantages of having understanding of a life in terms of ethical human conduct leading to a **mutually fulfilling human behavior with Self,Family , Society and Nature**. | |
| CO2 | To facilitate the development of a **Holistic Perspective** which forms the basis of universal human values and movement towards value based living in a natural way . | |
| CO3 | **Saving** teenagers from self destructive habits. | |
| CO4 | Creating a class of people of **high character** through spirituality and of high competence through self excellence skills with basic and higher principles of Consciousness Science | |
| CO5 | Creating a class of people who respect , trust and love each other , living as **vehicles of practical wisdom**. | |
| | | |

**Mapping of CO and PO:**

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | **3** | **2** | **2** | **1** | **1** | **3** | **3** | **3** | **2** | **1** | **0** | **3** |
| CO2 | **3** | **3** | **3** | **0** | **0** | **3** | **2** | **3** | **2** | **1** | **1** | **3** |
| CO3 | **2** | **2** | **2** | **1** | **1** | **2** | **2** | **3** | **2** | **1** | **1** | **3** |
| CO4 | **2** | **1** | **1** | **0** | **0** | **3** | **3** | **3** | **3** | **2** | **0** | **3** |
| CO 5 | **2** | **2** | **2** | **2** | **3** | **1** | **3** | **3** | **3** | **3** | **3** | **3** |

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

| | | | | | |
|---|---|---|---|---|---|
| Programme | Bachelor of Technology | | Branch/Spec. | All Branches of Engineering | |
| Semester | III | | Version | 1.0.0.0 | |
| Effective from Academic Year | 2021-22 | | Effective for the batch Admitted in | Nov 2020 | |
| Subject code | UHV4DYSBG2 | Subject Name | **Discover Yourself** through Bhagavad Gita II ( Positive Thinker ) I | | |

| Teaching scheme | | | | | | Examination scheme (Marks) | | | |
|---|---|---|---|---|---|---|---|---|---|
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | 2 | 0 | 0 | 0 | 2 | Theory | 100 | 0 | 100 |
| Hours | 2 | 0 | 0 | 0 | 2 | Practical | 0 | 0 | 0 |

Pre-requisites: Interest in self development along with welfare of others

Objectives of the Course:

1.

Theory Syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to Value Education :<br>1. Understanding Value Education<br>2. Self Exploration is the process of Value Education<br>3. Basic human aspiration and their fulfilment<br>4. Understanding Happiness and Prosperity | 2 |
| | Practical Tips 1 : How to deal with Stress : About Stress, Stress in young age , Importance of Stress , Causes of Stress , Suicide - the present age stupid idea ,Why only Human commit suicide , How to deal with crisis in our life , Art of Tolerance , Practical solution for youth , Life Style management , Learn to manage the stress | 2 |
| | Explore Values : Positive Thinking , Friendliness and See good in others | 2 |
| | Discover the game of Life , Discover Inner Self | 2 |
| 2 | Understanding the Harmony at Various levels<br>5. Understanding the Human beings as coexistence of Self and Body<br>6. Harmony in Self and understanding Myself<br>7. Harmony of the self with the body , Self -Regulation & Health<br>8. Harmony in the family - Understanding values in human - human relationship<br>9. Harmony in Society - Understanding universal human order<br>10. Harmony in Nature - Understanding the interconnectedness , Self Regulation and Mutual fulfilment<br>11. Harmony in Existence : Understanding coexistence at various levels | 2 |

| | | |
|---|---|---|
| | Explore Values : Health and Regulation , Goal of Life | 2 |
| | Practical Tip 2 -Time Management: The clock and the compass, Time Management Matrix, spiritual intelligence, L.I.F.E, Four Human Needs**,** Return of investment of life, Various Time Management Techniques, Identifying the big rocks, Triple "S" formula, Tips on time management. | 2 |
| | Discover the Ultimate Genius , Discover Manual of Life | |
| 3. | Implications of the Right Understanding<br>12. The basis for Universal human values and Ethical human conduct<br>13. Professional Ethics in the light of Right understanding<br>14. Holistic Development towards Universal Human Order<br>15. Vision for Holistic Technologies , Production System and Management Models<br>16. Journey towards Universal Human Order - The Road Ahead | 2 |
| | Explore Values : Yoga for Modern age , As you sow so shall you reap | 2 |
| | Practical Tip 3 - Self Empowerment through Self Management : Self Management , Importance of Self Management, Best solace for self management, , Need of self management in modern scenario, Successful tool for Self management : working smarter not harder, Self control to achieve Will power , Stop worrying and start living peacefully ( Peace formula) , What is spirituality and how to be spiritual ? Is spirituality scientific and practical ? , | 2 |
| | Discover the Lasting Solutions / Discover sublime joy through Sound Vibrations | 2 |
| 4 | UHV at a Glance :<br>1. HUman Values pertaining to Self and Body<br>2. Human Values pertaining to family<br>3. Human Values pertaining to Society<br>4. Human Values pertaining to Nature<br>5. Human Values pertaining to Existence<br>Various Appendices | 2 |
| | Practical Tip 4-Leadership Principles : Leadership - its need and foundation. Six qualities of a leader, Bad leadership and Good leadership , Five Factors that mould our personality, Power of Thoughts, Triple "A" formula, Types of people, Personality ethics, Character ethics, The SIX formidable enemies that BIND us, Be Bound or Be Free: Choice is yours, Invisible Influences, The Concept of Servant Leadership | 2 |
| | Explore values : Overcome Bad Habits / Devotion and Satisfaction of Heart/ Competition , Character and Culture in Action | 2 |
| | Discover the Happy Planet , Discover Unity in Diversity | 2 |

| Practical Content |
|---|
| Drama , Visit, Literary , meeting personalities of special field and other orientation activities based on above concepts<br>Workbook : Value Education by Center for Value Education ( CVE ) - Pune |

| Text Books | |
|---|---|
| 1 | Essence of Bhagavad Gita Series : Positive Thinking by Radheshyam Das, M.Tech - IIT ( With workbook) |
| 2 | Value Education for Young Leaders by Prof( Dr.) P . Harikrishna ,NIT -Warangal |
| | |

| Reference Books | |
|---|---|
| 1 | Bhagavad Gita As IT Is by ACBVS Prabhupad |
| 2 | Voice your Choice by Govidn Das |

| | |
|---|---|
| 3 | Leadership Lessons from the Bhagavad Gita by Ace V . Simpson , Brunel University , London |
| ICT/MOOCs Reference | |
| 1 | |
| | |
| Course Outcomes: | |
| COs | At the end of the course Students will be able to : |
| CO1 | Highlight the advantages of having understanding of a life in terms of ethical human conduct leading to a **mutually fulfilling human behavior with Self,Family , Society and Nature**. |
| CO2 | To facilitate the development of a **Holistic Perspective** which forms the basis of universal human values and movement towards value based living in a natural way . |
| CO3 | **Saving** teenagers from self destructive habits. |
| CO4 | Creating a class of people of **high character** through spirituality and of high competence through self excellence skills with basic and higher principles of Consciousness Science |
| CO5 | Creating a class of people who respect , trust and love each other , living as **vehicles of practical wisdom**. |
| | |

**Mapping of CO and PO:**

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | **3** | **2** | **2** | **1** | **1** | **3** | **3** | **3** | **2** | **1** | **0** | **3** |
| CO2 | **3** | **3** | **3** | **0** | **0** | **3** | **2** | **3** | **2** | **1** | **1** | **3** |
| CO3 | **2** | **2** | **2** | **1** | **1** | **2** | **2** | **3** | **2** | **1** | **1** | **3** |
| CO4 | **2** | **1** | **1** | **0** | **0** | **3** | **3** | **3** | **3** | **2** | **0** | **3** |
| CO 5 | **2** | **2** | **2** | **2** | **3** | **1** | **3** | **3** | **3** | **3** | **3** | **3** |

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

| | | | |
|---|---|---|---|
| Programme | Bachelor of Technology | Branch/Spec. | All Branches of Engineering |
| Semester | II | Version | 1.0.0.0 |
| Effective from Academic Year | 2020-21 | Effective for the batch Admitted in | Nov 2020 |
| Subject code | UHV 3DYS BG1 | Subject Name | **Discover Yourself** through Bhagavad Gita DYS-BG 1 |

| Teaching scheme | | | | | | Examination scheme (Marks) | | | |
|---|---|---|---|---|---|---|---|---|---|
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE ( Open Book Assmt & CLosed Book Assmt ) | Total |
| | L | TU | P | TW | | | | | |
| Credit | 2 | 0 | 0 | 0 | 2 | Theory | 100 | 0 | 100 |
| Hours | 2 | 0 | 0 | 0 | 2 | Practical | 0 | 0 | 0 |

Pre-requisites: Interest in self development along with welfare of others

Objectives of the Course:

1. To facilitate the development of a holistic perspective which forms the basis of universal human values and movement towards value based living in a natural way .
2. Creating a class of people of high character through spirituality and of high competence through self excellence skills.
3. Saving teenagers from self destructive habits.
4. Highlight the advantages of having understanding of a life in terms of ethical human conduct leading to a mutually fulfilling human behaviour.
5. Creating a class of people who respect , trust and love each other , living as vehicles of wisdom.

Theory Syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Value education :**<br>a. Introduction : Need , Guideline & Content ; Value of an entity<br>b. Basic requirement for fulfillment of human aspiration:Development of Human Consciousness,Role of Education- Sanskar,The Sanskar to transform Consciousness from animal to humane<br>c. Process of Value Education: Self Exploration<br>d. Exploring the meaning of happiness and prosperity :Realizing Existence as Coexistence at All Levels | 2 |
| | **Explore Values :** Art of Concentration , Respect for all religions and Nonviolence | 2 |
| | **Practical Tip** 1 -Introduction to Practical tips for Value Education: Goal of Education, Major Benefit of Value Education to Students and to professional institutes. DEFAULTER & its reversing . | 2 |
| | The modern Challenge : Covid 19 _ Why this ? Way ahead ?<br>Case study : Disrobing the Kauravas. | |

| | | |
|---|---|---|
| 2 | **Harmony in Human Being:**<br>1. Understanding the human being as a coexistence of Self and body<br>2. Understanding harmony in the Self : Self as a Consciousness entity and body as the material entity<br>3. Gross Misunderstanding : Assuming Human being to be only the Body<br>4. Understanding Harmony in human being<br>**5.** Understanding the Harmony of the Self with the Body | 2 |
| | **Explore Values :** Self Control , Our Blissful Identity | 2 |
| | Practical Tip 2 - Dealing with Habits : Types of Habits - Good Habits and Bad Habits, Additions - Causes, Right perception , Power of Good habits. | 2 |
| 3 | **Harmony in the Family** : Intention and Competence : Journey From Trust to Love ….<br>1. Understanding the Relationship<br>2. Trust - The foundation value in Relationship<br>3. Respect - As the Right Evaluation<br>4. Other naturally acceptable feelings in Relationship<br>5. Justice in the Relationship | 2 |
| | Practical Tip 3 - Lightening up Values: Value Based Life, Present day materialistic approach , Balance Life wheel , Wisdom Tree, Good foundation to excel in life , Compassion, Love gives but greed takes , Perfect Charity , Contentment , Humility , Love means to give and by giving we receive , Attitude , Failures are the stepping stones for the success, Self Confidence, | 2 |
| | Explore Values : Cleanliness / | 2 |
| 4 | **Harmony in Society** :<br>1. Understanding Human Goal<br>2. Dimension (Systems) of Human Order<br>3. Universal Human Order - Harmony from Family order to world family Order<br>4. Process of Development of a Child in an environment of Relationship<br><br>Five Dimensions of Human Order …. Tendency to Control and Rule ( Domination Vs Developing and valuing Inter Relationships … | 2 |
| | Practical Tip 4 -Professional Ethics : What is Ethics, Need of Ethics, Educational Ethics , Missing thing in modern education, Healing the wounded modern world, Values are real valuables, Values for the modern generation. Integrating spirituality with education , Positive and negative attitudes of professionals, Ideal Attitude at work, Step to make your work as worship , Case study : Kansaness and Krishnaness . | 2 |
| | Explore Values : Tolerance and Forgiveness , Secret of Smart work | 2 |
| 5 | **Harmony in Nature and Existence :**<br>**1. Understanding Harmony in Nature**<br>**2. Realising Existence as Coexistence at all levels**<br>**3. The Holistic perception of Harmony in Existence**<br>**4. Program of Individual Action : Self Exploration , self Awareness and Self Evaluation** | 2 |
| | Practical Tip 5 - True Friendship and Love : Who is a friend , Qualities of good friend , Real Friend , Examples of True Friendship , What is Love , True Love means to give , Smiley faces but crying & empty hearts , Love and Lust , Message of Love | 2 |
| | Explore Values :Big brain behind the Universe , Divine Knowledge | 2 |

| Practical Content | |
|---|---|
| Drama , Visit, Literary , meeting personalities of special field and other orientation activities based on above concepts | |
| **Text Books** | |
| 1 | Value Education for Young Leaders by Prof( Dr.) P . Harikrishna ,NIT -Warangal |
| 2 | Discover Yourself by Radheshyam Das , M.Tech , IIT - Mumbai |
| Work Book :Value Education by Center for Value Education ( CVE ) - Pune | |
| **Reference Books** | |
| 1 | Bhagavad Gita As IT Is by ACBVS Prabhupad |
| 2 | Voice your Choice by Govidn Das |
| 3 | Leadership Lessons from the Bhagavad Gita by Ace V . Simpson , Brunel University , London |
| **ICT/MOOCs Reference** | |
| 1 | |
| | |

| Course Outcomes: | | |
|---|---|---|
| COs | At the end of the course Students will be able to : | |
| CO1 | Highlight the advantages of having understanding of a life in terms of ethical human conduct leading to a **mutually fulfilling human behavior with Self,Family , Society and Nature**. | |
| CO2 | To facilitate the development of a **Holistic Perspective** which forms the basis of universal human values and movement towards value based living in a natural way . | |
| CO3 | **Saving** teenagers from self destructive habits. | |
| CO4 | Creating a class of people of **high character** through spirituality and of high competence through self excellence skills with basic and higher principles of Consciousness Science | |
| CO5 | Creating a class of people who respect , trust and love each other , living as **vehicles of practical wisdom**. | |
| | | |

**Mapping of CO and PO:**

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | **3** | **2** | **2** | **1** | **1** | **3** | **3** | **3** | **2** | **1** | **0** | **3** |
| CO2 | **3** | **3** | **3** | **0** | **0** | **3** | **2** | **3** | **2** | **1** | **1** | **3** |
| CO3 | **2** | **2** | **2** | **1** | **1** | **2** | **2** | **3** | **2** | **1** | **1** | **3** |
| CO4 | **2** | **1** | **1** | **0** | **0** | **3** | **3** | **3** | **3** | **2** | **0** | **3** |
| CO 5 | **2** | **2** | **2** | **2** | **3** | **1** | **3** | **3** | **3** | **3** | **3** | **3** |

# GANPAT UNIVERSITY

## FACULTY OF ENGINEERING & TECHNOLOGY

| | | | | | |
|---|---|---|---|---|---|
| Programme | Bachelor of Technology | | Branch/Spec. | All Branches of Engineering | |
| Semester | III | | Version | 1.0.0.0 | |
| Effective from Academic Year | 2021-22 | | Effective for the batch Admitted in | Nov 2020 | |
| Subject code | UHV4DYSBG2 | Subject Name | **Discover Yourself** through Bhagavad Gita II ( Positive Thinker ) I | | |

| Teaching scheme | | | | | | Examination scheme (Marks) | | | |
|---|---|---|---|---|---|---|---|---|---|
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | 2 | 0 | 0 | 0 | 2 | Theory | 100 | 0 | 100 |
| Hours | 2 | 0 | 0 | 0 | 2 | Practical | 0 | 0 | 0 |

Pre-requisites: Interest in self development along with welfare of others

Objectives of the Course:

1.

Theory Syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to Value Education :<br>1. Understanding Value Education<br>2. Self Exploration is the process of Value Education<br>3. Basic human aspiration and their fulfilment<br>4. Understanding Happiness and Prosperity | 2 |
| | Practical Tips 1 : How to deal with Stress : About Stress, Stress in young age , Importance of Stress , Causes of Stress , Suicide - the present age stupid idea ,Why only Human commit suicide , How to deal with crisis in our life , Art of Tolerance , Practical solution for youth , Life Style management , Learn to manage the stress | 2 |
| | Explore Values : Positive Thinking , Friendliness and See good in others | 2 |
| | Discover the game of Life , Discover Inner Self | 2 |
| 2 | Understanding the Harmony at Various levels<br>5. Understanding the Human beings as coexistence of Self and Body<br>6. Harmony in Self and understanding Myself<br>7. Harmony of the self with the body , Self -Regulation & Health<br>8. Harmony in the family - Understanding values in human - human relationship<br>9. Harmony in Society - Understanding universal human order<br>10. Harmony in Nature - Understanding the interconnectedness , Self Regulation and Mutual fulfilment<br>11. Harmony in Existence : Understanding coexistence at various levels | 2 |
| | Explore Values : Health and Regulation , Goal of Life | 2 |
| | Practical Tip 2 -Time Management: The clock and the compass, Time Management Matrix, spiritual intelligence, L.I.F.E, Four Human Needs**,** Return of investment of life, Various Time Management Techniques, Identifying the big rocks, Triple “S” formula, Tips on time management. | 2 |

| | | |
|---|---|---|
| | Discover the Ultimate Genius , Discover Manual of Life | |
| 3. | Implications of the Right Understanding<br>12. The basis for Universal human values and Ethical human conduct<br>13. Professional Ethics in the light of Right understanding<br>14. Holistic Development towards Universal Human Order<br>15. Vision for Holistic Technologies , Production System and Management Models<br>16. Journey towards Universal Human Order - The Road Ahead | 2 |
| | Explore Values : Yoga for Modern age , As you sow so shall you reap | 2 |
| | Practical Tip 3 - Self Empowerment through Self Management : Self Management , Importance of Self Management, Best solace for self management, , Need of self management in modern scenario, Successful tool for Self management : working smarter not harder, Self control to achieve Will power , Stop worrying and start living peacefully ( Peace formula) , What is spirituality and how to be spiritual ? Is spirituality scientific and practical ? , | 2 |
| | Discover the Lasting Solutions / Discover sublime joy through Sound Vibrations | 2 |
| 4 | UHV at a Glance :<br>1. HUman Values pertaining to Self and Body<br>2. Human Values pertaining to family<br>3. Human Values pertaining to Society<br>4. Human Values pertaining to Nature<br>5. Human Values pertaining to Existence<br>Various Appendices | 2 |
| | Practical Tip 4-Leadership Principles : Leadership - its need and foundation. Six qualities of a leader, Bad leadership and Good leadership , Five Factors that mould our personality, Power of Thoughts, Triple "A" formula, Types of people, Personality ethics, Character ethics, The SIX formidable enemies that BIND us, Be Bound or Be Free: Choice is yours, Invisible Influences, The Concept of Servant Leadership | 2 |
| | Explore values : Overcome Bad Habits / Devotion and Satisfaction of Heart/<br>Competition , Character and Culture in Action | 2 |
| | Discover the Happy Planet , Discover Unity in Diversity | 2 |

| Practical Content | |
|---|---|
| Drama , Visit, Literary , meeting personalities of special field and other orientation activities based on above concepts<br>Workbook : Value Education by Center for Value Education ( CVE ) - Pune | |
| Text Books | |
| 1 | Essence of Bhagavad Gita Series : Positive Thinking by Radheshyam Das, M.Tech - IIT ( With workbook) |
| 2 | Value Education for Young Leaders by Prof( Dr.) P . Harikrishna ,NIT -Warangal |
| | |
| Reference Books | |
| 1 | Bhagavad Gita As IT Is by ACBVS Prabhupad |
| 2 | Voice your Choice by Govidn Das |
| 3 | Leadership Lessons from the Bhagavad Gita by Ace V . Simpson , Brunel University , London |
| ICT/MOOCs Reference | |
| 1 | |
| | |

| Course Outcomes: | |
|---|---|
| COs | At the end of the course Students will be able to : |
| CO1 | Highlight the advantages of having understanding of a life in terms of ethical human conduct leading to a **mutually fulfilling human behavior with Self,Family , Society and Nature**. |
| CO2 | To facilitate the development of a **Holistic Perspective** which forms the basis of universal human values and movement towards value based living in a natural way . |
| CO3 | **Saving** teenagers from self destructive habits. |
| CO4 | Creating a class of people of **high character** through spirituality and of high competence through self excellence skills with basic and higher principles of Consciousness Science |
| CO5 | Creating a class of people who respect , trust and love each other , living as **vehicles of practical wisdom**. |
| | |

**Mapping of CO and PO:**

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CO1 | **3** | **2** | **2** | **1** | **1** | **3** | **3** | **3** | **2** | **1** | **0** | **3** |
| CO2 | **3** | **3** | **3** | **0** | **0** | **3** | **2** | **3** | **2** | **1** | **1** | **3** |
| CO3 | **2** | **2** | **2** | **1** | **1** | **2** | **2** | **3** | **2** | **1** | **1** | **3** |
| CO4 | **2** | **1** | **1** | **0** | **0** | **3** | **3** | **3** | **3** | **2** | **0** | **3** |
| CO 5 | **2** | **2** | **2** | **2** | **3** | **1** | **3** | **3** | **3** | **3** | **3** | **3** |

# Student Notice

It is hereby informed you that Registration for Value added courses offered by the institute for the academic year 2021-22 is initiated.

Applications are invited for the below-mentioned value-added course offered by VMPIM as given below:

| Course | Duration | Fees |
|---|---|---|
| **Discover Yourself through Bhagavad Gita** | **30 hours** | **Nil** |

The students of MBA Sem-III can register for the course and they are required to report the coordinator (Dr. Dipesh Dasani) of Value-added course up to 14.09.2021.

I/C. Head
V.M.Patel Institute of Management
Ganpat University, Kherva-384012
Dist.Mehsana (North Gujarat)

# GANPAT UNIVERSITY

## FACULTY OF MANAGEMENT STUDIES

| | | | |
|---|---|---|---|
| Programme | Master of Business Administration | Branch/Spec. | Marketing/Finance/Human Resources Management/International Business/ Entrepreneurship/Supply Chain Management |
| Semester | | Version | 1.0.0.0 |
| Effective from Academic Year | 2020-21 | Effective for the batch Admitted in | 2020 |
| Subject code | UHV3DYS BG1 | Subject Name | **Discover Yourself** through Bhagavad Gita DYS-BG 1 |

| Teaching scheme | | | | | | Examination scheme (Marks) | | | |
|---|---|---|---|---|---|---|---|---|---|
| (Per week) | Lecture (DT) | | Practical( Lab.) | | Total | | CE | SEE ( Open Book Assmt & CLosed Book Assmt ) | Total |
| | L | TU | P | TW | | | | | |
| Credit | 2 | 0 | 0 | 0 | 2 | Theory | 100 | 0 | 100 |
| Hours | 2 | 0 | 0 | 0 | 2 | Practical | 0 | 0 | 0 |

Pre-requisites: Interest in self-development along with welfare of others

Course Objective:

1. To facilitate the development of a holistic perspective which forms the basis of universal human values and movement towards value-based living in a natural way.
2. Creating a class of people of high character through spirituality and of high competence through self-excellence skills.
3. Saving teenagers from self-destructive habits.
4. Highlight the advantages of having understanding of a life in terms of ethical human conduct leading to a mutually fulfilling human behaviour. Creating a class of people who respect, trust and love each other, living as vehicles of wisdom.

Course Outcome



Cos: At the end of the course Students will be able to :

CO1: Understand the essential complementary relation between values and skill for ensuring sustained happiness and prosperity

CO2: Visualise a holistic perspective towards life and profession based on correct understanding of human reality by discovering themselves as a potential spirit part and parcel belonging to a divine entity

CO3: Develop taste in theistic science which promotes sustainable development, mutual love and mutually enriching interaction with nature and thus visualizing life as an eternal journey of joy

CO4: Appreciate the importance of the practice of following as an integral part of universal citizen's duties: (a) respectful etiquettes and service behaviour towards parents-teachers and elderly people. (b) prayers and services to God ( c) mutually respectful inter-religious brotherhood . Apply the concepts of Time Management and Self-Management to develop true leadership qualities for fulfilling their mission of life.

Theory Syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction:** Introduction to the program - its need, its broader view, its scope, Education and Value Education, Necessity of Value Education ,Major benefits of Value education in professional institutes. Case study: Disrobing the Kauravas.<br><br>**Lightening up Values**: Value Based Life, Present day materialistic approach, Balance Life wheel, Wisdom Tree, Good foundation to excel in life, Compassion, Love gives but greed takes, Perfect Charity, Contentment, Humility, Love means to give and by giving we receive, Attitude, Failures are the stepping stones for the success, Self Confidence, Case study : Wrong but Right . Killing of Abhimanyu<br><br>**Professional Ethics**: What is Ethics, Need of Ethics, Educational Ethics, Missing thing in modern education, Healing the wounded modern world, Values are real valuables, Values for the modern generation. Integrating spirituality with education, Positive and negative attitudes of professionals, Ideal Attitude at work, Step to make your work as worship, Case study: Kansaness and Krishnaness . | 6 |
| 2 | **Can A Scientist Believe In GOD?**<br><br>The Story of Isaac Newton, Onder and design, Tremendous Energy, Organization and Craftsmanship, A Giant in a Tiny Package, Laus of Nature, Did everything start from a "Big bang' or a "Big brain'", A Charge against Chance, Do you know a machine which has no maker and with no purpose, The Unseen Is Proven by the Seen, The Spiritual Scientist<br><br>**Getting The Eyes to See GOD**: Blind Men and the Elephant, Pratyaksha Praman, Anumana Praman, Shabda Praman, See Through the Eyes of Scriptures.<br><br>**Vedic Wisdom: The Privilege of Humanity:**<br><br>Human Life vs. Animal Life, The Special Prerogative of the Human Body, the actual Destination of Life, Cause of Suffering, Shun the Sinful tendency and Surpass Suffering, What is the purpose of Vedic Literature, Is Accepting the Vedas not Blind Faith? Why are | 8 |

V.M. Patel Institute of Management
Ganpat Vidyanagar
Kherva-382711

| | | |
|---|---|---|
| | Vedas Considered the Word of God, Two Systems of Knowledge, The Vedic Process of Learning? | |
| 3 | **Science of the soul:**<br>The ABC of Bhagavad-gita, Scientific Proof of the Soul's Existence, Practical Benefits of the knowledge about the soul, A Clear Understanding of Life and Death, The Nature of the Soul, Are we Gods or God's?<br>**Substance And Shadow:**<br>Where Does the Soul Come from? Spiritual World vs. Material World, The story of Liquid Beauty, All that glitters is not gold, The Goal of Life: Purification of Heart and Glorification of Lord, Mantra Meditation Technique<br>**If God is one, then why so many religions?**<br>Dharma - our eternal occupation, Selfless Love vs Self-centeredness, GOD: One Person called by Different Names, Who Is God? Is God Personal or Impersonal?, What is 90 special about Krishna that makes Him God?, When will my Love and Service satisfy my heart fully?, Ascending from Fear to Love, Serving simply out of love, with no motivation, Religions presented according to the ability of audience the to digest the Truth, Paro Dharma, Different Religions Same Message, Sanatan Dharma - The Supermarket of Religions, Worship according to Propensities, The ABCD formula for a happy life | 8 |
| 4 | **True Friendship and Love**: Who is a Friend? important qualities of a friend, Real Friend, Examples of True Friendship, What is Love ? , Smiling face but crying empty hearts, Love and Lust : what is the difference ? , Message of Love<br>**Power Of habits:** Statistics, Cycle of habit formation, Types of Habits, Effects of habits, Causes of bad habits, addiction, Why do people want to change, Where do we get our scripts from, How some habits are bad though they look good, How to say "NO" to bad habits, How to say "YES" to good habits | 8 |
| Practical Content | | |
| | | |
| Text Books | | |
| 1 | Value Education for Young Leaders by Prof (Dr.) P . Harikrishna, NIT -Warangal | |
| 2 | Discover Yourself by Radheshyam Das , M.Tech , IIT - Mumbai | |
| Reference Books | | |
| 1 | Bhagavad Gita as IT Is by ACBVS Prabhupad | |
| 2 | Voice your Choice by Govind Das | |
| 3 | Leadership Lessons from the Bhagavad Gita by Ace V. Simpson, Brunel University, London | |

V.M. Patel Institute of Management
Ganpat Vidyanagar
Kherva-382711

## GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES

## V.M. PATEL INSTITUTE OF MANAGEMENT

### Time- Table

| Date | Time | Subject |
|---|---|---|
| 4th September 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 11th September 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 18th September 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 25th September 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 2nd October 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 9th October 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 16th October 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 23rd October 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 20th November 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 13th December 2021 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 22nd January 2022 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 30th January 2022 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 5th February 2022 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 12th February 2022 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |
| 19th February 2022 | 2.00 pm to 4.00 pm | Discovering yourself through Bhagvad Geeta |



# GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES

## V.M. PATEL INSTITUTE OF MANAGEMENT

### Value- added course summary report

Faculty of Management Studies has organized value added course on "Discovering yourself through Bhagvad Geeta" for the students of V.M. Patel Institute of Management, FMS, Ganpat University during the year 2021-22.

The details about the number of students who have attended and completed successfully are as follows:

| Year | Semester | Value-added Course | No of students participated |
|---|---|---|---|
| 2021-22 | Sem-III | Discovering yourself through Bhagvad Geeta | 18 |

The value-added course was very informative, knowledgeable and related to the values and management function. Overall, the value-added course was highly appreciated by the students.

Seal of the Institute

(Dr. Hiren, J. Patel)

**I/C. Head**
**V.M.Patel Institute of Management**
**Ganpat University,Kherva-384012**
**Dist.Mehsana (North Gujarat)**

| S. No | Student Name | Enrolment Number |
|---|---|---|
| 1 | Patel Arju Jayeshbhai | 20044311048 |
| 2 | Vinod Amirbhai vasava | 20044311106 |
| 3 | Naiya Gupta | 20044311020 |
| 4 | Meesa Ketankumar Patel | 20044311057 |
| 5 | Anjali vasava | 20044311105 |
| 6 | Bhavesh Harjibhai Parmar | 20044311040 |
| 7 | Shivam Bakuleshbhai Shah | 20044311090 |
| 8 | Binkal chunilal vadaliya | 20044311101 |
| 9 | Neha girishbhai Ghodasara | 20044311017 |
| 10 | Dhavalbhai Rameshbhai Chauhan | 20044311011 |
| 11 | Patel Poojan Mayankkumar | 20044311061 |
| 12 | Deep Jitendrakumar Raval | 20044311078 |
| 13 | Gunjan Gupta | 20044311019 |
| 14 | Milan Makvana | 20044311030 |
| 15 | Ruthvi Dodiya | 20044311016 |
| 16 | Anushka shah | 20044311086 |
| 17 | Ritika Saxena | 20044311084 |
| 18 | Ishita Patel | 20044311021 |



## Student Notice

**Date: 15/07/2020**

It is hereby informed you that Registration for Value added courses offered by the institute for the academic year 2020-21 is initiated.

Applications are invited for the below-mentioned value-added course offered by VMPIM as given below:

| Course | Duration | fees |
|---|---|---|
| **Retail Customer Interaction** | **32 hours** | **Nil** |

The students of MBA Sem-III can register for the course and they are required to report the coordinator (Dr. Dipesh Dasani) of Value-added course up to 21st July 2020.

I/C. Head
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

# GANPAT UNIVERSITY

## FACULTY OF MANAGEMENT STUDIES

| | | | | | |
|---|---|---|---|---|---|
| Programme | Master of Business Administration | | | Branch/Spec. | |
| Semester | III/IV | | | Version | 1.0.0.0 |
| Effective from *Academic* Year | 2020-21 | | | Effective for the batch Admitted in | |
| Subject code | **1OS105** | Subject Name | | **Retail Customer Interaction** | |

| Teaching scheme (Per week) | Lecture(DT) | | Practical(Lab.) | | Total |
|---|---|---|---|---|---|
| | L | TU | P | TW | |
| Credit | | | | | |
| Hours | | | | | |

| Examination scheme (Marks) | CE | SEE | Total |
|---|---|---|---|
| Theory | | | |
| Practical | - | - | - |

Pre-requisites:

Learning Outcome:

- Customer Interaction course will give understanding about customer interactions in stores and retail outlets.
- Students would be able to understand how to communicate clearly and respectfully with customers

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **About Retail Industry**: Understanding retailing, retail Industry, retail career. and jobs, Differentiate between retail and quick service restaurants, Understand and define retail verticals, Understand, and define retail formats. | 16 |
| 2 | **Sales Interaction:** Understanding the customers, Greeting customers & understand. Customer requirements by "probing", Explain features, advantages, benefits of products (FABing), Ability to "close" sales, Differentiate. between extension sales and up selling | 16 |

V. M. Patel Institute of Management Ganpat Vidhyanagar, Kherva-382711

**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**

**V. M. PATEL INSTITUTE OF MANAGEMENT**

**Time- Table**

| Date | Time | Subject |
|---|---|---|
| 23-07-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 25-07-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 28-07-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 30-07-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 04-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 06-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 07-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 10-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 13-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 17-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 19-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 21-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 24-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 25-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 27-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |
| 29-08-2020 | 4.00 pm to 6.00 pm | Retail Customer Interaction |



## GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES

## V. M. PATEL INSTITUTE OF MANAGEMENT

### Value added course summary report

Faculty of Management Studies has organized value added course on "Retail Customer Interaction" for the students of V.M. Patel Institute of Management, FMS, Ganpat University during the academic year 2020-21

The details about the number of students who have attended enrolled and completed successfully are as follows:

| Year | Semester | Value-added course | No of students participates |
|---|---|---|---|
| 2020-21 | Sem-III | Retail Customer Interaction | 42 |

The Value-added course was very knowledgeable, informative and related to the managerial function. Overall, the value-added course was highly appreciated by the students

Seal of the Institute

V.M.Patel Institute of Management Ganpat Vidyanagar Kherva-382711

(Dr. Hiren J Patel)
I/C. Head
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

## Value Added course offered to MBA Sem-III students during 2020-21

| S. No | Student Name | Enroll No | Course offered |
|---|---|---|---|
| 1 | AMRUTIYA RAJ JIGNESHKUMAR | 19044311002 | Retail Customer Interaction |
| 2 | ANSHU DHELARIYA | 19044311003 | Retail Customer Interaction |
| 3 | BHURANI DIVYA PRAMOD | 19044311006 | Retail Customer Interaction |
| 4 | BRAHMBHATT PRUTHVI NIRMALKUMAR | 19044311007 | Retail Customer Interaction |
| 5 | CHAUDHARY SHIVANI LALJIBHAI | 19044311008 | Retail Customer Interaction |
| 6 | CHAVDA JYOTIBEN LALJIBHAI | 19044311010 | Retail Customer Interaction |
| 7 | CHUDASMA RAHULKUMAR | 19044311013 | Retail Customer Interaction |
| 8 | EKTA ROSHANLAL GUPTA | 19044311015 | Retail Customer Interaction |
| 9 | GOSWAMI ADITYA PRAKASHGIRI | 19044311018 | Retail Customer Interaction |
| 10 | JOSHI AKASH ROHITKUMAR | 19044311019 | Retail Customer Interaction |
| 11 | KALARIYA DHARA PRAFULBHAI | 19044311020 | Retail Customer Interaction |
| 12 | MEHTA AESHA BIPINKUMAR | 19044311032 | Retail Customer Interaction |
| 13 | MODI DARSHAN ARVINDKUMAR | 19044311036 | Retail Customer Interaction |
| 14 | MODI RANCHHOD PRAMODBHAI | 19044311037 | Retail Customer Interaction |
| 15 | MODI RUSHABH SANJAYKUMAR | 19044311038 | Retail Customer Interaction |
| 16 | NAYAK PRITIBAHEN RAJENDRAKUMAR | 19044311041 | Retail Customer Interaction |
| 17 | PANCHAL PARTHKUMAR SHASHIKANT | 19044311043 | Retail Customer Interaction |
| 18 | PANCHAL POOJABEN MUKESHBHAI | 19044311044 | Retail Customer Interaction |
| 19 | PARMAR NISHIBEN HARESHBHAI | 19044311049 | Retail Customer Interaction |
| 20 | PARMAR PRIYANKABEN KAMLESHKUMAR | 19044311050 | Retail Customer Interaction |
| 21 | GAURAV PARWAL | 19044311051 | Retail Customer Interaction |
| 22 | PATEL AKSHAY JAGDISHBHAI | 19044311052 | Retail Customer Interaction |
| 23 | PATEL ARCHITKUMAR MAHESHBHAI | 19044311053 | Retail Customer Interaction |
| 24 | PATEL KANAN PRAKASHBHAI | 19044311057 | Retail Customer Interaction |
| 25 | PATEL PURTIBEN BHARATBHAI | 19044311061 | Retail Customer Interaction |
| 26 | PATEL RAHUL PRADEEPBHAI | 19044311062 | Retail Customer Interaction |
| 27 | PATEL RIYA PRAKASHBHAI | 19044311064 | Retail Customer Interaction |
| 28 | PATEL VIBHUTIBEN VIKESHBHAI | 19044311069 | Retail Customer Interaction |
| 29 | PUJARA RADHIKA RAJENDRAKUMAR | 19044311075 | Retail Customer Interaction |
| 30 | RAJPURA NAIMISHA NILESHKUMAR | 19044311077 | Retail Customer Interaction |
| 31 | RAVAL MANALI GOVINDBHAI | 19044311081 | Retail Customer Interaction |
| 32 | SHAH HETVEE DILIPKUMAR | 19044311082 | Retail Customer Interaction |
| 33 | SHAH JAINAM HARESHKUMAR | 19044311083 | Retail Customer Interaction |
| 34 | SHAH KRIPA KALPESH | 19044311085 | Retail Customer Interaction |



| | | | |
|---|---|---|---|
| 35 | SHARMA HITENDRAKUMAR RAJENDRABHAI | 19044311086 | Retail Customer Interaction |
| 36 | SHETH AKASH DHARMENDRAKUMAR | 19044311087 | Retail Customer Interaction |
| 37 | SIKH ADITYA SINGH SATNAM SINGH | 19044311088 | Retail Customer Interaction |
| 38 | SOLANKI ARTIBEN NITINSINH | 19044311089 | Retail Customer Interaction |
| 39 | THAKKAR NIRANT JAGDISHKUMAR | 19044311094 | Retail Customer Interaction |
| 40 | THAKKAR YATRIBEN GIRISHKUMAR | 19044311095 | Retail Customer Interaction |
| 41 | PRACHI MUKESHBHAI THAKKER | 19044311096 | Retail Customer Interaction |
| 42 | KAILASH VAGHELA | 19044311098 | Retail Customer Interaction |

I/C. Head
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Dist.Mehsana (North Gujarat)

# Student Notice

It is hereby informed you that Registration for Value added courses offered by the institute for the academic year 2020-21 is initiated.

Applications are invited for the below-mentioned value-added course offered by VMPIM as given below:

| Course | Duration | Fees |
|---|---|---|
| **Google Applications** | **30 hours** | **Nil** |

The students of MBA Sem-I can register for the course and they are required to report the coordinator (Dr. Dipesh Dasani) of Value-added course up to 11.11.2020.

I/C. Head
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

# GANPAT UNIVERSITY

## FACULTY OF MANAGEMENT STUDIES

| | | | |
|---|---|---|---|
| Programme | Master of Business Administration | Branch/Spec. | |
| Semester | I | Version | 1.0.0.0 |
| Effective from *Academic* Year | 2020-21 | Effective for the batch Admitted in | 2021 |
| Subject code | 1OS106 | Subject Name | **Google Applications** |

| Teaching scheme | | | | | | Examination scheme (Marks) | | | |
|---|---|---|---|---|---|---|---|---|---|
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | | | | | | Theory | | | |
| Hours | | | | | | Practical | - | - | - |

Pre-requisites:

Learning Outcome:

- Google apps is intention to provide in depth understand of Google apps. Course is undertaken to provide hand on training of Google calendar, drive, email, form and other application of Google

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction of Google and Google Applications: Google Chrome overview and settings** Advantages of Chrome over other browsers, Safety and security features of Chrome, Google Search Website, Image, Voice, News Video, Shopping, Finance, Search Settings<br>**Gmail Application Interface:** Introduction of Google Application interface, General, Labels, Accounts, Filters and Blocked Address, Forwarding and POP/IMPA, Chat, Advance<br>**Google Calendar:** Adding Event, out office, Reminder, Task, Appointment slots, Add guests, location, rooms or conference room, Search other calendar, change visibility, public, private, busy, free,<br>**Google Drive Overview and Usage:** Effective use of Google Drive, Uploading and downloading file and folder, Google Drive Setting and Trash, Granting Access to Google Drive file and folders. | 4 |
| 2 | **Google Team Drive:**<br>**Google Spreadsheet:** Spreadsheet Menu, view, insert, data and Tools Menu<br>**Google Documents:** Share, download as, available off line, view, insert, format, and tools menu, Google Docs, Sheet, Slide and Graphs and pivot | 4 |
| 3 | **Google Calendar interface introduction:** Adding Appointment and events, Sharing and viewing calendar, Creation of private calendar | 4 |
| 4 | **Google Form Interface:** Google Form introduction and usefulness, Creation of Google Form with different usage, Collecting data from Google form | 3 |

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| | | |
|---|---|---|
| 5 | **Google Classroom:** Introduction of Google Classroom, Theme, Assignment, Discussion, Settings and Email notifications | 4 |
| 6 | **Assigning and Creating the Content:** Google Document, spread sheet for content creation rights, Revoking access of shared documents | 3 |
| 7 | **Migrating from Office 2000 to Google Apps:** Understanding security and storage space on Google Drive, Uploading and downloading files, Converting files, Sharing files with Others, Replacing Word, Excel, and PowerPoint with Google apps | 4 |
| 8 | **Display Advertising:** The seminal form of digital advertising prominent today, Related history, current trends, concepts, terminology, metrics and benchmarks | 4 |
| Practical content | | |
| | | |
| | | |
| 1 | Conner, N. (2008). *Google Apps: The Missing Manual: The Missing Manual.* " O'Reilly Media, Inc." | |



## GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES

## V. M. PATEL INSTITUTE OF MANAGEMENT

### Time- Table

| Date | Time | Subject |
|---|---|---|
| 17/11/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 20/11/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 21/11/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 26/11/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 27/11/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 03/12/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 04/12/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 10/12/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 11/12/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 17/12/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 18/12/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 24/12/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 31/12/2020 | 3.00 pm to 4.00 pm | Google Applications |
| 01/01/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 07/01/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 08/01/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 21/01/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 22/01/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 28/01/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 29/01/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 19/02/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 20/02/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 25/02/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 26/02/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 27/02/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 02/03/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 03/03/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 04/03/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 05/03/2021 | 3.00 pm to 4.00 pm | Google Applications |
| 06/03/2021 | 3.00 pm to 4.00 pm | Google Applications |

V.M.Patel Institute of Management
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Kherva-382711

## GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES

## V. M. PATEL INSTITUTE OF MANAGEMENT

### Value added course summary report

Faculty of Management Studies has organized value added course on "Google Applications" for the students of V.M. Patel Institute of Management, FMS, Ganpat University during the academic year 2020-21

The details about the number of students who have attended enrolled and completed successfully are as follows:

| Year | Semester | Value-added course | No of students participates |
|---|---|---|---|
| 2020-21 | Sem-1 | Google Applications | 105 |

The Value-added course was very knowledgeable, informative and related to the managerial function. Overall, the value-added course was highly appreciated by the students

Seal of the Institute

V.M.Patel Institute of Management Ganpat Vidyanagar Kherva-382711

(Dr. Hiren J Patel)
I/C. Head
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

| Value Added course offered to MBA Sem-I students during 2020-21 | | | |
|---|---|---|---|
| S. No | Student | Enrolment Number | Course Opted |
| | | | |
| 1 | ALKA KUMARI | 20044311001 | Google Application |
| 2 | AMITKUMAR PRATAPBHAI DAMOR | 20044311002 | Google Application |
| 3 | BAROT HEMANGIBEN KALPESHKUMAR | 20044311003 | Google Application |
| 4 | BAROT SAHIL AJAYKUMAR | 20044311004 | Google Application |
| 5 | BHATT DHWANI BIPIN KASHMIRA | 20044311005 | Google Application |
| 6 | BHAVSAR HONEY AJAYKUMAR | 20044311006 | Google Application |
| 7 | BHUMIKA SHARMA | 20044311007 | Google Application |
| 8 | BIKASH KUMAR SINGH | 20044311008 | Google Application |
| 9 | CHAUDHARY KUNJAN PRAVINBHAI | 20044311010 | Google Application |
| 10 | CHAUHAN DHAVALBHAI RAMESHBHAI | 20044311011 | Google Application |
| 11 | DAVE MANJARI DUSHYANTKUMAR | 20044311012 | Google Application |
| 12 | DESAI NIKITA JALUBHAI | 20044311013 | Google Application |
| 13 | DESAI PARTH RAJUBHAI | 20044311014 | Google Application |
| 14 | DESAI PREYASKUMAR SATISHBHAI | 20044311015 | Google Application |
| 15 | DODIYA RUTHVI DEEPAKBHAI | 20044311016 | Google Application |
| 16 | GHODASARA NEHABEN GIRISHBHAI | 20044311017 | Google Application |
| 17 | GUDWANI RITU JITENDRAKUMAR | 20044311018 | Google Application |
| 18 | GUNJAN GUPTA | 20044311019 | Google Application |
| 19 | GUPTA NAIYA RAKESHKUMAR | 20044311020 | Google Application |
| 20 | ISHITA PATEL . | 20044311021 | Google Application |
| 21 | JANI KAVYA NILESHKUMAR | 20044311022 | Google Application |
| 22 | JHA ZUBIN DEEPAKBHAI | 20044311023 | Google Application |
| 23 | JOSHI HIMANIBEN JAYESHKUMAR | 20044311024 | Google Application |
| 24 | KADIYA UNNATIBEN PANKAJKUMAR | 20044311025 | Google Application |
| 25 | KANSARA HIMALI HARISHKUMAR RITABEN | 20044311026 | Google Application |
| 26 | KETAN SHARMA | 20044311027 | Google Application |
| 27 | KHAMAR SMIT MUKESHBHAI | 20044311028 | Google Application |



| | | | |
|---|---|---|---|
| 28 | LIMBACHIYA PARTH JITENDRABHAI | 20044311029 | Google Application |
| 29 | MAKVANA MILAN MANSUKHBHAI | 20044311030 | Google Application |
| 30 | MAKWANA MAYURKUMAR NANJIBHAI | 20044311031 | Google Application |
| 31 | MAKWANA RAJNI KHANABHAI | 20044311032 | Google Application |
| 32 | MALI VISHALKUMAR SURESHBHAI | 20044311033 | Google Application |
| 33 | MANIYAR DHAIRYAKUMAR ATULKUMAR | 20044311034 | Google Application |
| 34 | MEHTA KHUSHBU PARESHBHAI | 20044311035 | Google Application |
| 35 | MODH RUTVIK DILIPKUMAR | 20044311036 | Google Application |
| 36 | NAYAK VIVEKKUMAR BHIKHABHAI | 20044311038 | Google Application |
| 37 | PARIKH VAIBHAVI AMITKUMAR | 20044311039 | Google Application |
| 38 | PARMAR BHAVESH HARJIBHAI | 20044311040 | Google Application |
| 39 | PARMAR DIGVIJAYSINH GIRISHKUMAR | 20044311041 | Google Application |
| 40 | PARMAR HARESHBHAI CHHAGANBHAI | 20044311042 | Google Application |
| 41 | PARMAR KAJAL GANPATBHAI | 20044311043 | Google Application |
| 42 | PARMAR KIRAN PIRABHAI | 20044311044 | Google Application |
| 43 | PARMAR KRUNALKUMAR GOPALBHAI | 20044311045 | Google Application |
| 44 | PARMAR PANKAJKUMAR MAHENDRABHAI | 20044311046 | Google Application |
| 45 | PATEL ANKUR PRAVINBHAI | 20044311047 | Google Application |
| 46 | PATEL ARJU JAYESHBHAI | 20044311048 | Google Application |
| 47 | PATEL DHARATIBEN DHARMENDRAKUMAR | 20044311050 | Google Application |
| 48 | PATEL DIPALI ISHWARBHAI | 20044311051 | Google Application |
| 49 | PATEL DIXITKUMAR NITESHBHAI | 20044311052 | Google Application |
| 50 | PATEL HARDI JALPESHBHAI | 20044311053 | Google Application |
| 51 | PATEL HARSH ALPESHKUMAR | 20044311054 | Google Application |
| 52 | PATEL KARANKUMAR MUKESHBHAI | 20044311055 | Google Application |
| 53 | PATEL MEESA KETANKUMAR | 20044311057 | Google Application |
| 54 | PATEL MIHIR RAMESHBHAI | 20044311058 | Google Application |
| 55 | PATEL NEEMABEN BHARATKUMAR | 20044311059 | Google Application |

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| | | | |
|---|---|---|---|
| 56 | PATEL PAYAL SURESHKUMAR | 20044311060 | Google Application |
| 57 | PATEL POOJANKUMAR MAYANKKUMAR | 20044311061 | Google Application |
| 58 | PATEL RAJVI RANJANBHAI | 20044311062 | Google Application |
| 59 | PATEL RAVIKUMAR HARESHBHAI | 20044311063 | Google Application |
| 60 | PATEL UJASH PRAVINBHAI | 20044311064 | Google Application |
| 61 | PATEL UMANGKUMAR SURESHBHAI | 20044311065 | Google Application |
| 62 | PATEL VANSH KAMLESHKUMAR | 20044311066 | Google Application |
| 63 | PATEL VINEETKUMAR RAKESHKUMAR | 20044311067 | Google Application |
| 64 | PATEL VRUTTIBEN KESHAVLAL | 20044311068 | Google Application |
| 65 | PATHAN FARDINKHAN AIYUBKHAN | 20044311069 | Google Application |
| 66 | PRAJAPATI CHIRAG BIPINBHAI | 20044311070 | Google Application |
| 67 | PRAJAPATI KUNDANBEN BHIKHABHAI | 20044311071 | Google Application |
| 68 | PRAJAPATI WILLIS RAMESHKUMAR | 20044311072 | Google Application |
| 69 | PUROHIT JAYESHKUMAR ISHWARBHAI | 20044311073 | Google Application |
| 70 | RAJPUT RAHULKUMAR DIPAKKUMAR | 20044311075 | Google Application |
| 71 | RANA KRUTIBEN DHARMENDRABHAI | 20044311076 | Google Application |
| 72 | RATHOD KHUSHBU GHANSHYAMBHAI | 20044311077 | Google Application |
| 73 | RAVAL DEEP JITENDRAKUMAR | 20044311078 | Google Application |
| 74 | RUSHABH RAKESHKUMAR SHAH | 20044311079 | Google Application |
| 75 | SADHU RIYABEN MANISHBHAI | 20044311080 | Google Application |
| 76 | SALVI PRIYANKA | 20044311081 | Google Application |
| 77 | SATHAVARA KAUSHAL HIMMATKUMAR | 20044311082 | Google Application |
| 78 | SAVASANI MANALI MAHENDRABHAI | 20044311083 | Google Application |
| 79 | SAXENA RITIKA RAJESHKUMAR | 20044311084 | Google Application |
| 80 | SHAH ABHISHEK DEEPAKKUMAR | 20044311085 | Google Application |



| | | | |
|---|---|---|---|
| 81 | SHAH ANUSHKA MANOHARBHAI | 20044311086 | Google Application |
| 82 | SHAH DARSHITA HARESH HANSABEN | 20044311087 | Google Application |
| 83 | SHAH KRUTIK RAKESHKUMAR | 20044311088 | Google Application |
| 84 | SHAH MITESH VIMALKUMAR | 20044311089 | Google Application |
| 85 | SHAH SHIVAM BAKULESHBHAI | 20044311090 | Google Application |
| 86 | SHAH VATSAL MUKESHKUMAR | 20044311091 | Google Application |
| 87 | SHARMA TITHI KHEMKUMAR | 20044311092 | Google Application |
| 88 | SINGH ANURADHA RAMESHKUMAR | 20044311093 | Google Application |
| 89 | SOLANKI MILANKUMAR CHANDRAKANTBHAI | 20044311094 | Google Application |
| 90 | SONI PARTH SANJAYKUMAR | 20044311095 | Google Application |
| 91 | SONI PRACHI UMESHBHAI | 20044311096 | Google Application |
| 92 | SUTARIYA REVAN JAYPRAKASH | 20044311097 | Google Application |
| 93 | TAJPARA VIKEE DIPAKKUMAR | 20044311098 | Google Application |
| 94 | THAKKAR KHUSHBU BHARATKUMAR | 20044311099 | Google Application |
| 95 | VACHHANI MEGIKUMAR MANSUKHBHAI | 20044311100 | Google Application |
| 96 | VADALIYA BINKALBEN CHUNILAL | 20044311101 | Google Application |
| 97 | VADI MADHVIK VIPULBHAI | 20044311102 | Google Application |
| 98 | VAGHELA VISHAL MUKESHBHAI | 20044311103 | Google Application |
| 99 | VANIK NIRALI BHIKHABHAI | 20044311104 | Google Application |
| 100 | VASAVA ANJALIBEN KANUBHAI | 20044311105 | Google Application |
| 101 | VASAVA VINOD AMIR | 20044311106 | Google Application |
| 102 | VINAY MALI | 20044311107 | Google Application |
| 103 | VIPIN JINDAL | 20044311108 | Google Application |
| 104 | VYAS DWARKESH AJAYKUMAR | 20044311109 | Google Application |
| 105 | ZALA SHAKTISINH BABUBHA | 20044311110 | Google Application |

I/C. Head
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Dist.Mehsana (North Gujarat)

V.M. Patel Institute of Management
Ganpat Vidhyanagar, Kherva-382711

**Student Notice** **Date: 21/08/2019**

**It is hereby informed you that Registration for Value added courses offered by the institute for the academic year 2019-20 is initiated.**

**Applications are invited for the below-mentioned value-added course offered by VMPIM**

| Course | Duration | fees |
|---|---|---|
| **Decision Support System for Managers (1OS104)** | **36 hours** | **Nil** |

The students of MBA, who is interested in the course are required to report the coordinator (Dr. Dipesh Dasani) of Value-added course up to 24th August 2019. The session would be taken by Expert Mr. Nilesh Mahato.

Seal of the Institute

V.M. Patel Institute of Management Ganpat Vidhyanagar, Kherva-382711

**(Dr. Hiren J. Patel)**
I/C. Head
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

## Decision Support system for Managers (1OS104)

### Course Plan

Course Introduction: This course is designed with the purpose of making the participant an effective user as well as a builder of Decision Support systems (DSS). The course is application oriented and particularly focused towards solving semi-structured decision problems faced by managers in manufacturing and service organizations.

| S. No | Module Name |
|---|---|
| 1 | Introduction to Decision Support Systems (DSS) – Different types of Managerial Decision Problems and the Role of a DSS in solving them. Management Information System versus DSS, Range of Capabilities of a DSS, Components of a DSS, Examples of DSS, Basics of DSS Design Cycle. |
| 2 | Models in Decision Support Systems – What is a Model? Classification of Models, Purpose of Modeling in DSS, Solution Techniques: Optimization, Heuristics, and Simulation, Traditional approach to modeling and its weaknesses, Desirable features for Models in DSS, Models and Managers: The Concept of a Decision Calculus'. |
| 3 | Decision Support System for Evaluation of Investment Proposals |
| 4 | Decision Support System for Materials Managers |
| 5 | Decision Support System for Forecasting Demand for Independent Items – single and multi-period forecasting, forecasting for products with intermittent demand |
| 6 | Decision Support System for Determination of Product Mix – product choice and bundling decisions, product mix decisions |
| 7 | Decision Support System for Production Distribution Problem for a Multi-Product and a Multi-Unit Organization |
| 8 | Decision Support System for Vehicle Scheduling |
| 9 | Decision Support System for Customer Centric Value Driven Decisions – designing the service system |
| 10 | Decision Support System for Human Resources Function |
| 11 | Decision Support System for Distribution Network Design in a Supply Network |
| 12 | Decision Support System for Pricing Decisions |

**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**

**V. M. PATEL INSTITUTE OF MANAGEMENT**

**Time Table**

| Date | Time | Subject |
|---|---|---|
| 31/08/19 | 10 am to 12.00 pm<br>1 pm to 4.00 pm | Decision Support System for Managers |
| 14/09/19 | 10 am to 12.00 pm<br>1 pm to 4.00 pm | Decision Support System for Managers |
| 28/09/19 | 10 am to 12.00 pm<br>1 pm to 4.00 pm | Decision Support System for Managers |
| 23/11/19 | 10 am to 12.00 pm<br>1 pm to 4.00 pm | Decision Support System for Managers |
| 30/11/19 | 10 am to 12.00 pm<br>1 pm to 4.00 pm | Decision Support System for Managers |
| 14/12/19 | 10 am to 12.30 pm<br>1 pm to 4.00 pm | Decision Support System for Managers |
| 28/12/19 | 10 am to 12.30 pm<br>1 pm to 4.00 pm | Decision Support System for Managers |

V. M. Patel Institute of Management
Ganpat Vidhyanagar, Kherva-382711

**GANPAT UNIVERSITY – FACULTY OF MANAGEMEN STUDIES**

**V. M PATEL INSTITUTE OF MANAGEMENT**

**Date: 02/01/2020**

## Value-added course Summary Report

Faculty of Management Studies has organized value added course on 'Decision Support System for Managers' for the students of V.M Patel Institute of Management, FMS, Ganpat University on during the academic year 2019-20.

The details about the number of students who have attended enrolled and completed successfully are as follows:

| Year | Semester | Value-added Course | No of Students participated |
|---|---|---|---|
| 2019-20 | III | Decision Support System (1OS104) | 79 |

The Value-added course was very knowledgeable, informative, and related to the managerial function. Overall, the value-added course was highly appreciated by the students.

Seal of the Institute

V. M. Patel Institute of Management Ganpat Vidhyanagar, Kherva-382711

**(Dr. Hiren J. Patel)**
I/C. Head
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

| Value Added courses opted by MBA sem-III student during 2019-20 | | | |
|---|---|---|---|
| Sr. No | Name of Student | Enrolment Name | Allocated Course |
| 1 | ANKITA PANDEY | 18044311001 | Decision Support System for Manager |
| 2 | BIHAREE FARAHADBIBI AJAMKHAN | 18044311002 | Decision Support System for Manager |
| 3 | CHAUDHARY PARASBHAI HIRABHAI | 18044311003 | Decision Support System for Manager |
| 4 | CHAUDHARY VINABEN ANADABHAI | 18044311004 | Decision Support System for Manager |
| 5 | CHAUHAN PRUTHVIRAJ MULABHAI | 18044311005 | Decision Support System for Manager |
| 6 | CHUNNU KUMAR | 18044311006 | Decision Support System for Manager |
| 7 | DARJI DEEP BHADRESHKUMAR | 18044311007 | Decision Support System for Manager |
| 8 | DAVE KAKSHA PRAKASHKUMAR | 18044311008 | Decision Support System for Manager |
| 9 | DOBARIYA DEVANGIBEN HIMMATBHAI | 18044311009 | Decision Support System for Manager |
| 10 | DODIYA SAKERAFATEMA KHADIMHUSEN | 18044311010 | Decision Support System for Manager |
| 11 | DODIYAR KINJALBEN DINUBHAI | 18044311011 | Decision Support System for Manager |
| 12 | GARVA JAYESHKUMAR HARILAL | 18044311012 | Decision Support System for Manager |
| 13 | GOSWAMI CHIRAGKUMAR ANILVAN | 18044311013 | Decision Support System for Manager |
| 14 | GOSWAMI MILANBHARATHI MANUBHARATHI | 18044311014 | Decision Support System for Manager |
| 15 | JAVED AHAMAD | 18044311015 | Decision Support System for Manager |
| 16 | JAY JANI | 18044311016 | Decision Support System for Manager |
| 17 | JOSHI NIRALI MANOJKUMAR | 18044311017 | Decision Support System for Manager |
| 18 | KHATWANI LAVESHKUMAR MULCHANDBHAI | 18044311018 | Decision Support System for Manager |
| 19 | KOLI ARUXI DINESH | 18044311020 | Decision Support System for Manager |
| 20 | MAKAWANA SANDIPKUMAR HARISHKUMAR | 18044311021 | Decision Support System for Manager |
| 21 | MALEK RASULKHAN MURIDKHAN | 18044311022 | Decision Support System for Manager |
| 22 | MANSURI MUSKANBEN MAHEBUBBHAI | 18044311023 | Decision Support System for Manager |
| 23 | MIRZA FAEZA IMTYAZ | 18044311024 | Decision Support System for Manager |



| | | | |
|---|---|---|---|
| 24 | MODH ROHAN SURESHKUMAR | 18044311025 | Decision Support System for Manager |
| 25 | NAYI SACHIN MADANLAL | 18044311026 | Decision Support System for Manager |
| 26 | NEHA PATEL | 18044311027 | Decision Support System for Manager |
| 27 | PAHELAJANI DISHA RUPESHKUMAR | 18044311028 | Decision Support System for Manager |
| 28 | PANCHAL HARDIK RAMANLAL | 18044311029 | Decision Support System for Manager |
| 29 | PANDAV KHUSHBOO PARSHOTAMBHAI | 18044311030 | Decision Support System for Manager |
| 30 | PANDYA JIGAR NARENDRAKUMAR | 18044311031 | Decision Support System for Manager |
| 31 | PARIKH PIYUSHKUMAR DHANJIBHAI | 18044311032 | Decision Support System for Manager |
| 32 | PARMAR DIPAKBHAI SHIVABHAI | 18044311033 | Decision Support System for Manager |
| 33 | PARMAR DIPTIBEN RAJESHKUMAR | 18044311034 | Decision Support System for Manager |
| 34 | PARMAR MIHIR VINODKUMAR | 18044311035 | Decision Support System for Manager |
| 35 | PARVANI NILESH BHARATKUMAR | 18044311036 | Decision Support System for Manager |
| 36 | PATEL ADITI VIJAYKUMAR | 18044311037 | Decision Support System for Manager |
| 37 | PATEL AMEE GOVINDBHAI | 18044311038 | Decision Support System for Manager |
| 38 | PATEL AXAYKUMAR BHARATBHAI | 18044311039 | Decision Support System for Manager |
| 39 | PATEL BHAVI BHARATBHAI | 18044311040 | Decision Support System for Manager |
| 40 | PATEL BRIJEN VINODBHAI | 18044311042 | Decision Support System for Manager |
| 41 | PATEL DHARA SANDEEPKUMAR | 18044311043 | Decision Support System for Manager |
| 42 | PATEL DHAVAL KIRITBHAI | 18044311044 | Decision Support System for Manager |
| 43 | PATEL DHRUVIBEN SUDHIRBHAI | 18044311045 | Decision Support System for Manager |
| 44 | PATEL DINALBEN SURESHKUMAR | 18044311046 | Decision Support System for Manager |
| 45 | PATEL KAMAXIBEN KANUBHAI | 18044311047 | Decision Support System for Manager |
| 46 | PATEL KRIMAL NARENDRAKUMAR | 18044311048 | Decision Support System for Manager |
| 47 | PATEL NIDHIBEN MADHAVLAL | 18044311049 | Decision Support System for Manager |
| 48 | PATEL NIL MUKESHKUMAR | 18044311050 | Decision Support System for Manager |



| | | | |
|---|---|---|---|
| 49 | PATEL POOJABEN KIRANBHAI | 18044311051 | Decision Support System for Manager |
| 50 | PATEL RAVI PRAVINBHAI | 18044311053 | Decision Support System for Manager |
| 51 | PATEL RIDDHI MUKESHCHANDRA | 18044311054 | Decision Support System for Manager |
| 52 | PATEL VASANT KANUBHAI | 18044311055 | Decision Support System for Manager |
| 53 | PATEL YAMINIBEN MAHESHBHAI | 18044311056 | Decision Support System for Manager |
| 54 | PATEL YASHKUMAR ASHOKBHAI | 18044311057 | Decision Support System for Manager |
| 55 | PATHAN FARHIN MANJAMKHAN | 18044311058 | Decision Support System for Manager |
| 56 | PRAJAPATI APOORVA MANSUKHBHAI | 18044311059 | Decision Support System for Manager |
| 57 | PRAJAPATI KAJAL PRAVINBHAI | 18044311060 | Decision Support System for Manager |
| 58 | PRAJAPATI KAUSHALKUMAR PRAVINKUMAR | 18044311061 | Decision Support System for Manager |
| 59 | PRAJAPATI MOSAMBEN KANTIBHAI | 18044311063 | Decision Support System for Manager |
| 60 | PRAJAPATI PRIYANKABEN JITENDRAKUMAR | 18044311064 | Decision Support System for Manager |
| 61 | PRIMABEN PATEL | 18044311065 | Decision Support System for Manager |
| 62 | PUROHIT BHARATIBEN GANAPATLAL | 18044311067 | Decision Support System for Manager |
| 63 | RAJPUT PALAK BALDEVJI | 18044311068 | Decision Support System for Manager |
| 64 | RANA ANJALI MUKESHKUMAR | 18044311069 | Decision Support System for Manager |
| 65 | RANA ARPITABEN HETALBEN | 18044311070 | Decision Support System for Manager |
| 66 | RAVAL SIDDHIBEN YOGESHBHAI | 18044311071 | Decision Support System for Manager |
| 67 | SAIJA KARAN SHAILESH | 18044311073 | Decision Support System for Manager |
| 68 | SHAH RAVI VIKRAM | 18044311074 | Decision Support System for Manager |
| 69 | SHAH SWETABEN VINODBHAI | 18044311075 | Decision Support System for Manager |
| 70 | SHEKH MOHMADASHIF HANIFBHAI | 18044311076 | Decision Support System for Manager |
| 71 | SHEKHAWAT NIRALI HANUMANSINGH | 18044311077 | Decision Support System for Manager |
| 72 | SHRIMALI CHIRAG MAHESHBHAI | 18044311078 | Decision Support System for Manager |
| 73 | SOLANKI KARANKUMAR NATVARLAL | 18044311080 | Decision Support System for Manager |



| | | | |
|---|---|---|---|
| 74 | SOLANKI PARTHVI HASMUKHBHAI | 18044311081 | Decision Support System for Manager |
| 75 | SONIA B BISHNOI | 18044311082 | Decision Support System for Manager |
| 76 | SUKHADIYA DHRUVIBEN ALPESHKUMAR | 18044311083 | Decision Support System for Manager |
| 77 | SUNDESHA RAHULKUMAR BHARATBHAI | 18044311084 | Decision Support System for Manager |
| 78 | SUTHAR ATISHKUMAR MANUBHAI | 18044311085 | Decision Support System for Manager |
| 79 | TEKCHANDANI RICHA AJITBHAI | 18044311086 | Decision Support System for Manager |

Seal of the Institute

V. M. Patel Institute of Management, Ganpat Vidhyanagar, Kherva-382711

(Dr. Hiren J. Patel)
I/C. Head
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

Ganpat University
॥ विद्यया समाजोत्कर्षः ॥

# *Certificate of Completion of Value Added Course 2019-20*

This is to certify that

## KARAN SOLANKI

the bonafide student of the
Ganpat University- V. M. Patel Institute of Management
has successfully completed the course on

**Decision Support System for Managers**

for the duration of 36 hours
during his\her Semester III as a part of his/her MBA program.

**DR. HIREN PATEL**
Head (I/C)
V. M. Patel Institute of Management
Ganpat University

# Ganpat University,

**FACULTY OF MANAGEMENT STUDIES**

**V. M. PATEL INSTITUTE OF MANAGEMENT**

## Centre for Entrepreneurship and Incubation Centre in support with Student Start up and Innovation Policy

**Report : Entrepreneurship 101- Accelerator Training Module I (Phase I)**
**Idea Validation workshop (1OS102)**

To give a much needed impetus to budding Entrepreneurs, Ganpat University undertook important initiative for strengthening the student start up ecosystem by launching an Entrepreneurship 101 for students registered under SSIP. Entrepreneurship 101 was organized by Ganpat University in support with Student Start Up and Innovation Policy, in pursuance to facilitate Entrepreneurship spirit among our students and to enhance and elevate the entrepreneurial Ecosystem, Ganpat University Centre for Entrepreneurship and Incubation Centre conducted Accelerator training Program Entrepreneurship 101. The First Module (Phase I) was over spanning a period of 30 hours.

**About The Programme**: Entrepreneurship 101 is a comprehensive training program for entrepreneurs who have ambition to start and transform their small business into thriving enterprises. It enables to develop and deliver tailored business training to equip entrepreneurs with the tools they need to become successful business owners. More specifically this program enables participants to understand various facets of starting and managing their business, Provides participants business development support to enable them to pitch their business to investors and other stakeholders. This unique model delivers the training in a modular format with emphasis on Intensive business training covering inputs in various aspects of business management including marketing, market surveys,

digital marketing, finance planning, business communication, risk management, wealth management and fund pitching, taxation, Legal foundations and so on.

## INAUGURAL CEREMONY OF ENTREPRENEURSHIP 101

**Prof. Saurabh Dave**, Dean of Incubation Centre and Student Startup Policy encouraged participants to think big - think different, innovate things differently and deal with the solutions. He motivated the participants by saying that the ecosystem of Innovation and Start-up created at GNU would always open to support their ideas and encourage them that their young minds should always be having persistence to utilize this ecosystem availed for nurturing the innovation by GNU.

**Prof Remi Mitra**, Center for Entrepreneurship, GNU welcomed all the participants registered in the SSIP and incubates and discussed with them needs to evolve system and mechanisms to convert the present demographic dividend into high quality entrepreneurial human resource. She highlighted on the very basic fact that Every enterprise that stands as a monolith today started somewhere as an entrepreneurial pursuit as a kernel of idea residing in the minds of one or two young budding students. She also explained the entire module 1 and elaborated on various Parts of first module viz. Part 1: Idea Identification and Assessment, Part 2: A Workshop on Digital Marketing, Part 3: A study on Consumer Behaviour .


SSIP
ENTREPRENEURSHIP 101
Accelerator Training Program
GANPAT UNIVERSITY-V.M PATEL INSTITUTE OF MANAGEMENT


GANPAT UNIVERSITY
SSIP
ENTREPRENEURSHI
Accelerator Training Program
ORGANISED BY
GANPAT UNIVERSITY INCUBATION CENTRE &
CENTRE FOR ENTREPRENEURSHIP
STUDENT STARTUP
GANPAT UNIVERSITY-V.M PATEL INSTITUTE OF MAN

## Part 1: IDEA IDENTIFICATION AND ASSESMENT

The First Part of Entrepreneurship 101 was conducted on September 8, 2019 on the topic Idea Identification and Assessment . This block consisted on various aspects of Idea generation, the first building block of beginning of any enterprise and included subtopics like Sources of new ideas , Techniques for generating Ideas, Essentials of Entrepreneurship, How an Idea can change our life?- Idea to Opportunity, Steps involved in tapping the opportunity and finally Opportunity to Business Conversion. The Resource person for this session was Mr P Pradeep Kumar CEO and Founder of Exeo Consulting Ltd. The mode of delivery of session were lecture, discussion, case study, simulation techniques where more than 30 students participated from various educational background including Computer Engineering, IOT, Biomedical engineering, Management participated and interacted during the session.






## Part 2: A WORKSHOP ON DIGITAL MARKETING.

The Second Part of Entrepreneurship 101 was conducted on September 14, 2019 where in a workshop on digital marketing was done for more than 30 students from various educational background including Computer Engineering, IOT, Biomedical engineering, Management participated. A one day hands on training programme on Digital marketing was designed to make students more effective in developing the digital marketing strategies for their own start up and enterprise Mr Saurabh Pandey founder of Brandveda provided his technical expertise to the students.







## PART 3: A STUDY ON CONSUMER BEHAVIOUR

The third Part of Entrepreneurship 101 was conducted on September 21, 2019 which introduced the students to the influence that consumer behaviour has on marketing activities and included details on Introduction market strategy and consumer behaviour, Perception and consumer behaviour, Concepts on Attitude and consumer behaviour, Market Segmentation and Positioning, Analysis of Market environment, and essentially Building your Marketing Plan. This session was taken by Mr A.B Raju Founder CEO Biztrans and more than 30 students participated from various educational background including Computer Engineering, IOT, Biomedical engineering, Management participated and interacted during the session.





| GANPAT UNIVERSITY | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CENTRE FOR ENTREPRENEURSHIP | | | | | | | | | |
| Programme | Entrepreneurship 101 | | | | | Branch/Spec. | - | | |
| Semester | Module-I | | | | | Version | - | | |
| Effective from *Academic* Year | - | | | | | Effective for the batch Admitted in | - | | |
| Subject code | 1OS102 | | Subject Name | | | Idea Validation Workshop | | | |
| Teaching scheme | | | | | | Examination scheme (Marks) | | | |
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | - | - | - | - | - | | - | - | - |
| Hours | - | - | - | - | - | Practical | - | - | - |
| Pre-requisites: | | | | | | | | | |
| | | | | | | | | | |
| Learning Outcome: | | | | | | | | | |

- Enabling participants to understand various facets of starting and managing their business
- Providing participants with business development support to enable them to pitch their business to investors and other stakeholders.
- This unique model delivers the training in a modular format with emphasis on Intensive business training

Theory syllabus

| Unit | Content | Hr |
|---|---|---|
| 1 | **Idea Identification and Assessment:** Sources of new ideas, Techniques for generating Ideas, Essentials of Entrepreneurship, How an Idea can change our life?, Idea to Opportunity, Steps involved in tapping the opportunity, Opportunity to Business | 10 |
| 2 | **A study on consumer behavior:** Introduction market strategy and consumer behavior, Perception and consumer behavior, Attitude and consumer behavior, Market Segmentation and Positioning, Analysis of Market environment, Building your Marketing Plan | 10 |
| 3 | **Workshop On Digital Marketing:** Digital Marketing Top strategies, Competitive Analysis using top tools, SEO Introduction, PPC Introduction, Social Media Introduction, Keyword Planner, Spying on Competitors Activity, Search Ads & Display Ads, How to Run Search Ads, Ad words Structure, Introduction to Quality Score and Ad rank, Targeting Methods - Search & display, Live Campaign - Search & display Campaign, Learning from Our Live Campaigns, Social media introduction, Lead gen Strategies, Funnel Introduction, Content Cycle, TOFU , MOFU, BOFU, Content Research, Content Calendar, Practical Tools, Content Tools, FB Ads, Spying on FB Ads/Social media, Practical & Assignments | 10 |

**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**

**V. M. PATEL INSTITUTE OF MANAGEMENT**

# "Entrepreneurship 101: Accelerator Training
# "Idea Identification and Assessment"
# Date: Sep 8, 2019, Saturday
# Venue: Seminar Hall, City Office & Information Centre
# Ganpat University, Ahmedabad
# Time Table

| Sr. No | Topics | Time |
|---|---|---|
| 1 | Registration/ Refreshment & Kit Distribution | 9:00 AM to 9:30 AM |
| 2 | Inauguration & Welcome to Guest | 9:30 AM to 9:40 AM |
| 3 | Introduction theories and process of Entrepreneurship | 9:40 AM- 11:00 AM |
| 4 | Sources of new Ideas and techniques for generating ideas | 11:00 AM- 12:00 PM |
| 5 | A Good Idea is not Enough | 12:00 PM-01:00 PM |
| **LUNCH BREAK (01:00 PM-01:30PM)** | | |
| 6 | Idea to Opportunity | 01:30 PM-03:00 PM |
| **7** | Steps involved in assessing Business Potential of Idea | 03:00 PM- 04:00PM |
| | | |
| 8 | Steps involved in tapping the opportunity | 04:00 PM-05:00 PM |
| 9 | Hands on training given to students from their home | 3 Hours |

# "Entreprenuership 101"
# Time Table for 14th September,2019 workshop on
# "A Digital Marketing"

| Sr.no | Sections | Topics | Time |
|---|---|---|---|
| Registration/Refreshment | | | 09:00 AM- 09:30 AM |
| 1 | Part A | Digital Marketing Top strategies,<br>Competitive Analysis using top tools<br>SEO Introduction<br>PPC Introduction | 09:30 AM- 10:30 AM |
| | | Keyword Planner<br>Spying on Competitors Activity<br>Spying on Competitors Activity | 10:30 AM-11:30 AM |
| | Part B | Search ADs & Display Ads<br>How to Run Search Ads<br>Adwords Structure<br>ntroduction to Quality | 11:30 AM- 12:30 PM |
| **LUNCH BREAK (12:30 PM-01:30PM)** | | | |
| 3 | Continue<br>PART B | IScore and Ad rank,<br>Targeting Methods,<br>Live Campaign - Search & display<br>Campaign ,<br>Learning from Our Live Campaigns | 01:00 PM-02:30 PM |
| | PART C | Social media introduction,<br>Lead gen Strategies,<br>Funnel Introduction,<br>Content Cycle | 02:30 PM-03:30 PM |
| 4 | | TOFU<br>MOFU<br>BOFU<br>Content Research<br>Content Calendar<br>Practical Tools<br>Content Tools<br>FB Ads | 03:30 PM- 05:00 PM |

| | | | |
|---|---|---|---|
| | | Spying on FB Ads/Social media<br>Practical & Assignment | |
| 5 | | Homework of Hands on training to students from their home | 3 hours |

## Entrepreneurship 101 Module 1 Part III
## Time Table for 21st September,2019
## A study on Consumer Behaviour

| Sr.no | Topics | Time |
|---|---|---|
| Registration/Refreshment | | 09:00 AM- 09:30 AM |
| 1 | Introduction market strategy and consumer behaviour | 09:30 AM- 10:30 AM |
| 2 | Perception and consumer behaviour | 10:30 AM-11:30 AM |
| **3** | Attitude and consumer behaviour | 11:30 AM- 12:30 PM |
| **LUNCH BREAK (12:30 PM-01:00PM)** | | |
| 4 | Market Segmentation and Positioning | 01:00 PM-02:00 PM |
| 5 | Analysis of Market environment | 02:00 PM-03:30 PM |
| 6 | Building your Marketing Plan | 03:30 PM- 05:00 PM |
| 7 | Home work to students on case studies | 3 hours |

**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**
**V. M. PATEL INSTITUTE OF MANAGEMENT**

Academic Year: 2019-20

List of student Participated

| Sr.No. | Name of the student |
|---|---|
| 1 | Kishan chavda |
| 2 | SANILKUMAR MODI |
| 3 | Darshan Modi |
| 4 | Nikhil Singh |
| 5 | Aman Rathore |
| 6 | Kailash vaghela |
| 7 | Hardik Panchal |
| 8 | Jyoti chavda |
| 9 | KALPANA SINGH |
| 10 | Desai Aarti ishwarbhai |
| 11 | Tanmay punj |
| 12 | Jatin makwana |
| 13 | Akash sheth |
| 14 | Patel Rutvik Dinesh Bhai |
| 15 | PATEL ARCHITKUMAR MAHESHBHAI |
| 16 | Goswami Aditya Prakashgiri |
| 17 | KOLI JAGRUTI GOPAL |
| 18 | Yuvraj singh |
| 19 | AMRUTIYA RAJ JIGNESHKUMAR |
| 20 | KOLI ARUXI DINESH |
| 21 | Naimisha rajpura |
| 22 | Prajapati Shweta Amathabhai |
| 23 | Moin Mamu |

**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**
**V. M. PATEL INSTITUTE OF MANAGEMENT**
Academic Year: 2019-20

| Sr.No. | Name of the student |
|---|---|
| 23 | MODH MILANKUMAR RASIKBHAI |
| 24 | PUJARA RADHIKA RAJENDRAKUMAR |
| 25 | Divya bhurani |
| 26 | Barot Jigar |
| 27 | THAKKAR YATRIBEN GIRISHKUMAR |
| 28 | Anshu dhelariya |

Seal of the Institute

V.M. Patel Institute of Management Ganpat Vidhyanagar, Kherva-382711

**(Dr. Hiren J. Patel)**
**I/C. Head**
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

Ganpat University
॥ विद्यया समाजोत्कर्षः ॥

SSIP

# *Certificate*

*This is to certify that*

*Mr./Ms* DIVYA BHURANI

*has participated in Phase* I *at Ganpat University*

*Accelerator Training Program*

## *ENTREPRENEURSHIP 101*

*Organized by Ganpat University Centre for Entrepreneurship*
*and Ganpat University Incubation Centre*
*Supported by Student Startup and Innovation Policy (SSIP), Goverment of Gujarat.*

| | | | |
|---|---|---|---|
| Remi Mitra | | | |
| **Prof. Remi Mitra**<br>*Chairperson*<br>*Center for Entrepreneurship* | **Prof. Saurabh Dave**<br>*Dean-Student Startup*<br>*& Incubation Centre* | **Dr. Amit Patel**<br>*Pro-Vice Chancellor &*<br>*Executive Registrar* | **Dr. Mahendra Sharma**<br>*Pro-Chancellor &*<br>*Director General* |

**Ganpat University.**

**FACULTY OF MANAGEMENT STUDIES**

**V. M. PATEL INSTITUTE OF MANAGEMENT**

**Centre for Entrepreneurship and Incubation Centre in support with Student Start up and Innovation Policy**

**Report : Entrepreneurship 101- Module-II (Phase -II)**

**Financial Accounting and Analysis and Perspective of Business Plan (1OS103)**

To give a much needed impetus to budding Entrepreneurs, Ganpat University undertook important initiative for strengthening the student start up ecosystem by launching an Entrepreneurship 101 for students registered under SSIP. Entrepreneurship 101 was organized by Ganpat University in support with Student Start Up and Innovation Policy, in pursuance to facilitate Entrepreneurship spirit among our students and to enhance and elevate the entrepreneurial Ecosystem, Ganpat University Centre for Entrepreneurship and Incubation Centre conducted Accelerator training Program Entrepreneurship 101. The Second Module was over spanning a period of 30 hours.

**About The Programme**: Given the riskiness of a new venture, the acquisition of capital funding is particularly challenging, and many entrepreneurs deal with it via bootstrapping: financing a business using methods such as using their own money, providing sweat equity to reduce labor costs, minimizing inventory, and factoring receivables. While some entrepreneurs are lone players struggling to get small businesses off the ground on a shoestring, others take on partners armed with greater access to capital and other resources. In these situations, new firms may acquire financing from venture capitalists, angel investors, hedge funds, crowdsourcing, or through more traditional sources such as bank loans. Entrepreneurship 101_Module-II (Phase II) on Finance and Accounting is a comprehensive training program to start and run a business for budding entreprenuers, who are often need to understand business terms that may not be well defined in a standard dictionary. Our glossary of business terms provides definitions for common terminology and acronyms in business plans, accounting, finance, and other aspects of small business

# INAUGURAL CEREMONY OF ENTREPRENEURSHIP 101

**Prof Remi Mitra**, Center for Entrepreneurship, GNUI welcomed the guest Dr.Saurabh Dave, Expert lecturer and all the participants registered in the SSIP and incubates and suggested that Sometimes entrepreneurs think they can leave the finance and the numbers to the bookkeepers and accountant,which is not a good Idea . An entreprenuer certainly want to have a bookkeeper. Which can be use them to collect and analyze the financial data, to understand the underlying financial flows of a business. That's key to your understanding of how to manage a business.
And sometimes finance is not about money. This Modele-II includes Part 1:Insights into Business and Accounting, Part 2:Key role of Finance & Taxation Policies for Emerging Startups, Part 3:Introduction to Business Planning and learn how to build an effective business plan for your venture.







**Dr. Saurabh Dave,** Dean-Incubation Centre & Student Start-up Policy, GUNI welcomed all the participants and given the speech on Start-up and different opportunities for Startup. He motivated the student by giving the example of different startups which are Incubated in incubation centre and also suggested the students about the importance of finance and accounts in startups.

## PART 1: INSIGHTS INTO BUSINESS AND ACCOUNTING

The First Part of Entrepreneurship 101 was conducted on February 01, 2020 on the topic Insights into Business and Accounting. This block consisted on various aspects of basics Finance and Accounting terms necessary for budding entrepreneurs included subtopics like Nature & Purpose of Business,Forms of Business Organisation, Basic Accounting Terms, Principles of Accounting.The Resource person for this session was Mr Hrashesh Jasvani ,Chartered Account and the Founder of Think Tank Edventures. The mode of delivery of session were lecture, discussion, case study, simulation techniques where more than 70 students participated from various educational background including Engineering, Management and Pharmacy participated and interacted during the session.

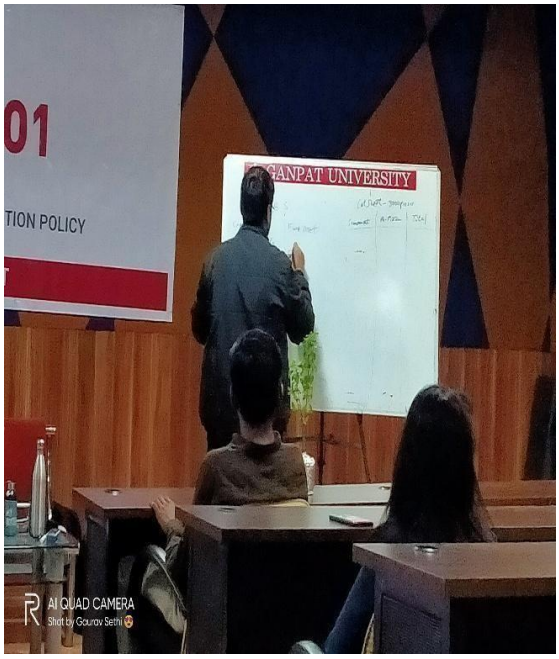





## PART 2: KEY ROLE OF FINANCE & TAXATION POLICIES FOR EMERGING STARTUPS.

The Second Part of Entrepreneurship 101- Module-II was conducted on February 02nd, 2020 where in a seminar: Key role of Finance & Taxation Policies for Emerging Startups was done for more than 70 students from various educational background including Engineering,Management, Pharmacy participated. A one day hands on training programme was designed to make students more effective in Funding Opportunities for Start Ups - Seed Funding - Venture Capital Funding - Loans from Financial Institutions - Start Up Assistance under Government Schemes as well as in Sources of Finance Raising of Funds - Debt v/s Equity Capital Budgeting & Working Capital Mr Harshesh Jasvani and the Mr.Anand Jasvani founder of Think Tank Edventures provided their expertise to the students.



## PART 3: INTODUCTION TO BUSINESS PLANNING AND LEARN HOW TO BUILD AN EFFECTIVE BUSINESS PLAN FOR YOUR VENTURE

The third Part of Entrepreneurship 101_Module-II was conducted on February 08, 2020 which introduced the students to the details on Introduction to Business planning and to build an effective business plan this Part focuses on the subtopics like Entreprenuerial Oppurtunities and Business Failure,Defining the Business Plan,Authoring the Business Plan,Sales Forcasting,Managing the Sales Pipeline,Pricing . This session was taken by CA Ms.Anju Pasari more than 70 students participated from various educational background including Engineering, Pharmacy, Management participated and interacted during the session. Ms.Pasari have given the task to the students and asked them to create a business plan on Healthy food products.Students in a group made the business plan and presented their idea.






| GANPAT UNIVERSITY | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CENTRE FOR ENTREPRENEURSHIP | | | | | | | | | |
| Programme | Entrepreneurship 101 | | | | | Branch/Spec. | - | | |
| Semester | Module-II | | | | | Version | - | | |
| Effective from *Academic* Year | - | | | | | Effective for the batch Admitted in | - | | |
| Subject code | 1OS103 | | Subject Name | | | Financial Accounting and Analysis and Perspective of Business Plan | | | |
| Teaching scheme | | | | | | Examination scheme (Marks) | | | |
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | - | - | - | - | - | Theory | - | - | - |
| Hours | - | - | - | - | - | Practical | - | - | - |
| Pre-requisites: | | | | | | | | | |
| | | | | | | | | | |
| Learning Outcome: | | | | | | | | | |
| • Covers the Financial Accounting and Analysis<br>• Helps to develop Business Plan | | | | | | | | | |
| Theory syllabus | | | | | | | | | |

| Unit | Content | Hr |
|---|---|---|
| 1 | **Insights from Financial Statements:** Principles of Accounting, Meaning and Objectives of Financial Statement, Balance Sheet- Concept & Understanding, Profit & Loss Account/Income Statement, Financial Statement Analysis, Types of Costs and Cost Sheet Analysis, Break even analysis | 10 |
| 2 | **Financing Venture with Perspectives of Insurance & Taxation Policy:** Functions of Finance & Importance of Finance, Raising Of Funds: Internal and external, Sources of Finance to Entrepreneurs, Capital Budgeting, Perspectives of Seed Funding, Venture Capital Funding, Funding from banks, Lease Financing, Funding Opportunities for Start Ups in India, Concept of Insurance & Types of Insurance: Fire, Burglary, Marine, Taxation from Perspective of SMEs | 10 |
| 3 | **Introduction to Business Planning and Learn how to build an effective Business Plan for your venture:** Entrepreneurial Opportunities and Business Plan, Business Failures, Introduction to Business Plan: Perspectives to be considered in Business plan preparation, Defining the Business Plan, Authoring the Business Plan, Sales forecasting, Managing the sales pipeline, Developing Marketing Mix( Brief in form of Activity), Pricing, Action plan of making Financial Statement Analysis & Sources of Finance (Theory already covered in prior workshop), Final thoughts on business plan | 10 |

**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**

**V. M. PATEL INSTITUTE OF MANAGEMENT**

**Entrepreneurship 101: Accelerator Training-Module-II**
**"Insights into Business & Accounting"**
**Date: Feb 01, 2020,Saturday**
**Venue: MBA Auditorium**
**Ganpat University, Mehsana**
**Time Table**

| Sr. No | Topics | Time |
|---|---|---|
| 1 | Registration/ Refreshment & Kit Distribution | 9:00 AM to 9:30 AM |
| 2 | Inauguration & Welcome to Guest | 9:30 AM to 9:40 AM |
| 3 | Insights into Business & Accounting-Nature & Purpose of Business,Forms of Business Organisation,Basic Accounting Terms,Principles of Accounting | 9:40 AM- 11:00 AM |
| 4 | Capital Expenditure v/s Revenue Expense,Accounting Process,Manual v/s Computerised Accounting , | 11:00 AM- 12:30 PM |
| 6 | **LUNCH BREAK FACILITY MADE BY STUDENT ITSELF (12:30PM-01:00PM)** | |
| **7** | Financial Statements - Balance Sheet - Profit and Loss Account - Cash Flow Statement | 01:00 PM- 03:00 PM |
| 8 | Types of Accounting Types of Cost and Cost Sheet Analysis Pricing Decision & Strategy | 03:00 PM-05:00 PM |
| 9 | Home work on hands on training to students | 3 hours |

**Entrepreneurship 101: Accelerator Training-Module-II**

**"Key Role of Finance & Taxation Policies for Emerging Start Ups "**

**Date:Feb 02, 2020,Sunday**

**Venue: MBA Auditorium**

**Ganpat University, Mehsana**

**Time Table**

| Sr. No | Topics | Time |
|---|---|---|
| 1 | Sources of Finance Raising of Funds - Debt v/s Equity Capital Budgeting & Working Capital | 9:00 AM to 10:00AM |
| 2 | Financial Statement Analysis Breakeven Analysis | 10:00 AM to 11:00 AM |
| 3 | Funding Opportunities for Start Ups - Seed Funding - Venture Capital Funding - Loans from Financial Institutions - Start Up Assistance under Government Schemes | 11:00 AM- 12:30 AM |
| 4 | **LUNCH BREAK FACILITY MADE BY STUDENT ITSELF (12:30PM-01:00PM)** | |
| **5** | Direct Tax V/s Indirect Taxes - Income Tax - Goods & Service Tax | 01:00 PM- 03:00 PM |
| 6 | Tax Benefits to Start Ups | 03:00 PM-05:00 PM |
| 7 | Home work on hands on training to students | 2.5 hours |

**Entrepreneurship 101: Accelerator Training-Module-II**

**"Introduction to Business Planing and learn how to build an effective business plan for your venture "**

**Date:Feb 08, 2020,Saturday**

**Venue:BBA Seminar Hall,Ganpat University, Mehsana**

**Time Table**

| Sr. No | Topics | Time |
|---|---|---|
| 1 | What a Business?, Advantages & Disadvantages to start a Business, Barriers to starting a business | 9:00 AM to 10:00AM |
| 2 | What is a business plan? , Benefits of Business plan | 10:00 AM to 11:00 AM |
| 3 | A Standard Business Plan Outline,What is a Sales Pipeline: REVENUE GROWTH | 11:00 AM- 01:00 PM |
| 4 | **LUNCH BREAK FACILITY MADE BY STUDENT ITSELF (01:00PM-01:30PM)** | |
| **5** | MARKETING MIX: | 01:30 PM- 02:30 PM |
| 6 | PERSONNEL PLANS FOR A BUSINESS,STANDARD BUSINESS RATIOS,BREAK EVEN ANALYSIS: | 02:30 PM-03:30 PM |
| 7 | Business Paln Review | 03:30 PM- 05:00 PM |
| 8 | Home work on hands on training to students | 2.5 Hours |

**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**
**V. M. PATEL INSTITUTE OF MANAGEMENT**
Academic Year: 2019-20

List of student Participated from VMPIM

| Sr. No. | Name of the student |
|---|---|
| 1 | Raval manali govindbhai |
| 2 | Chavda jyoti |
| 3 | Punj Tanmay Nareshkumar |
| 4 | Modh milan |
| 5 | Parth Panchal |
| 6 | Priyanka kamleshbhai Parmar |
| 7 | Modi ranchhod pramod bhai |
| 8 | Anshu Dhelariya |
| 9 | Desai Aarti |
| 10 | Patel Meetkumar |
| 11 | Mistri Gunjan |
| 12 | Patel Purti |
| 13 | Dhara Kalariya |
| 14 | Darshan Modi |
| 15 | Barot Jigar |

Seal of the Institute

V. M. Patel Institute of Management Ganpat Vidyanagar-382711

**(Dr. Hiren J. Patel)**
**I/C. Head**
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

Ganpat University
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SSIP

# CERTIFICATE

**This is to certify that**

## *Mr. Parth Panchal*

***has participated in the Phase-II at Ganpat University***

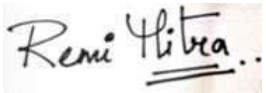
***Acceleration Training Program***

## *ENTREPRENEURSHIP 101*

***Organized by Ganpat University Centre for Entrepreneurship***

***and Ganpat University Incubation Centre***

***Supported by Student Startup and Innovation Policy (SSIP), Government of Gujarat***



*Prof.Remi Mitra*
*Chairerson*
*Centre for Entrepreneurship*



*Dr.Saurabh Dave*
*Dean Student-Startup*
*& Incubation Centre*



*Dr.Amit Patel*
*Pro Vice-Chancellor &*
*Executive Registrar*



*Dr.Mahendra Sharma*
*Pro-Chancellor &*
*Director General*

# Student's Notice

Date: 20/08/2018

It is hereby inform that Registration for Value added **courses** offered by the institute for the year academic year 2018-19 is initiated.

Application are invited for the below mentioned value added course offered by VMPIM

| Course | Duration | Fees |
|---|---|---|
| Entrepreneurship Development and Start-up (CEU02EDS) | 30 hours | Nil |
| Fundamental of Digital Media Marketing (CEU02DMM) | 30 hours | Nil |

The student of MBA interested for the course required report the coordinator (Dr. Dipesh Dasani) of value added course up to 24th August 2018.

Seal of the Institute

V.M. Patel Institute of Management Ganpat Vidhyanagar, Kherva-382711

(Dr. Hiren J. Patel)
I/C. Head
V.M.Patel Institute of Management
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Dist.Mehsana (North Gujarat)

## Entrepreneurship Development and Start-up (CEU02EDS)

**Course Introduction:** The course titled Entrepreneurship Development and Start-up, is designed to give an in-depth understanding on various aspects of innovation, creativity, evolving business models, incubation and entrepreneurship. The course also includes sessions on blue ocean strategy and technology incubation which are proving as game changer in today's competitive scenario. The course is a blend of theory and practice therefore this course does not require any prerequisite and will be useful to understand innovation and its applications in different spheres of development and growth.

**COURSE PLAN**

| SL.NO | Module Name |
|---|---|
| 1 | Analyzing the Current Business Scenario, Innovation and Creativity- An Introduction, Innovation in Current Environment, Types of Innovation , School of Innovation |
| 2 | Challenges of Innovation, Steps of Innovation Management, Idea Management System, Divergent Vs Convergent Thinking, Levers of Idea Management |
| 3 | Experimentation in Innovation Management, Idea Championship, Participation for Innovation ,Co-creation for Innovation , Proto typing to Incubation. |
| 4 | What is a Business Model ,Who is and Entrepreneur ,Social Entrepreneurship Blue Ocean Strategy-I ,Blue Ocean Strategy-II |
| 5 | Marketing of Innovation, Technology Innovation Process, Technological Innovation Management Planning, Technological Innovation Management Strategies, Technology Forecasting |
| 6 | Sustainability Innovation and Entrepreneurship, Types of Sustainable Entrepreneurship, Conditions for Sustainabiling Innovation, SME's strategic involvement in sustainable development, Exploration of business models for material efficiency services. |
| 7 | Business Models and value proposition, Business Model Failure: Reasons and Remedies, Incubators : Business Vs Technology, Managing Investor for Innovation , Future markets and Innovation needs for India |

## Fundamental of Digital Media Marketing (CEU02DMM)

### COURSE PLAN

| SL.NO | Module Name |
|---|---|
| 1 | Principles of Digital Marketing : Inbound and Outbound Strategies , Digital Media Examples, Traditional vs. Digital Marketing. Principles of DMI's 3i Methodology, Digital Channels |
| 2 | Digital Research, Audience Research, Social Listening Platforms, Social Listening and Audience Research Tools |
| 3 | Connecting with the Customer, The Buyer's Journey , Five Marketing Functions, 360 Digital Marketing Campaign, Marketing Functions and Buyer Journey Stages, Digital Marketing Concepts, Principles, Procedures and Tools |
| 4 | Developing Objectives: SMART Objectives |
| 5 | Cultural Research, Competitive Research Platforms and Tools , Industry Trend Research, Digital Research |
| 6 | Content Marketing Concepts and Strategy, Benefits of Content Marketing, Qualities of Effective Content, Types of Content, Content Alignment with the Buyer's Journey, Community Management, Content Marketing Strategy |
| 7 | Creating and Curating Content, Content Stakeholders, Content Types and Formats, Content Tools, Content Creation and Curation, Content Creation Best Practice, Brand Components, Content Personalization |
| 8 | Publishing and Distributing Content, Content Platforms, Benefits and Challenges of Content Seeding, Content Scheduling Techniques and Tools, Content Promotion Strategies |

## GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES

## V. M. PATEL INSTITUTE OF MANAGEMENT

### Time Table

| Date | Time | Subject |
|---|---|---|
| 31/08/2018 | 10:00 am to 12:00 pm<br>1:00 pm to 4:00 pm | Entrepreneurship Development and Start-up/ Fundamental of Digital Media Marketing |
| 08/09/2018 | 10:00 am to 12:00 pm<br>1:00 pm to 4:00 pm | Entrepreneurship Development and Start-up/ Fundamental of Digital Media Marketing |
| 22/09/2018 | 10:00 am to 12:00 pm<br>1:00 pm to 4:00 pm | Entrepreneurship Development and Start-up/ Fundamental of Digital Media Marketing |
| 29/09/2018 | 10:00 am to 12:00 pm<br>1:00 pm to 4:00 pm | Entrepreneurship Development and Start-up/ Fundamental of Digital Media Marketing |
| 13/10/2018 | 10:00 am to 12:00 pm<br>1:00 pm to 4:00 pm | Entrepreneurship Development and Start-up/ Fundamental of Digital Media Marketing |
| 27/10/2018 | 10:00 am to 12:00 pm<br>1:00 pm to 4:00 pm | Entrepreneurship Development and Start-up/ Fundamental of Digital Media Marketing |

**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**

**V. M. PATEL INSTITUTE OF MANAGEMENT**

Date: 29th October, 2018

**Value added course summery report**

Faculty of Management studies has organized value added courses on "Entrepreneurship Development and Start-up" and "Fundamental of Digital Media Marketing" for the students of V.M. Patel Institute of Management, Faculty of Management studies, Ganpat University on during academic year 2018-19.

The details about the number of students who have attended enrolled and completed successfully are as follows.

| Year | Semester | Value added Course | No of Student Participated |
|---|---|---|---|
| 2018-19 | Sem III | Entrepreneurship Development and Start-up (CEU02EDS) | 31 |
| 2018-19 | Sem III | Fundamental of Digital Media Marketing (CEU02DMM) | 19 |

The value added course was informative and interesting for the students to build their career. Overall, the value added courses were highly appreciated by the students.

Seal of the Institute

V. M. Patel Institute of Management Ganpat Vidhyanagar, Kherva-382711

(Dr. Hiren J. Patel)
I/C. Head
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

## Value added courses opted by MBA sem-III student during 2018-19

| Sr. No. | Name of Student | Enrollment Number | Allocated Course |
|---|---|---|---|
| 1 | Agrawal ayushiben dilipkumar | 17044311001 | Fundamentals of Digital Media Marketing - N/A |
| 2 | Haresh Ahir | 17044311002 | Entrepreneurship Development and Start-up - N/A |
| 3 | BAROT RAVIKUMAR KANUBHAI | 17044311003 | Entrepreneurship Development and Start-up - N/A |
| 4 | Berva Ajaykumar Pratapsinh | 17044311004 | Fundamentals of Digital Media Marketing - N/A |
| 5 | brahmbhatt arpit kumar kamleshkumar | 17044311005 | Entrepreneurship Development and Start-up - N/A |
| 6 | Chaudhary Jayesh | 17044311006 | Entrepreneurship Development and Start-up - N/A |
| 7 | CHAUHAN RAJESH DILIPBHAI | 17044311007 | Entrepreneurship Development and Start-up - N/A |
| 8 | DADUJI AHMAD IBRAHIM | 17044311008 | Entrepreneurship Development and Start-up - N/A |
| 9 | DANTROLIYA AMIRSOHEL RASHIDBHAI | 17044311009 | Entrepreneurship Development and Start-up - N/A |
| 10 | Desai nishaben valjibhai | 17044311010 | Entrepreneurship Development and Start-up - N/A |
| 11 | Divya kumari | 17044311011 | Entrepreneurship Development and Start-up - N/A |
| 12 | Harwinder kaur | 17044311012 | Entrepreneurship Development and Start-up - N/A |
| 13 | Heena Ben patel | 17044311013 | Entrepreneurship Development and Start-up - N/A |
| 14 | jagrala hamja irfanbhai | 17044311014 | Fundamentals of Digital Media Marketing - N/A |
| 15 | Jenish Patel | 17044311015 | Fundamentals of Digital Media Marketing - N/A |
| 16 | JOSHI DVARKESH JAGDISHKUMAR | 17044311016 | Entrepreneurship Development and Start-up - N/A |
| 17 | Ahesanali kadival | 17044311017 | Fundamentals of Digital Media Marketing - N/A |
| 18 | Khan Sohelkhan Aslamkhan | 17044311019 | Fundamentals of Digital Media Marketing - N/A |
| 19 | Kinnary kotwal | 17044311020 | Fundamentals of Digital Media Marketing - N/A |
| 20 | Makwana kishan B | 17044311021 | Entrepreneurship Development and Start-up - N/A |
| 21 | Nazmin Mukhi | 17044311022 | Fundamentals of Digital Media Marketing - N/A |
| 22 | Milan Nayak | 17044311023 | Entrepreneurship Development and Start-up - N/A |
| 23 | himanshu pandya | 17044311025 | Fundamentals of Digital Media Marketing - N/A |
| 24 | Patel Ami Rasikbhai | 17044311028 | Entrepreneurship Development and Start-up - N/A |
| 25 | Patel amiben navinbhai | 17044311029 | Fundamentals of Digital Media Marketing - N/A |
| 26 | Patel Ankit | 17044311030 | Entrepreneurship Development and Start-up - N/A |
| 27 | Patel Hardikkumar Pravinbhai | 17044311032 | Entrepreneurship Development and Start-up - N/A |
| 28 | Harsh hareshbhai patel | 17044311033 | Entrepreneurship Development and Start-up - N/A |
| 29 | Patel Hiteshkumar Visabhai | 17044311034 | Fundamentals of Digital Media Marketing - N/A |
| 30 | Nisha patel | 17044311038 | Fundamentals of Digital Media Marketing - N/A |
| 31 | Patel parth visnubhai | 17044311039 | Entrepreneurship Development and Start-up - N/A |
| 32 | Tejas Patel | 17044311040 | Entrepreneurship Development and Start-up - N/A |
| 33 | Patel trupal pankajbhai | 17044311041 | Fundamentals of Digital Media Marketing - N/A |
| 34 | Pathan Asifkhan Mustufakha | 17044311042 | Entrepreneurship Development and Start-up - N/A |
| 35 | Prajapati hetal mukeshbhai | 17044311043 | Entrepreneurship Development and Start-up - N/A |
| 36 | Prajapati umangbhai bhagawanbhai | 17044311044 | Fundamentals of Digital Media Marketing - N/A |
| 37 | Rakesh Rajpurohit | 17044311045 | Fundamentals of Digital Media Marketing - N/A |

| | | | |
|---|---|---|---|
| 38 | Rathod Nirali Rupeshbhai | 17044311046 | Fundamentals of Digital Media Marketing - N/A |
| 39 | Shrushti RajeshKumar Patel | 17044311047 | Fundamentals of Digital Media Marketing - N/A |
| 40 | Singh sunny satish | 17044311048 | Entrepreneurship Development and Start-up - N/A |
| 41 | Solanki Nehalben Jashubhai | 17044311049 | Entrepreneurship Development and Start-up - N/A |
| 42 | Solanki Twinklebahen himatlal | 17044311050 | Entrepreneurship Development and Start-up - N/A |
| 43 | Soni Hardik Rajendrakumar | 17044311051 | Entrepreneurship Development and Start-up - N/A |
| 44 | Soni parth dineshkumar | 17044311052 | Entrepreneurship Development and Start-up - N/A |
| 45 | Rimpal soni | 17044311053 | Fundamentals of Digital Media Marketing - N/A |
| 46 | Sukhdeep singh | 17044311054 | Entrepreneurship Development and Start-up - N/A |
| 47 | Suthar rinkalben ramanlal | 17044311055 | Entrepreneurship Development and Start-up - N/A |
| 48 | Tijil Prakash | 17044311056 | Entrepreneurship Development and Start-up - N/A |
| 49 | Vijapura moiuddin | 17044311057 | Entrepreneurship Development and Start-up - N/A |
| 50 | Patel nileshkumar Rasikbhai | 17044411036 | Fundamentals of Digital Media Marketing - N/A |

V. M. Patel Institute of Management Ganpat Vidyanagar, Kherva-382711

(Dr. Hiren J. Patel)
I/C. Head
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Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

GANPAT UNIVERSITY
॥ विद्यया समाजोत्कर्षः ॥

# *Certificate of Completion of Value Added Course 2018-19*

This is to certify that

## BAROT RAVIKUMAR KANUBHAI

the bona fide student of the
Ganpat University- V. M. Patel Institute of Management
has successfully completed the course on

## Entrepreneurship Development & Start-up

for the duration of 30 hours
during his/her Semester III as a part of his /her MBA program.

DR. HIR EN PATE L
Head(1/C)
V. M. Patel lnstitute of Management
Ganpat University

GANPAT UNIVERSITY
॥ विद्यया समाजोत्कर्षः ॥

# Certificate of Completion of Value Added Course 2018-19

This is to certify that

## AJAY BERVA

the bona fide student of the Ganpat University- V. M. Patel Institute of Management has successfully completed the course on

## Fundamentals of Digital Media Marketing

for the duration of 30 hours
during his/her Semester III as a part of his /her MBA program.

DR. HIR EN PATE L
Head(1/C)
V. M. Patel Institute of Management
Ganpat University

# Student Notice

It is hereby informed you that Registration for Value added courses offered by the institute for the academic year 2017-18 is initiated.

Applications are invited for the below-mentioned value-added course offered by VMPIM as given below:

| Course | Duration | Fees |
|---|---|---|
| E-Commerce | 30 hours | Nil |

The students of MBA Sem-IV can register for the course, and they are required to report the coordinator (Dr. Dipesh Dasani) of Value-added course up to 10.1.2018. The session would be taken by Expert. Dr. Sourbhi Chaturvedi.

V.M.Patel Institute of Management
Ganpat Vidyanagar
Kherva-382711

**Seal of the Institute**

**(Dr. Hiren J Patel)**

**I/C. Head**
V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

# GANPAT UNIVERSITY

## V. M Patel Institute of Management

| | | | |
|---|---|---|---|
| Programme | Value Added Course | Branch/Spec. | - |
| Semester | | Version | - |
| Effective from *Academic* Year | - | Effective for the batch Admitted in | - |
| Subject code | MOS103 | Subject Name | E-Commerce |

| Teaching scheme (Per week) | Lecture(DT) | | Practical(Lab.) | | Total |
|---|---|---|---|---|---|
| | L | TU | P | TW | |
| Credit | - | - | - | - | - |
| Hours | - | - | - | - | - |

| Examination scheme (Marks) | CE | SEE | Total |
|---|---|---|---|
| Theory | - | - | - |
| Practical | - | - | - |

Pre-requisites:

Learning Outcome:

- Understand the basic concepts and technologies used in the field of management information systems
- Understand the processes of developing and implementing information systems
- Develop an understanding of how various information systems work together to accomplish the information objectives of an organization

| Theory syllabus | | |
|---|---|---|
| **Unit** | **Content** | **Hr** |
| 1 | **Unit I: INTRODUCTION**<br>Definition of Electronic Commerce, E-Commerce: technology and prospects, incentives for engaging in electronic commerce, needs of E-Commerce, advantages, and disadvantages, framework, Impact of E-commerce on business, E-Commerce Models. | 6 |
| 2 | **Unit II: NETWORK INFRASTRUCTURE FOR E- COMMERCE**<br>Internet and Intranet based E-commerce- Issues, problems and prospects, Network Infrastructure, Network Access Equipment's, Broadband telecommunication (ATM, ISDN, FRAME RELAY). Mobile Commerce: Introduction, Wireless Application Protocol, WAP technology, Mobile Information device. | 6 |
| 3 | **Unit III: WEB SECURITY**<br>Security Issues on web, Importance of Firewall, components of Firewall, Transaction security, Emerging client server, Security Threats, Network Security, Factors to consider in Firewall design, Limitation of Firewalls. | 6 |
| 4 | **Unit IV: ENCRYPTION**<br>Encryption techniques, Symmetric Encryption: Keys and data encryption standard, Triple encryption, Secret key encryption; Asymmetric encryption: public and private pair key encryption, Digital Signatures, Virtual Private Network. | 6 |
| 5 | **UNIT V: ELECTRONIC PAYMENTS**<br>Overview, The SET protocol, Payment Gateway, certificate, digital Tokens, Smart card, credit card, magnetic strip card, E-Checks, Credit/Debit card-based EPS, online Banking .EDI m Application in business, E- Commerce Law, Forms of Agreement, Govt. policies | 6 |

| | | |
|---|---|---|
| | and Agenda. | |
| | Textbooks:<br>• Ravi Kalakota, Andrew Winston, "Frontiers of Electronic Commerce", Addison Wesley.<br>Reference Books:<br>• Pete Lohsin , John Vacca "Electronic Commerce", New Age International<br>• Goel, Ritendra "E-commerce", New Age International<br>• Laudon, "E-Commerce: Business, Technology, Society", Pearson Education | |



**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**

**V.M. PATEL INSTITUTE OF MANAGEMENT**

## Timetable- E-Commerce

| Date | Time |
|---|---|
| 13/01/2018 | 10.00am-12.00 pm<br>1.00pm-4.00pm |
| 27/01/2018 | 10.00am-12.00 pm<br>1.00pm-4.00pm |
| 10/02/2018 | 10.00am-12.00 pm<br>1.00pm-4.00pm |
| 24/02/2018 | 10.00am-12.00 pm<br>1.00pm-4.00pm |
| 10/03/2018 | 10.00am-12.00 pm<br>1.00pm-4.00pm |
| 24/03/2018 | 10.00am-12.00 pm<br>1.00pm-4.00pm |



**GANPAT UNIVERSITY- FACULTY OF MANAGEMENT STUDIES**

**V.M. PATEL INSTITUTE OF MANAGEMENT**

**Date: 26/03/2018**

# Value- added course Summary Report

Faculty of Management Studies has organized value added course on "E-Commerce" for the students of V.M. Patel Institute of Management, FMS, Ganpat University during the academic year 2017-18.

| Year | Semester | Value-added Course | No of Students participated |
|---|---|---|---|
| 2017-18 | IV | E-Commerce | 65 |

The Value-added course was very knowledgeable, informative and related to the managerial function. Overall, the value-added course was highly appreciated by the students.

V.M.Patel Institute of Management Ganpat Vidyanagar Kherva-382711

**Seal of the Institute**

**(Dr. Hiren J Patel)**

**HC. Head**

V.M.Patel Institute of Management
Ganpat University,Kherva-384012
Dist.Mehsana (North Gujarat)

## Value Added Course opted by MBA Sem-IV Students for the year 2017-18

| S. No | Name | Enrolment No. | Allocated Course |
|---|---|---|---|
| 1 | AGRAWAL SANGINI GAJENDRA | 16044311001 | E-Commerce |
| 2 | ANIL KUMAR | 16044311002 | E-Commerce |
| 3 | BAROT AVANI PRAMODKUMAR | 16044311003 | E-Commerce |
| 4 | CHAUDHARY DAMAYANTIBEN AMBABHAI | 16044311005 | E-Commerce |
| 5 | CHAUHAN RAVIKUMAR JIVANLAL | 16044311006 | E-Commerce |
| 6 | CHOKSI KRIMABEN ANILKUMAR | 16044311008 | E-Commerce |
| 7 | DAVE KAUSHABEN MAYANKKUMAR | 16044311009 | E-Commerce |
| 8 | DESAI SAHDEVBHAI SAKKARBHAI | 16044311010 | E-Commerce |
| 9 | GAJJAR MIRAL NITINBHAI | 16044311011 | E-Commerce |
| 10 | GHUNJARIYA GOPIBEN HARESHKUMAR | 16044311012 | E-Commerce |
| 11 | GOLANI URVASHIBEN HARESHKUMAR | 16044311013 | E-Commerce |
| 12 | GURJAR PARESHKUMAR NARANBHAI | 16044311015 | E-Commerce |
| 13 | ISARANI RAVINA BALCHAND | 16044311016 | E-Commerce |
| 14 | JOSHI BINAL BHANUBHAI | 16044311018 | E-Commerce |
| 15 | JPWALA RIYANKA JITENDRAKUMAR | 16044311020 | E-Commerce |
| 16 | KACHHATIYA BHAVIK MAHESHBHAI | 16044311021 | E-Commerce |
| 17 | KHANUSIYA AKILBHAI SALIMBHAI | 16044311024 | E-Commerce |
| 18 | KHATRI KAPILKUMAR SUNILBHAI | 16044311025 | E-Commerce |
| 19 | KRIPLANI TWINKLE MAHESHKUMAR | 16044311026 | E-Commerce |
| 20 | MAKWANA NILESH NARESHBHAI | 16044311027 | E-Commerce |
| 21 | MODH AKASH KIRITKUMAR | 16044311030 | E-Commerce |
| 22 | MODHAVADIYA DILIP KARSHANBHAI | 16044311031 | E-Commerce |
| 23 | MODI AYAN SANJAYBHAI | 16044311032 | E-Commerce |
| 24 | NAYAK MILANKUMAR HASHMUKHBHAI | 16044311034 | E-Commerce |
| 25 | NAYI PRADIPKUMAR MAHESHKUMAR | 16044311035 | E-Commerce |
| 26 | OZA RAJATKUMAR NAVINBHAI | 16044311036 | E-Commerce |
| 27 | OZA RUCHITKUMAR NAVINBHAI | 16044311037 | E-Commerce |
| 28 | PABARI AKASH PARESHBHAI | 16044311038 | E-Commerce |
| 29 | PANCHAL KISHAN PARESHBHAI | 16044311040 | E-Commerce |
| 30 | PANCHAL MAHARSHI ARVINDBHAI | 16044311041 | E-Commerce |
| 31 | PANCHAL RUTVESH MAHESHBHAI | 16044311042 | E-Commerce |
| 32 | PARMAR CHANDRAKANT VIRABHAI | 16044311043 | E-Commerce |
| 33 | PATEL JAYKUMAR VITHTHALBHAI | 16044311044 | E-Commerce |
| 34 | PATEL PIYUSHKUMAR GHANSHYAMBHAI | 16044311045 | E-Commerce |
| 35 | PATEL APURV VISHNUBHAI | 16044311046 | E-Commerce |
| 36 | PATEL AVANIBEN JITENDRAKUMAR | 16044311048 | E-Commerce |
| 37 | PATEL HAPPY CHANDRAKANT | 16044311051 | E-Commerce |

| | | | |
|---|---|---|---|
| 38 | PATEL HARDIK ASHVINBHAI | 16044311052 | E-Commerce |
| 39 | PATEL HARDIKKUMAR CHHAGANBHAI | 16044311053 | E-Commerce |
| 40 | PATEL NIDHIBEN MUKESHKUMAR | 16044311056 | E-Commerce |
| 41 | PATEL PARTHKUMAR BHARATBHAI | 16044311057 | E-Commerce |
| 42 | PATEL PRATIKKUMAR SHAILESHBHAI | 16044311058 | E-Commerce |
| 43 | PATEL SAGAR ASHOKKUMAR | 16044311059 | E-Commerce |
| 44 | PATEL SHIVANI VIPULKUMAR | 16044311060 | E-Commerce |
| 45 | PATEL SWETABEN SHIVRAMBHAI | 16044311061 | E-Commerce |
| 46 | PATEL URVISHKUMAR NARENDRABHAI | 16044311062 | E-Commerce |
| 47 | PATEL VIKASKUMAR VINODKUMAR | 16044311063 | E-Commerce |
| 48 | PATHAN IRSHADKHAN MAHAMADKHAN | 16044311064 | E-Commerce |
| 49 | PRAJAPATI URVESHKUMAR MUKESHBHAI | 16044311065 | E-Commerce |
| 50 | RAJBHAR JIGNESH MANAGER | 16044311067 | E-Commerce |
| 51 | RAJPUT SATVIRSINH PREMSINH | 16044311068 | E-Commerce |
| 52 | RAMI KISHAN JAYESHBHAI | 16044311069 | E-Commerce |
| 53 | RAMLAVAT HEMANGINI YASHWANTSINH | 16044311070 | E-Commerce |
| 54 | SAKARIYA CHANDRESH RAMESHBHAI | 16044311074 | E-Commerce |
| 55 | SANGHAVI VIPASHA JIGNESHKUMAR | 16044311075 | E-Commerce |
| 56 | SHARMA CHIRAG HARISHKUMAR | 16044311077 | E-Commerce |
| 57 | SHARMA MILONI DINESHKUMAR | 16044311078 | E-Commerce |
| 58 | SHARMA PUNIT MANHARLAL | 16044311079 | E-Commerce |
| 59 | SHREEMALI PRADIPKUMAR HARESHBHAI | 16044311080 | E-Commerce |
| 60 | SOLANKI HARSHADKUMAR SURESHCHANDRA | 16044311081 | E-Commerce |
| 61 | THAKKAR AKSHAYKUMAR HIRALAL | 16044311083 | E-Commerce |
| 62 | THAKOR RAMAJI ISHVARJI | 16044311084 | E-Commerce |
| 63 | TOMAR KAJAL NARAYANSINGH | 16044311085 | E-Commerce |
| 64 | VALA HEMANSHIBEN SHAILESHBHAI | 16044311087 | E-Commerce |
| 65 | VALA RAHULBHAI RAMSIBHAI | 16044311088 | E-Commerce |

V.M. Patel Institute of Management
Ganpat Vidyanagar
Kherva-382711

**Seal of the Institute**

**(Dr. Hiren J Patel)**

**I/C. Head**
V.M.Patel Institute of Management
Ganpat University, Kherva-384
Dist.Mehsana (North Gujarat)

## Value Added course

| GANPAT UNIVERSITY | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FACULTY OF MANAGEMENT STUDIES | | | | | | | | | |
| Programme | MBA/BBA | | Branch/Spec. | | Pharmaceuticals/ Financial Services/ International Business/Agribusiness/Start-up Entrepreneurship/Logistics and Supply Chain Management/ Business Analytics | | | | |
| Semester | I | | | Version | 1.0.0.0 | | | | |
| Effective from Academic Year | 2020-21 | | | Effective for the batch Admitted in | June 2020 | | | | |
| Subject code | 1OS107MMB | | Subject Name | **Master Class on Marketing and Branding Level-1** | | | | | |
| Teaching scheme | | | | | Examination scheme (Marks) | | | | |
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | 3 | | | | 3 | Theory | 0 | 0 | 00 |
| Hours | 3 | | | | 45 | Practical | | | |

**Course Outcomes:**

CO: While the students are learning management courses, they need to learn to construct the brand strategically. This courses aims to develop the marketing insights among management students practically.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction: Marketing, Emerging Marketing Practices. | 10 |
| 2 | Brand: Concept, Importance, Developing Brand Personality, make your own brand, Practical sessions on creating Brand- slogan, punch line<br>Use of various tools of brand design, group wise student presentation | 18 |
| 3 | Next level branding, Self-branding, Brand communication. Creating Advertisement for self-brand. Analysis Market for created brand. Developing SWOT analysis for self-brand. | 15 |
| 4 | Real time exercise with students in group of 2 to 3. | 12 |

Reference Books

| | |
|---|---|
| | Reference material is to be provided by the expert/trainer. |



| GANPAT UNIVERSITY | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FACULTY OF MANAGEMENT STUDIES | | | | | | | | | |
| Programme | MBA/BBA | | Branch/Spec. | | Pharmaceuticals/ Financial Services/ International Business/Agribusiness/Start-up Entrepreneurship/Logistics and Supply Chain Management/ Business Analytics | | | | |
| Semester | I | | | | Version | 1.0.0.0 | | | |
| Effective from Academic Year | 2020-21 | | | | Effective for the batch Admitted in | | June 2020 | | |
| Subject code | 1OS108IFN | | Subject Name | | **Introduction to Finance for Non-Finance students** | | | | |
| Teaching scheme | | | | | Examination scheme (Marks) | | | | |
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | 2 | | | | 2 | Theory | 0 | 0 | 00 |
| Hours | 2 | | | | 30 | Practical | | | |

Course Outcomes:

CO: The objective of this course is to acquaint students with various concepts of accounting and highlight the decision-making and control focus of managerial accounting.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction and basic terminologies of financial Accounting<br>Introduction to financial and management accounting<br>The accounting equation<br>The Golden rules of accounting<br>The accounting Cycle: Journal, Ledger and Trail Balance | 15 |
| 2 | The Final accounts: Income statement and its importance<br>The Balance Sheet and its interpretations<br>Introduction to Management Accounting and basic terminologies | 10 |
| 3 | CVP Analysis<br>Break even analysis | 5 |

| Reference Books | |
|---|---|
| | Reference material is to be provided by the expert/trainer |



**GANPAT UNIVERSITY**

CENTRE FOR MANAGEMENT STUDIES AND RESEARCH

| | | | |
|---|---|---|---|
| Programme | Entrepreneurship 101 | Branch/Spec. | - |
| Semester | Module-I | Version | - |
| Effective from *Academic* Year | - | Effective for the batch Admitted in | - |
| Subject code | 1OS102 | Subject Name | Idea Validation Workshop |

| Teaching scheme (Per week) | Lecture(DT) | | Practical(Lab.) | | Total |
|---|---|---|---|---|---|
| | L | TU | P | TW | |
| Credit | - | - | - | - | - |
| Hours | - | - | - | - | - |

| Examination scheme (Marks) | CE | SEE | Total |
|---|---|---|---|
| | | | |
| | - | - | - |
| Practical | - | - | - |

Pre-requisites:

Learning Outcome:

- Enabling participants to understand various facets of starting and managing their business
- Providing participants with business development support to enable them to pitch their businessto investors and other stakeholders.
- This unique model delivers the training in a modular format with emphasis on Intensivebusiness training

Theory syllabus

| Unit | Content | Hr |
|---|---|---|
| 1 | **Idea Identification and Assessment:** Sources of new ideas,Techniques for generating Ideas, Essentials of Entrepreneurship,How an Idea can change our life?, Idea to Opportunity,Steps involved in tapping the opportunity,Opportunity to Business | 10 |
| 2 | **A study on consumer behavior:** Introduction market strategy and consumer behavior,Perception and consumer behavior, Attitude and consumer behavior, Market Segmentation and Positioning, Analysis of Market environment, Building your Marketing Plan | 10 |
| 3 | **Workshop On Digital Marketing:** Digital Marketing Top strategies, Competitive Analysis using top tools, SEO Introduction, PPC Introduction, Social Media Introduction, Keyword Planner, Spying on Competitors Activity, Search Ads & Display Ads, How to Run Search Ads, Ad words Structure, Introduction to Quality Score and Ad rank, Targeting Methods - Search & display, Live Campaign - Search & display Campaign, Learning from Our Live Campaigns, Social media introduction, Lead gen Strategies, Funnel Introduction, Content Cycle, TOFU , MOFU, BOFU, Content Research, Content Calendar, Practical Tools, Content Tools, FB Ads, Spying on FB Ads/Social media, Practical & Assignments | 10 |

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Ganpat Vidyanagar

**GANPAT UNIVERSITY**

CENTRE FOR MANAGEMENT STUDIES AND RESEARCH

| | | | |
|---|---|---|---|
| Programme | Entrepreneurship 101 | Branch/Spec. | - |
| Semester | Module-II | Version | - |
| Effective from *Academic* Year | - | Effective for the batch Admitted in | - |
| Subject code | 1OS103 | Subject Name | Financial Accounting and Analysis and Perspective of Business Plan |

| Teaching scheme (Per week) | Lecture(DT) | | Practical(Lab.) | | Total |
|---|---|---|---|---|---|
| | L | TU | P | TW | |
| Credit | - | - | - | - | - |
| Hours | - | - | - | - | - |

| Examination scheme (Marks) | CE | SEE | Total |
|---|---|---|---|
| Theory | - | - | - |
| Practical | - | - | - |

Pre-requisites:

Learning Outcome:

- Covers the Financial Accounting and Analysis
- Helps to develop Business Plan

Theory syllabus

| Unit | Content | Hr |
|---|---|---|
| 1 | **Insights from Financial Statements:** Principles of Accounting, Meaning and Objectives of Financial Statement, Balance Sheet- Concept & Understanding, Profit & Loss Account/Income Statement, Financial Statement Analysis, Types of Costs and Cost Sheet Analysis, Break even analysis | 10 |
| 2 | **Financing Venture with Perspectives of Insurance & Taxation Policy:** Functions of Finance & Importance of Finance, Raising Of Funds: Internal and external, Sources of Finance to Entrepreneurs, Capital Budgeting, Perspectives of Seed Funding, Venture Capital Funding, Funding from banks, Lease Financing, Funding Opportunities for Start Ups in India, Concept of Insurance & Types of Insurance: Fire, Burglary, Marine, Taxation from Perspective of SMEs | 10 |
| 3 | **Introduction to Business Planning and Learn how to build an effective Business Plan for your venture:** Entrepreneurial Opportunities and Business Plan, Business Failures, Introduction to Business Plan: Perspectives to be considered in Business plan preparation, Defining the Business Plan, Authoring the Business Plan, Sales forecasting, Managing the sales pipeline, Developing Marketing Mix( Brief in form of Activity), Pricing, Action plan of making Financial Statement Analysis & Sources of Finance (Theory already covered in prior workshop), Final thoughts on business plan | 10 |

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**CENTRE FOR MANAGEMENT STUDIES AND RESEARCH**

**CED-ENTRERENEURSHIP DEVELOPMENT PROGRAM MODULE III- 1OS104**

| Sr.No | Day | Subject List |
|---|---|---|
| 1 | Day 1 | Who Is An Entrepreneur And Micro lab And Discussion |
| 2 | Day 2 | Important Aspects In Business Opportunity Selection &Business opportunity Functional |
| 3 | Day 3 | Experiences Sharing On Entrepreneur |
| 4 | Day4 | About Entrepreneurship Development Program And About CED |
| 5 | Day 5 | Support(Scheme ) For Financial Institution& Loan Application And Disbursement Information |
| 6 | Day 6 | Marketing Management & Whom To Contact For What? |
| 7 | Day 7 | Market Research And Survey Case Study Role Playing & Project Report |
| 8 | Day 8 | Business Account And Management & Financial Management |
| 9 | Day 9 | General Management & Working Capital/Fixed Capital |
| 10 | Day 10 | Personal Management & Computer In Business |
| 11 | Day 11 | Achievement Motivation Training |
| 12 | Day 12 | Schemes Of Supporting Institutions Of Industry And Service Sector Dic |
| 13 | Day 13 | Ethics And Value Of Gandhian Philosophy In Entrepreneurship |
| 14 | Day 14 | Industrial Visit- Ramdev Masala Ltd |

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# GANPAT UNIVERSITY
## CENTRE FOR MANAGEMENT STUDIES AND RESEARCH
### A Certification course on Certified Financial Market Professional with NSE
### Course Code: 1OS105

The objective of this short term program is to spread Financial Market Education & Financial Literacy. It aims to develop a pool of human resources having right skills & expertise to enhance financial planning and investment decisions. Following course aims to deliver Comprehensive Knowledge & Practical Skills to meet the vibrant demands of the financial sector and their by giving students to take informed financial decisions and take better investment decisions.

| Unit | Particulars | Duration |
|---|---|---|
| **UNIT 1** | Financial Modelling<br>• Introduction to Financial Statement Analysis<br>• Preparation of Financial Analysis Report<br>• Prepare Financial Statement<br>• Analyze & Forecast Revenue and Costs<br>• Valuation- Discounted Cash Flow Method (DCF), Others<br>• Prepare Presentation Sheet, Company Overview , Sector Overview | **10 Hours** |
| **UNIT 2** | Equity Analysis & Portfolio Management<br>• Introduction to Analysis in Financial Markets<br>• Technical Analysis – Charts, Trends & Patterns<br>• Fundamental Indicators Study<br>• Quantitative Techniques<br>• Portfolio Management<br>• Financial Planning & Investment Analysis | **5 Hours** |
| **UNIT 3** | Derivatives in Financial Markets<br>• Introduction & Application of Derivatives<br>• Trading Futures & Options<br>• Equity Futures Fundamentals & Investment | **5 Hours** |
| **UNIT 4** | Financial Markets Advanced<br>• Financial Markets Products & Institutions<br>• Understanding Debts<br>• Financial Statements Analysis & Projections<br>• International Markets | **5 Hours** |
| **UNIT 5** | Practical Training on selecting a Stock through DCF Analysis<br>• Selection of a Public Ltd. Company<br>• DCF Analysis | **5 Hours** |

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GANPAT UNIVERSITY

CENTRE FOR MANAGEMENT STUDIES AND RESERACH

CERTIFIED **Lean Six-Sigma professional (Green Belt)**

Course Code: 1OS106

**Objectives:**

1. To make students conscious about importance of quality and quality management
2. To enable students to know thoroughly all the concepts of six sigma and green belttools.
3. To impart knowledge on students how six-sigma is applied in manufacturing/serviceorganization.
4. To make students understand the role and importance of problems solving research in organization for improving quality

**COURSE COVERAGE**

The course covers six-sigma green belt tools and lean methodologies with problem solving approach for quality improvement

**LEARNING OUTCOME OF THE COURSE**

**After studying this course, student will be able to:**

- Understand meaning and importance of quality and quality management.
- Understand six-sigma tools and its implementation.
- Know how six sigma belts works and benefits reaped out of it.

**CONTENT (UNITS)**

| Unit No | Topic Name | Total No of Hours |
|---|---|---|
| 01 | **Introduction:** Meaning and introduction to lean thinking and six sigma concepts, Similarities and differences, History and Evolution of Lean and Six Sigma, Six Sigma approaches (DMAIC and DMADV), Phases of six sigma | 06 |
| 02 | **Basic Concepts and Terminologies:** Six-sigma team formation (various belts & their role), Push-pull system, COPQ- Cost of Poor Quality, Voice of customer, Quality Function Deployment, CTQ- Critical to Quality factors, Chance and Assignable cause of quality problems, First Yield and First Pass Yield, Acceptant Sampling, Process capability analysis | 07 |
| 03 | **Lean Six Sigma Green Belt Tools:** Introduction to Theory of constraints, Value stream mapping, Poka-Yoke, 5S, Total productive maintenance, FMEA & FMECA, KANBAN, KAIZEN, Statistical Quality/Process control (X-bar & R-chart, C-chart, P-chart, nP chart), Regression analysis, hypothesis testing, six-hat thinking, SMED-Single Minute Exchange of Dies | 17 |
| 04 | **Six Sigma Methodology:** Define, Measure, Analyze, Improve, Control | 03 |
| 05 | **Six Sigma projects and benefits:** Identifying Lean Six Sigma projects, Planning for implementation, Selection | 03 |

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| | | |
|---|---|---|
| | of tools and techniques for each phase, Measuring the benefits of Lean-Six sigma, Limitation of Six sigma | |
| | **Total Hours** | **36** |

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NPTEL MODULE ON SPEAKING EFFECTIVELY
Course Code: 1OS101

**Course Code & Name: Speaking Effectively**

**COURSE OUTLINE:**

This course aims to introduce learners to the dynamics of effective spoken communication by establishing speaking as an autonomous medium with a distinctive vocabulary, syntax, structure, style and register. It will enable learners to participate in one to one interactions, in small groups and before a group. Learners are expected to master the fundamentals of speaking such as vocabulary, body language, pronunciation and basic conversation skills before they move on to more advanced activities such as appearing in interviews, making formal presentations and participating in meetings.

**COURSE STRUCTURE:**

| Module | Title |
|---|---|
| 1 | Introduction, Verbal Communication |
| 2 | Nonverbal Communication |
| 3 | Phonetics |
| 4 | Voice and delivery |
| 5 | Basic conversational skills |
| 6 | Appearing in interviews and taking interviews |
| 7 | Making and assessing presentations |
| 8 | Group discussions and meetings |

**REFERENCES:**


- Andersen, Peter A. Nonverbal Communication: Forms and Functions. Mountain View, CA: Mayfield, 1999.
- Connor, J.D. Better English Pronunciation. Cambridge: Cambridge University Press.2013.
- Bradbury, Andrew. Successful Presentation Skills: Build Confidence; Understand Body Language; Use Visual Aids Effectively. London: Kogan Page 2010.


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# GANPAT UNIVERSITY

## FACULTY OF MANAGEMENT STUDIES

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Programme | BBA (General) | | | | Branch/Spec. | -- | |
| Semester | -- | | | | Version | 1.0.0.0 | |
| Effective from Academic Year | | 2018-19 | | | Effective for the batch Admitted in | | June 2015 |
| Subject code | IOS102 | | Subject Name | | MARKETING OF FINANCIAL PRODUCT | | |
| Teaching scheme | | | | | Examination scheme (Marks) | | |
| (Per week) | Lecture(DT) | | Practical(Lab.) | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | |
| Credit | -- | -- | -- | -- | | Theory | -- | -- | -- |
| Hours | -- | -- | -- | -- | | Practical | -- | -- | -- |

Pre-requisites:

Course Objectives: The basic objective of this course is to acquaint the students about the various types of financial services and how these are to be marketed. It will also develop an understanding among the students regarding recent developments in Marketing of Financial Services.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | An Overview of Bank Marketing & Bank Distribution<br>Concept of Marketing & Bank Marketing, Various Marketing Concepts, Difference between Product and Services, Concept of Services Marketing Mix, Channels of Distributions for Banks, Difference between Internet Banking and Online Banking. | 6 |
| 2 | Banking Consumer Behaviour and Its Models<br>Factors influencing consumer behaviour in Banking, Concepts of Consumer Behaviour, Behavioural Models for Analysing the Buyers. The Pavlovian Learning Model. The Veblenian Social – Psychological Model. The Hobbesian Organisational Factors Model. | 6 |
| 3 | Banking Consumer's Market Segmentation and Marketing Research<br>Introduction, Characteristic/ Types of Consumer Segments, Application of Segmentation to Banking Services. Definition of Marketing Research, The Marketing Research Process, Types of Data, Uses of Marketing Research. | 6 |
| 4 | Product/Service Strategy<br>Nature of Products, Elements of Product Mix, Product life cycle, Using PLC to manage Marketing Banking Products, New Product Development, Role of Brand in Bank Marketing. | 6 |
| 5 | Pricing Strategy and its application in Banking<br>Pricing and Profitability, Elasticity of Demand, Pricing Methods/Strategies, Pricing concepts in Banking, Trading Bank Pricing Approaches. | 6 |

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# GANPAT UNIVERSITY

## FACULTY OF Management studies

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Programme | BBA (General) | | | Branch/Spec. | -- | | |
| Semester | | | | Version | 1.0.0.0 | | |
| Effective from Academic Year | | 2016-2017 | | Effective for Admitted in | | | June 2015 |
| Subject code | **IOS101** | Subject Name | | **BASICS OF FINANCIAL MARKETS** | | | |
| Teaching scheme | | | | Examination scheme (Marks) | | | |
| (Per week) | Lecture(DT) | Practical(Lab.) | Total | | CE | SEE | Total |
| | L / TU | P / TW | | | | | |
| Credit | -- / -- | -- / -- | | Theory | -- | -- | -- |
| Hours | -- / -- | -- / -- | | Practical | -- | -- | -- |

Pre-requisites:

Course Objectives:

- To impart knowledge about different types of financial markets and how they operate.
- To make students acquainted about operations of primary and secondary markets.
- To understand derivative operations
- To develop skills of analyzing financial statement and its interpretation.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Markets and Financial Instruments: Types of Markets: Equity, Debt, Derivatives, Commodities; Meaning and features of private, public companies; Types of investment avenues. | 6 |
| 2 | Primary Market : Initial Public Offer (IPO); Book Building through Online IPO; Eligibillity to issue securities; Pricing of Issues; Fixed versus Book Building issues; Allotment of Shares; Basis of Allotment; Private Placement. | 7 |
| 3 | Secondary Market : Role and functions of Securities and Exchange Board of India (SEBI); Depositories; Stock exchanges; Intermediaries in the Indian stock market; Listing; Membership; Trading; Clearing and settlement and risk management; Investor protection fund (IPF); and Do's and Don'ts for investors, Equity and debt investment. | 7 |
| 4 | Derivatives: Types of derivatives; Commodity and commodity exchanges; Commodity versus financial derivatives. | 6 |
| 5 | Financial Statement Analysis : Balance sheet; Profit & loss account; Stock market related ratios; Simple analysis before investing in the shares; understanding annual report; D rector's report etc. | 6 |

Center For Management Studies

Center For Management Studies (GNU-CMS)

# GANPAT UNIVERSITY

## FACULTY OF MANAGEMENT STUDIES

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Programme | | | | | Branch/Spec. | -- | | |
| Semester | -- | | | | Version | 1.0.0.0 | | |
| Effective from Academic Year | | 2015-16 | | | Effective for the batch Admitted in | | | |
| Subject code | IIIOS101 | Subject Name | | | EVENT MANAGEMENT | | | |
| Teaching scheme | | | | | Examination scheme (Marks) | | | |
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | -- | -- | -- | -- | | Theory | -- | -- | -- |
| Hours | -- | -- | -- | -- | | Practical | -- | -- | -- |

Pre-requisites:

Course Objectives: This subject will give formal instructions and training to students to be future managers of the Event Industry. So that, they technical proficiency to effectively adjust, grow and excel in the field of Event Management.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to Event Management, The Emergence of Events Industry, types Of Events, Definitions of Event management, Importance of Event Management, Event Design and Concept, Role of Event Management Companies, The Scope Of Event Management | 6 |
| 2 | Why Event Management, Requirement of Event Manager, Analyzing the events, Scope of the Event, Decision-makers, Technical Staff, Developing Record-Keeping Systems, Establishing Policies & Procedures. | 7 |
| 3 | Preparing a Planning Schedule, Organizing Tasks, Assigning Responsibility, and Communicating, Using the Schedule Properly, The Budget, Overall Planning tips, Checklists, Expert Resources, Computer Software Required. | 7 |
| 4 | Introduction to Event Marketing, Event Promotion, Promotional Strategies, and five P's of Event Marketing: Product, promotion, price, public relations, and place. Internal versus External Event, marketing, Event Sponsorship, Internet Event Marketing, let us sum up: lesson end activity, keywords, and questions for discussion | 8 |
| 5 | Who are the people on the Event, Locating People, Clarifying Roles, Developing content Guidelines, Participant Tips, Reference Checks, Requirement Forms, Introduction, Fees & Honorariums, Expense Reimbursement, Travel Arrangements, Worksheets. | 8 |

Center For Management Studies



# GANPAT UNIVERSITY

## FACULTY OF MANAGEMENT STUDIES

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Programme | | | | | Branch/Spec. | -- | |
| Semester | -- | | | | Version | 1.0.0.0 | |
| Effective from Academic Year | | 2015-16 | | | Effective for the batch Admitted in | | |
| Subject code | IVOS101 | Subject Name | | | FILM AND TELEVISION PRODUCTION | | |
| Teaching scheme | | | | | Examination scheme (Marks) | | |
| (Per week) | Lecture(DT) | | Practical(Lab.) | | Total | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | -- | -- | -- | -- | | Theory | -- | -- | -- |
| Hours | -- | -- | -- | -- | | Practical | -- | -- | -- |

Pre-requisites:

Course Objectives: The course provides with a wide range of professional skills from pre to post production, including working process of production house, artiste mgmt & production television programming and management, Sound for TV and film: dubbing and on-location sound, editing and vex direction, Artiste management and studio production.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Various Genres of Film and Television Programmes, Preproduction Tech:** Introduction to Video technology and terminologies, Film Genres, Television Genres & Film Aesthetics. Visualization, Storyboarding, Fundamentals of SLR Camera, Composition, Editing Aesthetics | 16 |
| 2 | Jobs involved in a Film Production house, Process involved in Production of a Film, Marketing and Distribution of a Film. Direction techniques, Managing Artistes and the products that make up the artiste identity. Overview of a Television Station, Managing a Television station and careers involved, Programming TV shows, Advertisement Sales and Revenue. | 16 |

Center For Management Studies

Center For Management Studies (GNU-CMS)

**GANPAT UNIVERSITY**
**V. M. Patel College of Management Studies**
Ganpat Vidhyanagar 382712
Dist: Mehsana, Gujarat, India.
Phone: + 91-2762-289094, www.vmpcms.ac.in

# Notice

Date: 11/1/2022

**Subject of Notice:** Value added Course on Employability Enhancement Skills

In this academic season, Faculty of Management Studies and Faculty of Social Sciences and Humanities - VMPCMS, Ganpat University offers Six - Days Value added Course on Employability Enhancement Skills for BBA (General / FS / MM) Semester 6 students which includes 30 hours training, assignments and activities to develop the types of behaviours, attitudes and skills that employers require from the day first in an organization.

Total 30 hours course will be completed offline. Session will be conducted from 17th to 24nd January 2022. You can contact Prof. Haresh Oza, Coordinator, for detailed information of the course and Certificate.

Prof. Haresh Oza
Coordinator
GUNI: VMPCMS

Dr. Abhishek Parikh
Principal
GUNI: VMPCMS

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

# Value added Course on Employability Enhancement Skills 2021-2022

## Time Table

| Day & Date | Monday 17/1/2022 | Tuesday 18/1/2022 | Wednesday 19/1/2022 | Thursday 20/1/2022 | Friday 21/1/2022 | Saturday 22/1/2022 | Monday 24/1/2022 |
|---|---|---|---|---|---|---|---|
| Time | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am |
| | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm |
| | Break | | | | | | |
| | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm |
| | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm |

**Course Code:501EES**
**Course Name: Employability Enhancement Skills**

## COURSE OUTLINE:

Employability skills are foundational skills which are essential for gaining, sustaining and being successful in a job.

This course aims at enhancing employability skills of the students. It intends to inculcate the skills and attitudes that allow employees to get along with their co-workers, make important work-related decisions and become strong team members.

This course is meant to guide students that employability skills are transferable; they go on changing as per the demand of the world of work and learning these skills are essential in any employment scenario.

| Module | Course Content | No. hours |
|---|---|---|
| 1. | Goal setting, Time management, Interview skills | 5 hours |
| 2. | Reading Resources/ Activities/ Assessment/Assignments | 5 hours |
| 3. | Negotiation Skills, Critical thinking and logical, thinking and reasoning skills | 5 hours |
| 4. | Reading Resources/Activities/Assessment/Assignments | 5 hours |
| 5. | Presentation skills, Etiquette and grooming, group discussion and Key attitudes of life | 5 hours |
| 6. | Reading Resources/Activities/Assessment/Assignments | 5 hours |

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Phone: + 91-2762-289094, www.vmpcms.ac.in

# Notice

Date: 11/1/2022

**Subject of Notice:** Value added Course on English Language

In this academic season, Faculty of Management Studies and Faculty of Social Sciences and Humanities - VMPCMS, Ganpat University offers Value added Course on English Language for BBA (FS/MM/General) and B.Com Semester 2 students which includes 30 hours training, assignments and activities to improve English language.

Total 30 hours course will be conduct offline at New Building. Session will be conducted from 17th to 24th January 2022. You can contact Prof. Haresh Oza, Coordinator, for detailed information of the course and Certificate.

Prof. Haresh Oza
Coordinator
GUNI: VMPCMS

Dr. Abhishek Parikh
Principal
GUNI: VMPCMS

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

# Value added Course on English Language 2021-2022

## Time Table

| Day & Date | Monday 17/1/2022 | Tuesday 18/1/2022 | Wednesday 19/1/2022 | Thursday 20/1/2022 | Friday 21/1/2022 | Saturday 22/1/2022 | Monday 24/1/2022 |
|---|---|---|---|---|---|---|---|
| Time | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am |
| | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm |
| | Break | | | | | | |
| | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm |
| | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm |

**Course Code: CEU01ENL**
**Course Name: English Language**

The Course aims at preparing students to cope up with university education being imparted in English as medium of instruction. It specifically aims at bridging the gap between school and university education to reinforce the language skills and to support independent learning.

**Course Structure:**

| Module | Title |
|---|---|
| 1. | Vocabulary Building: Synonyms-antonyms, Words often confused word-analogies, one word substitutes, prefix-suffix, idioms and phrases. |
| 2. | Grammar and Language Components: Parts of speech, capitalization and punctuation, Sentence formation and sentence transformation (affirmative, negative and interrogative), Sentence types (function and structure based), Concord (subject-verb agreement) and Tenses. |
| 3. | Listening Skills: Types of Listening, listening to announcements of railway station, bus station, airport, sports announcement, Listening motivational speeches, lectures, spiritual talks, media interviews, business talks and presentations (TED Talks) |
| 4. | Speaking Skills and Body Language: Paralanguage, proxemics, Everyday conversation like, Self-introduction, Introducing painter and other in the social or formal gathering, asking for and giving information, requesting and responding to requests, congratulating people and telephonic communication. |
| 5. | Reading Skills: Identifying main idea, Extensive and intensive reading using academic and non-academic texts, Reading of newspaper articles, magazines, stories etc. |
| 6. | Writing Skills: prep ring invitation cards, congratulation notes, Paragraph writing, Drafting of formal and informal letters, essay writing. |

**REFERENCE:**


- M. Ashraf Rizvi, Effective Technical Communication, Mc Graw Hill Education(India) Private Limited: New Delhi 2015
- Raymond Murphy, Essential English Grammar ,Cam bridge University Press 2015
- Online resources: You Tube – Daily Video Vocabulary, Vocab 24, TED Lectures, Inspirational Speeches/ Addresses of success people, Parliamentary Speeches, interviews, various internet channel devoted to learning and improving communication English

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# Notice

Date: 11/1/2022

**Subject of Notice:** Value added Course on Entrepreneurship Development & Start Up

In this academic season, Faculty of Management Studies and Faculty of Social Sciences and Humanities - VMPCMS, Ganpat University offers Six - Days Value added Course on Entrepreneurship Development & Start Up for M.Com Semester 2 students, which includes 30 hours training, assignments and activities to develop the Entrepreneurship Development and Start-Up that require to develop business.

Total 30 hours course will be completed online. Session will be conducted from 17th to 24th January 2022. You can contact Prof. Haresh Oza, Coordinator, for detailed information of the course and Certificate.

Prof. Haresh Oza
Coordinator
GUNI: VMPCMS

Dr. Abhishek Parikh
Principal
GUNI: VMPCMS

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

# Value added Course on Entrepreneurship Development & Start Up 2021-2022

## Time Table

| Day & Date | Monday 17/1/2022 | Tuesday 18/1/2022 | Wednesday 19/1/2022 | Thursday 20/1/2022 | Friday 21/1/2022 | Saturday 22/1/2022 | Monday 24/1/2022 |
|---|---|---|---|---|---|---|---|
| Time | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am |
| | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm |
| | Break | | | | | | |
| | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm |
| | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm |

**Course Code: CEU02EDS**

**Course Name: Entrepreneurship Development and Start-Up**

Course Outline: The course titled Entrepreneurship and Start up, is designed is to give in-depth understanding on various aspects of innovation, creativity, evolving business models, incubation and entrepreneurship. The course also includes sessions on blue ocean strategy and technology incubation which are proving as game changer i n todays' competitive scenario.

The course is a blend of theory and practice therefore this course does not require any prerequisite and will be useful to understand innovation and its applications in different spheres of development and growth.

**Course Structure:**

| Module | Title |
|---|---|
| 1. | Analyzing the Current Business Scenario, Innovation and Creativity- An Introduction, Innovation in Current Environment, Types of Innovation, School of Innovation. |
| 2. | Challenges of Innovation, Steps of Innovation Management, Idea Management System, Divergent Vs. Convergent Thinking, Levers of Idea Management |
| 3. | Experimentation in Innovation Management, Idea Championship, Participation for Innovation, Co-creation for Innovation, Proto typing to Incubation. |
| 4. | What is a Business Model ,Who is an Entrepreneur ,Social Entrepreneurship Blue Ocean Strategy-I ,Blue Ocean Strategy-II |
| 5. | Marketing of Innovation, Technology Innovation Process, Technological Innovation Management Planning, Technological Innovation Management Strategies, Technology Forecasting |
| 6. | Sustainability Innovation and Entrepreneurship, Types of Sustainable Entrepreneurship, Conditions for Sustainable Innovation, strategic involvement in sustainable development, Exploration of business models for material efficiency services. |
| 7. | Management of Innovation, creation of IPR, Management of Innovation, creation of IPR, Types of IPR, Patents in India, Copyrights and other important IP |
| 8. | Business Models and value proposition, Business Model Failure: Reasons and Remedies Incubators : Business vs. Technology, managing Investor for Innovation, Future markets and Innovation needs for India. |

**REFERENCE:**


- 8 Steps to Innovation: Going From Jugaad To Excellence – Book by Rishikesha T. Krishnan and Vinay Dabholkar
- Innovation and Entrepreneurship Book by Peter Druker
- HBS series on Innovation and Entrepreneurship

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# Notice

Date: 13/1/2021

**Subject of Notice:** Value added Course on Employability Enhancement Skills

In this academic season, Faculty of Management Studies and Faculty of Social Sciences and Humanities - VMPCMS, Ganpat University offers Value added Course on Employability Enhancement Skills for BBA General and B.Com Semester 6 students which includes 30 hours training, assignments and activities to develop the types of behaviours, attitudes and skills that employers require from the day first in an organization.

Total 30 hours course will be completed online. Session will be conducted from 18th to 25th January 2021. You can contact Dr. Usha Kaushik, Coordinator, for detailed information of the course and Certificate.

Dr. Usha Kaushik
Coordinator
GUNI: VMPCMS

Dr. Abhishek Parikh
Principal
GUNI: VMPCMS

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

# Value added Course on Employability Enhancement Skills 2020-2021

## Time Table

| **Day & Date** | **Monday** **18/1/2021** | **Tuesday** **19/1/2021** | **Wednesday** **20/1/2021** | **Thursday** **21/1/2021** | **Friday** **22/1/2021** | **Saturday** **23/1/2021** | **Monday** **25/1/2021** |
|---|---|---|---|---|---|---|---|
| Time | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am |
| | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm |
| | Break | | | | | | |
| | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm |
| | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm |

**Course Code:501EES**
**Course Name: Employability Enhancement Skills**

## COURSE OUTLINE:

Employability skills are foundational skills which are essential for gaining, sustaining and being successful in a job.

This course aims at enhancing employability skills of the students. It intends to inculcate the skills and attitudes that allow employees to get along with their co-workers, make important work-related decisions and become strong team members.

This course is meant to guide students that employability skills are transferable; they go on changing as per the demand of the world of work and learning these skills are essential in any employment scenario.

| Module | Course Content | No. hours |
|---|---|---|
| 1. | Goal setting, Time management, Interview skills | 5 hours |
| 2. | Reading Resources/ Activities/ Assessment/Assignments | 5 hours |
| 3. | Negotiation Skills, Critical thinking and logical, thinking and reasoning skills | 5 hours |
| 4. | Reading Resources/Activities/Assessment/Assignments | 5 hours |
| 5. | Presentation skills, Etiquette and grooming, group discussion and Key attitudes of life | 5 hours |
| 6. | Reading Resources/Activities/Assessment/Assignments | 5 hours |

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# Notice

Date: 13/1/2021

**Subject of Notice:** Value added Course on English Language

In this academic season, Faculty of Management Studies and Faculty of Social Sciences and Humanities - VMPCMS, Ganpat University offers Value added Course on English Language for BBA (FS/MM/General) and B.Com Semester 2 students which includes 30 hours training, assignments and activities to improve English language.

Total 30 hours course will be completed online. Session will be conducted from 18th to 25th January 2021. You can contact Dr. Usha Kaushik, Coordinator, for detailed information of the course and Certificate.

Dr. Usha Kaushik
Coordinator
GUNI: VMPCMS

Dr. Abhishek Parikh
Principal
GUNI: VMPCMS

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

# Value added Course on English Language 2020-2021

## Time Table

| Day & Date | Monday 18/1/2021 | Tuesday 19/1/2021 | Wednesday 20/1/2021 | Thursday 21/1/2021 | Friday 22/1/2021 | Saturday 23/1/2021 | Monday 25/1/2021 |
|---|---|---|---|---|---|---|---|
| Time | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am | 9:20 am to 10:50 am |
| | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm | 11:00 am to 12:30 pm |
| | Break | | | | | | |
| | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm | 1:30 pm to 2:30 pm |
| | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm | 2:40 pm to 3:40 pm |

**Course Code: CEU01ENL**
**Course Name: English Language**

The Course aims at preparing students to cope up with university education being imparted in English as medium of instruction. It specifically aims at bridging the gap between school and university education to reinforce the language skills and to support independent learning.

**Course Structure:**

| Module | Title |
|---|---|
| 1. | Vocabulary Building: Synonyms-antonyms, Words often confused word-analogies, one word substitutes, prefix-suffix, idioms and phrases. |
| 2. | Grammar and Language Components: Parts of speech, capitalization and punctuation, Sentence formation and sentence transformation (affirmative, negative and interrogative), Sentence types (function and structure based), Concord (subject-verb agreement) and Tenses. |
| 3. | Listening Skills: Types of Listening, listening to announcements of railway station, bus station, airport, sports announcement, Listening motivational speeches, lectures, spiritual talks, media interviews, business talks and presentations (TED Talks) |
| 4. | Speaking Skills and Body Language: Paralanguage, proxemics, Everyday conversation like, Self-introduction, Introducing painter and other in the social or formal gathering, asking for and giving information, requesting and responding to requests, congratulating people and telephonic communication. |
| 5. | Reading Skills: Identifying main idea, Extensive and intensive reading using academic and non-academic texts, Reading of newspaper articles, magazines, stories etc. |
| 6. | Writing Skills: prep ring invitation cards, congratulation notes, Paragraph writing, Drafting of formal and informal letters, essay writing. |

**REFERENCE:**


- M. Ashraf Rizvi, Effective Technical Communication, Mc Graw Hill Education(India) Private Limited: New Delhi 2015
- Raymond Murphy, Essential English Grammar ,Cam bridge University Press 2015
- Online resources: You Tube – Daily Video Vocabulary, Vocab 24, TED Lectures, Inspirational Speeches/ Addresses of success people, Parliamentary Speeches, interviews, various internet channel devoted to learning and improving communication English

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

Date : 2/01/2020

# Notice

Subject: Regarding Value Added Courses

It is hereby informed to all the students that for academic year 2019-20, V. M. Patel College of Management Studies has taken initiative of offering Value Added Course of holistic development of Students. It is also at assisting students in their long term growth. Value Added Courses will serve as a bridge to fill the gap between formal education and Corporate demands.

All the students of BBA (General/FS/MM) / B.Com / M.Com Semester 2, 4 and 6 are required to take below given Value Added Course in a year:

| Sr. No. | Class & Semester | Course Name |
|---|---|---|
| 1. | BBA (General/FS/MM) Sem. 2 | English Language |
| 2. | BBA (General/FS/MM) Sem. 4 | Speaking Effectively |
| 3. | BBA (General/FS/MM) Sem.6 | Enhancing Soft skills and Personality |
| 4. | B.Com Sem. 2 | English Language |
| 5. | B.Com Sem. 4 | Speaking Effectively |
| 6. | M.Com Sem. 4 | Entrepreneurship Development & Start- Up |

Total 30 hours course will be completed on the basis of full day sessions of the respective class. Session will be conducted from 7th to 17th January 2020.

You can contact Prof. Haresh P. Oza or Dr. Usha Kaushik, Coordinator, for detailed information of the course and certificate. The schedule of the sessions, venue and course contents are displayed and notice board.

V.M. Patel College of Management Studies Ganpat University Kherva-382712

Prof. Haresh Oza
Coordinator
VMPCMS, GUNI

Dr. Usha Kaushik
Coordinator
VMPCMS, GUNI

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

## Value Added Course Schedule

## Academic Year: 2019-20

## Time Table for B.COM. / B.A. / M.Com. Sem. 2, 4

| Day | Tuesday | Wednesday | Thursday | Friday | Thursday | Friday |
|---|---|---|---|---|---|---|
| **Date** | **7/1/2020** | **8/1/2020** | **9/1/2020** | **10/1/2020** | **16/1/2020** | **17/1/2020** |
| **Time** | 9:15-10:15 | 9:15-10:15 | 9:15-10:15 | 9:15-10:15 | 9:15-10:15 | 9:15-10:15 |
| | 10:20 to 11:20 | 10:20 to 11:20 | 10:20 to 11:20 | 10:20 to 11:20 | 10:20 to 11:20 | 10:20 to 11:20 |
| | 11:15 to 12:15 | 11:15 to 12:15 | 11:15 to 12:15 | 11:15 to 12:15 | 11:15 to 12:15 | 11:15 to 12:15 |
| | **Recess** | **Recess** | **Recess** | **Recess** | **Recess** | **Recess** |
| | 12:45 to 1:45 | 12:45 to 1:45 | 12:45 to 1:45 | 12:45 to 1:45 | 12:45 to 1:45 | 12:45 to 1:45 |
| | 2:50 to 3:50 | 2:50 to 3:50 | 2:50 to 3:50 | 2:50 to 3:50 | 2:50 to 3:50 | 2:50 to 3:50 |

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

**Academic Year: 2019-20**

**B.COM. / M.Com. Sem. 2, 4**

**Course Code & Name: CEU01ENL: English Language**

| B.Com. Sem. 2 | Date | Day |
|---|---|---|
| Room No. 102 | 7th January, 2020 | Tuesday |
| | 8th January, 2020 | Wednesday |
| | 9th January, 2020 | Thursday |
| | 10th January, 2020 | Friday |
| | 16th January, 2020 | Thursday |
| | 17th January, 2020 | Friday |

**Course Name: Speaking Effectively**

| B.Com & Sem. 4 | Date | Day |
|---|---|---|
| Room No. 103 | 7th January, 2020 | Tuesday |
| | 8th January, 2020 | Wednesday |
| | 9th January, 2020 | Thursday |
| | 10th January, 2020 | Friday |
| | 16th January, 2020 | Thursday |
| | 17th January, 2020 | Friday |

**Course Code & Name: CEU02EDS: Entrepreneurship Development & Start -Up**

| M.Com. Sem. 4 | Date | Day |
|---|---|---|
| Venue: Seminar Hall 2 | 7th January, 2020 | Tuesday |
| | 8th January, 2020 | Wednesday |
| | 9th January, 2020 | Thursday |
| | 10th January, 2020 | Friday |
| | 16th January, 2020 | Thursday |
| | 17th January, 2020 | Friday |

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

**Academic Year: 2019-20**

**BBA (Gen/FS/MM) Sem. 2, 4, 6**

## Course Code & Name: CEU01ENL: English Language

| BBA (Gen/FS/MM) Sem. 2 | Date | Day |
|---|---|---|
| Venue: Room No. 101 | 7th January, 2020 | Tuesday |
| | 8th January, 2020 | Wednesday |
| | 9th January, 2020 | Thursday |
| | 10th January, 2020 | Friday |
| | 16th January, 2020 | Thursday |
| | 17th January, 2020 | Friday |

## Course Name: Speaking Effectively

| BBA (Gen/FS/MM) Sem. 4 | Date | Day |
|---|---|---|
| Venue: Room No. 104 | 7th January, 2020 | Tuesday |
| | 8th January, 2020 | Wednesday |
| | 9th January, 2020 | Thursday |
| | 10th January, 2020 | Friday |
| | 16th January, 2020 | Thursday |
| | 17th January, 2020 | Friday |

## Course Name: Enhancing Soft Skills and Personality

| BBA (Gen/FS/MM) Sem. 6 | Day | Time |
|---|---|---|
| Venue: Seminar Hall 1 | 7th January, 2020 | Tuesday |
| | 8th January, 2020 | Wednesday |
| | 9th January, 2020 | Thursday |
| | 10th January, 2020 | Friday |
| | 16th January, 2020 | Thursday |
| | 17th January, 2020 | Friday |

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| Course Code: CEU01ENL<br>Course Name: English Language | |
|---|---|
| The Course aims at preparing students to cope up with university education being imparted in English as medium of instruction. It specifically aims at bridging the gap between school and university education to reinforce the language skills and to support independent learning. | |
| **Course Structure:** | |
| **Module** | **Title** |
| 1. | Vocabulary Building: Synonyms-antonyms, Words often confused word-analogies, one word substitutes, prefix-suffix, idioms and phrases. |
| 2. | Grammar and Language Components: Parts of speech, capitalization and punctuation, Sentence formation and sentence transformation (affirmative, negative and interrogative), Sentence types (function and structure based), Concord (subject-verb agreement) and Tenses. |
| 3. | Listening Skills: Types of Listening, listening to announcements of railway station, bus station, airport, sports announcement, Listening motivational speeches, lectures, spiritual talks, media interviews, business talks and presentations (TED Talks) |
| 4. | Speaking Skills and Body Language: Paralanguage, proxemics, Everyday conversation like, Self-introduction, Introducing painter and other in the social or formal gathering, asking for and giving information, requesting and responding to requests, congratulating people and telephonic communication. |
| 5. | Reading Skills: Identifying main idea, Extensive and intensive reading using academic and non-academic texts, Reading of newspaper articles, magazines, stories etc. |
| 6. | Writing Skills: prep ring invitation cards, congratulation notes, Paragraph writing, Drafting of formal and informal letters, essay writing. |
| **REFERENCE:** | |


- M. Ashraf Rizvi, Effective Technical Communication, Mc Graw Hill Education(India) Private Limited: New Delhi 2015
- Raymond Murphy, Essential English Grammar ,Cam bridge University Press 2015
- Online resources: You Tube – Daily Video Vocabulary, Vocab 24, TED Lectures, Inspirational Speeches/ Addresses of success people, Parliamentary Speeches, interviews, various internet channel devoted to learning and improving communication English

**Course Code & Name: Speaking Effectively**

**COURSE OUTLINE:**

This course aims to introduce learners to the dynamics of effective spoken communication by establishing speaking as an autonomous medium with a distinctive vocabulary, syntax, structure, style and register. It will enable learners to participate in one to one interactions, in small groups and before a group. Learners are expected to master the fundamentals of speaking such as vocabulary, body language, pronunciation and basic conversation skills before they move on to more advanced activities such as appearing in interviews, making formal presentations and participating in meetings.

**COURSE STRUCTURE:**

| Module | Title |
|---|---|
| 1 | Introduction, Verbal Communication |
| 2 | Nonverbal Communication |
| 3 | Phonetics |
| 4 | Voice and delivery |
| 5 | Basic conversational skills |
| 6 | Appearing in interviews and taking interviews |
| 7 | Making and assessing presentations |
| 8 | Group discussions and meetings |

**REFERENCES:**


- Andersen, Peter A. Nonverbal Communication: Forms and Functions. Mountain View, CA: Mayfield, 1999.
- Connor, J.D. Better English Pronunciation. Cambridge: Cambridge University Press.2013.
- Bradbury, Andrew. Successful Presentation Skills: Build Confidence; Understand Body Language; Use Visual Aids Effectively. London: Kogan Page 2010.


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**Course Name: Enhancing Soft Skills and Personality**

**COURSE OUTLINE:**

The course aims to cause an enhanced awareness about the significance of soft skills in professional and inter-personal communications and facilitate an all-round development of personality. Hard or technical skills help securing a basic position in ones life and career. But only soft skills can ensure a person retain it, climb further, reach a pinnacle, achieve excellence, and derive fulfillment and supreme joy. Soft skills comprise pleasant and appealing personality traits as self-confidence, positive attitude, emotional intelligence, social grace, flexibility, friendliness and effective communication skills. The focus of this course is on interpersonal and management skills.

**COURSE STRUCTURE:**

| Module | Title |
|---|---|
| 1 | Highlighting Developing Soft Skills and Personality Course-1<br>Highlighting Developing Soft Skills and PersonalityCourse-2<br>Definitions and Types of Mind set<br>Learning Mindset<br>Developing Growth Mindsets |
| 2 | Importance of Time and Understanding Perceptions of Time<br>Using Time Efficiently, Understanding Procrastination,<br>Overcoming Procrastination, Don't Say "Yes" How to Make Others Happy |
| 3 | Types of People, How to Say "No, Controlling Anger, Gaining Power of Positive Thinking-1,<br>Gaining Power from Positive Thinking-2 |
| 4 | What Makes Others Dislike You?<br>What Makes Others Dislike You-1<br>What Makes Others Dislike You-2<br>Being Attractve-1<br>Being Attractve-2 |
| 5 | Common Errors-1 Common Errors-2,<br>Common Errors-3, Common Errors-4 |

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| | |
|---|---|
| | Common Errors-5 |
| 6 | Humour in Communication,<br>Humour in the Workplace,<br>Functon of Humour in the Workplace,<br>Money and Personality. Managing Money. |
| 7 | Health and Personality,<br>Managing Health-1: Importance of Exercise,<br>Managing Health-2: Diet and Sleep,<br>Love and Personality, Managing Love |
| 8 | Ethics and Etiquette<br>Business Etiquette<br>Managing Mind and Memory<br>Improving Memory<br>Care for Environment<br>Highlights of the Course |

**REFERENCES:**


- Dorch, Patricia. What Are Soft Skills? New York: Execu Dress Publisher, 2013.
- Kamin, Maxine. Soft Skills Revolution: A Guide for Connecting with Compassion for Trainers,
- Teams, and Leaders. Washington, DC: Pfeiffer and Company, 2013.
- Klaus, Peggy, Jane Rohman and Molly Hamaker. The Hard Truth about Soft Skills. London:
- HarperCollins E-books, 2007.


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**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

Date : 22/10/2018

# Notice

Subject: Regarding Value Added Courses

It is hereby informed to all the students that for academic year 2018-2019, V. M. Patel College of Management Studies has taken initiative of offering Value Added Course of holistic development of Students. It is also at assisting students in their long term growth. Value Added Courses will serve as a bridge to fill the gap between formal education and Corporate demands.

All the students of BBA (General/FS/MM) / B.Com / M.Com Semester 2, 4 and 6 are required to take below given Value Added Course in a year:

| Sr. No. | Class & Semester | Course Name |
|---|---|---|
| 1. | BBA (General/FS/MM) Sem. 1 | English Language |
| 2. | BBA (General/FS/MM) Sem. 3 | Entrepreneurship Development & Start- Up |
| 3. | B.Com Sem. 1 | English Language |
| 4. | B.Com Sem. 3 | Entrepreneurship Development & Start- Up |
| 6. | M.Com Sem. 1 | Entrepreneurship Development & Start- Up |

Total 30 hours course will be completed on the basis of full day sessions of the respective class. Session will be conducted as per time table during month of October.

You can contact Dr. Usha Kaushik, Coordinator, for detailed information of the course and certificate. The schedule of the sessions, venue and course contents are displayed and notice board.

V.M. Patel College of Management Studies Ganpat University Kherva-382712

Dr. Usha Kaushik
Coordinator
VMPCMS, GUNI

**GANPAT UNIVERSITY**

**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

**Value Added Course Schedule**

**Academic Year: 2018-19**

**Time Table for BBA (Gen/FS/MM) Sem. 1 and 3**

| Day | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Tuesday |
|---|---|---|---|---|---|---|---|
| **Date** | **22.10.2018** | **23.10.2108** | **24.10.2018** | **25.10.2018** | **26.10.2018** | **27.10.2018** | **30.10.2018** |
| **Time** | 1.15 - 2.15 | 1.15 - 2.15 | 1.15 - 2.15 | 1.15 - 2.15 | 1.15 - 2.15 | 9.00 - 10.00 | 1.15 - 2.15 |
| | 2.20 - 3.20 | 2.20 - 3.20 | 2.20 - 3.20 | 2.20 - 3.20 | 2.20 - 3.20 | 10.05 -11.05 | 2.20 - 3.20 |
| | 3.25 - 4.25 | 3.25 - 4.25 | 3.25 - 4.25 | 3.25 - 4.25 | 3.25 - 4.25 | 11.10 - 12.10 | 3.25 - 4.25 |
| | 4.30 - 5.30 | 4.30 - 5.30 | 4.30 - 5.30 | 4.30 - 5.30 | 4.30 - 5.30 | 1.10 - 2.10 | 4.30 - 5.30 |
| | ---------- | ---------- | ---------- | ---------- | ---------- | 2.15 - 3.15 | ---------- |
| | ---------- | ---------- | ---------- | ---------- | ---------- | 3.20 - 4.20 | ---------- |

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**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

**Academic Year: 2018-19**

**BBA (Gen/FS/MM) Sem. 1 and 3**

## Course Code & Name: CEU01ENL: English Language

| BBA (Gen/FS/MM) Sem. 1 | Date | Day |
|---|---|---|
| Venue: Seminar Hall 1 | 22.10.2018 | Monday |
| | 23.10.2108 | Tuesday |
| | 24.10.2018 | Wednesday |
| | 25.10.2018 | Thursday |
| | 26.10.2018 | Friday |
| | 27.10.2018 | Saturday |
| | 30.10.2018 | Tuesday |

## Course Name: Entrepreneurship Development & Start-Up

| BBA (Gen/FS/MM) Sem. 3 | Date | Day |
|---|---|---|
| Venue: Room No. 101 | 22.10.2018 | Monday |
| | 23.10.2108 | Tuesday |
| | 24.10.2018 | Wednesday |
| | 25.10.2018 | Thursday |
| | 26.10.2018 | Friday |
| | 27.10.2018 | Saturday |
| | 30.10.2018 | Tuesday |

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**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

**Academic Year: 2018-19 B.COM. / M.Com. Sem. 1, 3**

**Course Code & Name: CEU01ENL: English Language**

| B.Com. 1 & M.Com. 1 | Date | Day |
|---|---|---|
| Venue: Room No. 103 | 22.10.2018 | Monday |
| | 23.10.2108 | Tuesday |
| | 24.10.2018 | Wednesday |
| | 25.10.2018 | Thursday |
| | 26.10.2018 | Friday |
| | 27.10.2018 | Saturday |
| | 30.10.2018 | Tuesday |

**Course Name: CEU02EDS: Entrepreneurship Development & Start -Up**

| B.Com 3 & B.A. 1 | Date | Day |
|---|---|---|
| Venue: Room No. 104 | 22.10.2018 | Monday |
| | 23.10.2108 | Tuesday |
| | 24.10.2018 | Wednesday |
| | 25.10.2018 | Thursday |
| | 26.10.2018 | Friday |
| | 27.10.2018 | Saturday |
| | 30.10.2018 | Tuesday |

**Course Code: CEU01ENL**
**Course Name: English Language**

The Course aims at preparing students to cope up with university education being imparted in English as medium of instruction. It specifically aims at bridging the gap between school and university education to reinforce the language skills and to support independent learning.

**Course Structure:**

| Module | Title |
|---|---|
| 1. | Vocabulary Building: Synonyms-antonyms, Words often confused word-analogies, one word substitutes, prefix-suffix, idioms and phrases. |
| 2. | Grammar and Language Components: Parts of speech, capitalization and punctuation, Sentence formation and sentence transformation (affirmative, negative and interrogative), Sentence types (function and structure based), Concord (subject-verb agreement) and Tenses. |
| 3. | Listening Skills: Types of Listening, listening to announcements of railway station, bus station, airport, sports announcement, Listening motivational speeches, lectures, spiritual talks, media interviews, business talks and presentations (TED Talks) |
| 4. | Speaking Skills and Body Language: Paralanguage, proxemics, Everyday conversation like, Self-introduction, Introducing painter and other in the social or formal gathering, asking for and giving information, requesting and responding to requests, congratulating people and telephonic communication. |
| 5. | Reading Skills: Identifying main idea, Extensive and intensive reading using academic and non-academic texts, Reading of newspaper articles, magazines, stories etc. |
| 6. | Writing Skills: prep ring invitation cards, congratulation notes, Paragraph writing, Drafting of formal and informal letters, essay writing. |

**REFERENCE:**


- M. Ashraf Rizvi, Effective Technical Communication, Mc Graw Hill Education(India) Private Limited: New Delhi 2015
- Raymond Murphy, Essential English Grammar ,Cam bridge University Press 2015
- Online resources: You Tube – Daily Video Vocabulary, Vocab 24, TED Lectures, Inspirational Speeches/ Addresses of success people, Parliamentary Speeches, interviews, various internet channel devoted to learning and improving communication English

**Course Code: CEU02EDS**
**Course Name: Entrepreneurship Development and Start-Up**

Course Outline: The course titled Entrepreneurship and Start up, is designed is to give in-depth understanding on various aspects of innovation, creativity, evolving business models, incubation and entrepreneurship. The course also includes sessions on blue ocean strategy and technology incubation which are proving as game changer i n todays' competitive scenario.

The course is a blend of theory and practice therefore this course does not require any prerequisite and will be useful to understand innovation and its applications in different spheres of development and growth.

**Course Structure:**

| Module | Title |
|---|---|
| 1. | Analyzing the Current Business Scenario, Innovation and Creativity- An Introduction, Innovation in Current Environment, Types of Innovation, School of Innovation. |
| 2. | Challenges of Innovation, Steps of Innovation Management, Idea Management System, Divergent Vs. Convergent Thinking, Levers of Idea Management |
| 3. | Experimentation in Innovation Management, Idea Championship, Participation for Innovation, Co-creation for Innovation, Proto typing to Incubation. |
| 4. | What is a Business Model ,Who is an Entrepreneur ,Social Entrepreneurship Blue Ocean Strategy-I ,Blue Ocean Strategy-II |
| 5. | Marketing of Innovation, Technology Innovation Process, Technological Innovation Management Planning, Technological Innovation Management Strategies, Technology Forecasting |
| 6. | Sustainability Innovation and Entrepreneurship, Types of Sustainable Entrepreneurship, Conditions for Sustainable Innovation, strategic involvement in sustainable development, Exploration of business models for material efficiency services. |
| 7. | Management of Innovation, creation of IPR, Management of Innovation, creation of IPR, Types of IPR, Patents in India, Copyrights and other important IP |
| 8. | Business Models and value proposition, Business Model Failure: Reasons and Remedies Incubators : Business vs. Technology, managing Investor for Innovation, Future markets and Innovation needs for India. |

**REFERENCE:**


- 8 Steps to Innovation: Going From Jugaad To Excellence – Book by Rishikesha T. Krishnan and Vinay Dabholkar
- Innovation and Entrepreneurship Book by Peter Druker
- HBS series on Innovation and Entrepreneurship


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Faculty of Management Studies (VMPCMS)

Value Added Course Participant Details (2018-19)

| Sr. No. | Degree | Sem. | Enrl. No. | Name of the Student | Course Name |
|---|---|---|---|---|---|
| 166 | BBA (Financial Services) | 3 | 17052321012 | VADI MADHVIK VIPULBHAI | Entrepreneurship Development & Start-Up |
| 167 | BBA (Financial Services) | 3 | 18052322001 | PATEL DIVANSHI RAVIKUMAR | Entrepreneurship Development & Start-Up |
| 168 | BBA (Financial Services) | 3 | 18052322002 | PATEL VISHWA MAHESHKUMAR | Entrepreneurship Development & Start-Up |
| 169 | BBA (Marketing Management) | 3 | 17052341001 | JAYESH R KHUNTAD | Entrepreneurship Development & Start-Up |
| 170 | BBA (Marketing Management) | 3 | 17052341002 | KHANDHERIYA RAHUL PARVISHBHAI | Entrepreneurship Development & Start-Up |
| 171 | BBA (Marketing Management) | 3 | 17052341003 | PATEL JAIMIN SANJAYKUMAR | Entrepreneurship Development & Start-Up |
| 172 | BBA (Marketing Management) | 3 | 17052341004 | SHAH KARANKUMAR RAJESHBHAI | Entrepreneurship Development & Start-Up |
| 173 | BBA (Marketing Management) | 3 | 17052341006 | SOLANKI BHAVESH SHANKARLAL | Entrepreneurship Development & Start-Up |

Patel College of Management Studies V.M. Ganpat University Kherva-382712

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**GANPAT UNIVERSITY**
**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

Date: 23/02/2018

## NOTICE

**Subject:** Regarding Value Added Courses

It is hereby informed to all the students that for academic year 2017-18, V. M. Patel College of Management Studies has taken initiative of offering Value Added Course for holistic development of the students. It also aims at assisting students in their long-term growth. Value Added courses will serve as a bridge to fill the gap between formal education and corporate demands.

All the students of BBA (Gen/FS/MM)/B.Com./ M.Com of Semester 2 and 4 are required to take below given Value Added Course once in a year:

| Sr. No. | Class & Sem. | Course Name |
|---|---|---|
| 1 | BBA (Gen./FS/MM) 2 | Speaking Effectively |
| 2 | BBA (Gen./FS/MM) 4 | Speaking Effectively |
| 3 | B.Com 2 | Personality Development |
| 4 | B.Com 4 | Enhancing Soft Skills and Personality |
| 5 | M.Com 2 | Speaking Effectively |

Total 30 hours course will be completed on the basis of full day sessions of the respective class. Session will be conducted as per given time table during the month of March and April.

You can contact Dr. Usha Kaushik, Coordinator, for detailed information of the course and Certificate. The schedule of the sessions, Venue and Course contents are displayed on notice board.

V.M. Patel College of Management Studies * Ganpat University Kherva-382712

Dr. Usha Kaushik
Coordinator, VMPCMS

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**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

# Value Added Course Schedule

## Academic Year: 2017-18

## BBA (General / Financial Services / Marketing Management)

## Course Name: Speaking Effectively

| Class & Sem. | Venue | Time | Dates |
|---|---|---|---|
| BBA (Gen./FS/MM) Sem. 2 | Room No. 104 | 2:15 p.m. to 4:15 p.m. | **March, 2018:** $7^{th}$ - $9^{th}$; $14^{th}$ - $16^{th}$ $20^{th}$ - $23^{rd}$; $27^{th}$ - $30^{th}$ **April, 2018:** $3^{rd}$ |
| BBA (Gen./FS/MM) Sem. 4 | Seminar Hall 1 | 2:15 p.m. to 4:15 p.m. | **March, 2018:** $7^{th}$ - $9^{th}$; $14^{th}$ - $16^{th}$ $20^{th}$ - $23^{rd}$; $27^{th}$ - $30^{th}$ **April, 2018:** $3^{rd}$ |

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**V. M. PATEL COLLEGE OF MANAGEMENT STUDIES**

# Value Added Course Schedule

## Academic Year: 2017-18 B.Com. /

## M.Com.

## Course Name: Speaking Effectively

| Class & Sem. | Venue | Time | Dates |
|---|---|---|---|
| B.Com. Sem. 2 | Room No. 101 | 2:15 p.m. to 4:15 p.m. | **March, 2018:** $7^{th}$ - $9^{th}$; $14^{th}$ - $16^{th}$ $20^{th}$ - $23^{rd}$; $27^{th}$ - $30^{th}$ **April, 2018:** $3^{rd}$ |
| B.Com. Sem. 4 | Room No. 102 | 2:15 p.m. to 4:15 p.m. | **March, 2018:** $7^{th}$ – $9^{th}$; $14^{th}$ – $16^{th}$ $20^{th}$ - $23^{rd}$; $27^{th}$ - $30^{th}$ **April, 2018:** $3^{rd}$ |
| M.Com. Sem. 2 | Room No. 102 | 2:15 p.m. to 4:15 p.m. | **March, 2018:** $7^{th}$ – $9^{th}$; $14^{th}$ – $16^{th}$ $20^{th}$ - $23^{rd}$; $27^{th}$ - $30^{th}$ **April, 2018:** $3^{rd}$ |

**Course Code & Name: Speaking Effectively**

**COURSE OUTLINE:**

This course aims to introduce learners to the dynamics of effective spoken communication by establishing speaking as an autonomous medium with a distinctive vocabulary, syntax, structure, style and register. It will enable learners to participate in one to one interactions, in small groups and before a group. Learners are expected to master the fundamentals of speaking such as vocabulary, body language, pronunciation and basic conversation skills before they move on to more advanced activities such as appearing in interviews, making formal presentations and participating in meetings.

**COURSE STRUCTURE:**

| Module | Title |
|---|---|
| 1 | Introduction, Verbal Communication |
| 2 | Nonverbal Communication |
| 3 | Phonetics |
| 4 | Voice and delivery |
| 5 | Basic conversational skills |
| 6 | Appearing in interviews and taking interviews |
| 7 | Making and assessing presentations |
| 8 | Group discussions and meetings |

**REFERENCES:**


- Andersen, Peter A. Nonverbal Communication: Forms and Functions. Mountain View, CA: Mayfield, 1999.
- Connor, J.D. Better English Pronunciation. Cambridge: Cambridge University Press.2013.
- Bradbury, Andrew. Successful Presentation Skills: Build Confidence; Understand Body Language; Use Visual Aids Effectively. London: Kogan Page 2010.


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**Course Name: Enhancing Soft Skills and Personality**

**COURSE OUTLINE:**

The course aims to cause an enhanced awareness about the significance of soft skills in professional and inter-personal communications and facilitate an all-round development of personality. Hard or technical skills help securing a basic position in ones life and career. But only soft skills can ensure a person retain it, climb further, reach a pinnacle, achieve excellence, and derive fulfillment and supreme joy. Soft skills comprise pleasant and appealing personality traits as self-confidence, positive attitude, emotional intelligence, social grace, flexibility, friendliness and effective communication skills. The focus of this course is on interpersonal and management skills.

**COURSE STRUCTURE:**

| Module | Title |
|---|---|
| 1 | Highlighting Developing Soft Skills and Personality Course-1<br>Highlighting Developing Soft Skills and PersonalityCourse-2<br>Definitions and Types of Mind set<br>Learning Mindset<br>Developing Growth Mindsets |
| 2 | Importance of Time and Understanding Perceptions of Time<br>Using Time Efficiently, Understanding Procrastination,<br>Overcoming Procrastination, Don't Say "Yes" How to Make Others Happy |
| 3 | Types of People, How to Say "No, Controlling Anger, Gaining Power of Positive Thinking-1,<br>Gaining Power from Positive Thinking-2 |
| 4 | What Makes Others Dislike You?<br>What Makes Others Dislike You-1<br>What Makes Others Dislike You-2<br>Being Attractve-1<br>Being Attractve-2 |
| 5 | Common Errors-1 Common Errors-2,<br>Common Errors-3, Common Errors-4 |

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| | |
|---|---|
| | Common Errors-5 |
| 6 | Humour in Communication,<br>Humour in the Workplace,<br>Functon of Humour in the Workplace,<br>Money and Personality. Managing Money. |
| 7 | Health and Personality,<br>Managing Health-1: Importance of Exercise,<br>Managing Health-2: Diet and Sleep,<br>Love and Personality, Managing Love |
| 8 | Ethics and Etiquette<br>Business Etiquette<br>Managing Mind and Memory<br>Improving Memory<br>Care for Environment<br>Highlights of the Course |

**REFERENCES:**


- Dorch, Patricia. What Are Soft Skills? New York: Execu Dress Publisher, 2013.
- Kamin, Maxine. Soft Skills Revolution: A Guide for Connecting with Compassion for Trainers,
- Teams, and Leaders. Washington, DC: Pfeiffer and Company, 2013.
- Klaus, Peggy, Jane Rohman and Molly Hamaker. The Hard Truth about Soft Skills. London:
- HarperCollins E-books, 2007.


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**Ganpat University**

**Value Added Course**

**Personality Development**

| | | |
|---|---|---|
| 1 | **Personality Enhancement Tips** | No.Hours |
| | Personal grooming tips,<br>Group discussion tips<br>Public speaking and role play<br>Presentation tips | 5 |
| 2 | **Body Language** | 4 |
| | Forms of body language,<br>Tips to improve body language<br>Body language in building interpersonal relations<br>Body language in building industrial relations<br>Understanding and interpreting common gestures | |
| 3 | **Developing Positive Attitude** | 6 |
| | Introduction, factors which form attitude,<br>Ways of changing attitude in person,<br>Obstacles in developing positive attitude,<br>Developing positive attitude,<br>Workplace attitude and<br>Power of positive attitude.<br>Counseling | |
| 4 | **Etiquette and Manners** | 5 |
| | Introduction to etiquette,<br>Benefits of etiquette<br>Personal behavior etiquette<br>Office etiquette; Telephonic etiquette , Email etiquette,<br>Table etiquettes , Business meeting etiquette | |
| 5 | **Leadership** | 5 |
| | Time management<br>Team building and team work<br>Types of leaders<br>Characteristics of Charismatic leaders<br>Leadership Skills | |
| 6 | **Interview Skills** | 5 |
| | Cover letter<br>Effective Resume and CV writing<br>Preparing for interview (Research organization, dressing, body language, checklists for interview, frequently asked questions, do's and don'ts of interview.) | |

**Sources/Reference:**


Alex K.,Soft Skills Know Yourself and Know the World, Sultan Chand & Sons New Delhi

You tube Videos, Soft Skill books, Business Communication Books, Conversation books.



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# Ganpat University
## Mehsana Urban Institute of Sciences
List of Value-Added Courses Offered During Five Years

| Sr. No | Name of the value added courses (with 30 or more contact hours)offered | Course Code (if any) | Year of offering | No. of times offered during the same year | Duration of course |
|---|---|---|---|---|---|
| 1 | Enhancing Soft Skills and Personality | VAC01 | 2013-14 | 1 | 30 |
| 2 | Speaking Effectively | VAC02 | 2013-14 | 1 | 30 |
| 3 | Emotional Intelligence | VAC03 | 2013-14 | 1 | 30 |
| 4 | Educational Leadership | VAC04 | 2013-14 | 1 | 30 |
| 5 | Life Skills Development | VAC05 | 2013-14 | 1 | 30 |
| 6 | Quantitative Aptitude and Logical Reasoning | VAC06 | 2013-14 | 1 | 30 |
| 7 | Stochastic Processes | VAC07 | 2014-15 | 1 | 30 |
| 8 | Human Molecular Genetics | VAC08 | 2014-15 | 1 | 30 |
| 9 | NMR Research | VAC09 | 2014-15 | 1 | 30 |
| 10 | Fiber Optics | VAC10 | 2014-15 | 1 | 30 |
| 11 | Introduction to Research | VAC11 | 2016-17 | 1 | 30 |
| 12 | Basic Python Programming | VAC12 | 2016-17 | 1 | 30 |
| 13 | Image Processing | VAC13 | 2017-18 | 1 | 30 |
| 14 | Basic concept of Digital Media Marketing | VAC14 | 2017-18 | 1 | 30 |
| 15 | Social Networks | VAC15 | 2017-18 | 1 | 30 |
| 16 | Introduction to Internet of Things | VAC16 | 2018-19 | 1 | 30 |
| 17 | Artificial Intelligence: Knowledge Representation and Reasoning | VAC17 | 2018-19 | 1 | 30 |
| 18 | Introduction to Machine Learning | VAC18 | 2018-19 | 1 | 30 |
| 19 | MATLAB Programming for Numerical Computation | VAC19 | 2018-19 | 1 | 30 |
| 20 | Vedic Mathematics | VAC20 | 2018-19 | 1 | 30 |
| 21 | Women's Grooming and Professional Etiquette | VAC21 | 2020-21 | 1 | 30 |
| 22 | Men's Grooming and Professional Etiquette | VAC22 | 2020-21 | 1 | 30 |
| 23 | IELTS | VAC23 | 2020-21 | 1 | 30 |
| 24 | Communication for professional success and employability | VAC24 | 2020-21 | 1 | 30 |
| 25 | Innovation startup and entrepreneurship induction program | VAC25 | 2020-21 | 1 | 30 |

Mehsana Urban Institute of Sciences ★ Ganpat Vidyanagar ★ Ganpat University

# GANPAT UNIVERSITY

## FACULTY OF SCIENCE

| | | | |
|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2013-14 |
| Subject code | VAC01 | Subject Name | Enhancing Soft Skills and Personality |

**Learning Outcome:**

To inculcate and uphold values, morals and ethics in their professional environment (formal-informal). They will also know how developing genuine empathy towards others in life holds vital importance. They are also expected to gain a fresh new perspective towards leading a team, creating accountability, managing stress, improving health, managing professional and personal life and dealing with issues like money and love.

**Theory syllabus**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Emotional Intelligence, Spiritual Intelligence, Dealing with Emotions, Enhancing Empathy, Showing Sympathy, Dealing with Antipathy, Developing Emotional Bonding<br>Personal Ethics, Professional Ethics, Etiquette, Social Graces, Office Etiquette, Respecting Privacy & Space<br>Civic Sense, Care for the Environment, Negotiating, Decision-Making, Conflict-Resolution, Five Styles<br>Emotional Literacy, Assertiveness versus Aggressiveness, Learning to Say "NO" & Saying “Please" Learning to Appreciate and Give Praise, Dealing with Foreign Colleagues, Professional and Personal Excellence | 15 |
| 2 | Humour and Positivity, Humour for Effective Communication, Anecdotes for Breaking Monotony, Managing Time, Beating Procrastination, Finding Meaning & Purpose<br>Managing People, Leadership & Co-ordination, Team-Working & Co-operation, Developing Accountability, Commitment and Responsibility, Behaving Conscientious<br>Managing Stress Maintaining Stress-free life & work, Stopping Worrying, Maintaining Health, Boosting Memory, Enhancing Study Skills<br>Maintaining Positive Outlook, Managing Money, Managing Love, Dealing with Work Issues, Dealing with Life Issues, Balancing Work and Life | 15 |

**Reference Books**


| | |
|---|---|
| 1 | Dorch, Patricia. What Are Soft Skills? New York: Execu Dress Publisher, 2013. |
| 2 | Kamin, Maxine. Soft Skills Revolution: A Guide for Connecting with Compassion for Trainers, Teams, and Leaders. Washington, DC: Pfeiffer and Company, 2013. |
| 3 | Klaus, Peggy, Jane Rohman and Molly Hamaker. The Hard Truth about Soft Skills. London: HarperCollins E-books, 2007. |
| 4 | Petes S. J., Francis. Soft Skills and Professional Communication. New Delhi: Tata McGraw-Hill Education, 2011. |
| 5 | Stein, Steven J. and Howard E. Book. The EQ Edge: Emotional Intelligence and Your Success. Canada: Wiley and Sons, 2006. |

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## FACULTY OF SCIENCE

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|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2013-14 |
| Subject code | VAC02 | Subject Name | Speaking Effectively |

Learning Outcome:

As the main thrust here is to enable students to speak confidently, through this course students will be compelled to get rid of their inhibitions while speaking and gain in confidence to face formal as well as informal situations that require them to be verbal and articulate.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction, Verbal Communication, Nonverbal Communication, Phonetics, Voice and delivery | 15 |
| 2 | Basic conversational skills, Appearing in interviews and taking interviews, Making and assessing presentations, Group discussions and meetings | 15 |

Reference Books


| | |
|---|---|
| 1 | Andersen, Peter A. Nonverbal Communication: Forms and Functions. Mountain View, CA: Mayfield, 1999, |
| 2 | Connor, J.D. Better English Pronunciation. Cambridge: Cambridge University Press.2013 |
| 3 | Bradbury, Andrew. Successful Presentation Skills: Build Confidence; Understand Body Language; Use Visual Aids Effectively. London: Kogan Page 2010 |

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## FACULTY OF SCIENCE

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|---|---|---|---|---|
| Programme | B.Sc./M.Sc. | | Branch/Spec. | All |
| Semester | II/IV/VI | | Effective from Academic Year | 2013-14 |
| Subject code | VAC03 | Subject Name | Emotional Intelligence | |

Learning Outcome:

Students are likely to understand the inner-workings of emotional intelligence and how it shapes the circumstances around us. They are also to tap into its hidden potential to enhance happiness by developing emotional intelligence through spirituality and meditation.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction Emotion, Intelligence & Wisdom, Concept theory, measurement and applications of intelligence, Emotional intelligence: Concept, Theory and Measurements, Correlates of Emotional intelligence | 15 |
| 2 | Emotional intelligence, Culture, schooling 7 happiness, EQ mapping For enhancing emotional intelligence, Managing Stress, Suicide Prevention, through emotional intelligence, spirituality and meditation, Application of emotional intelligence at family, school and workplace | 15 |

Reference Books


| | |
|---|---|
| 1 | Emotional intelligence: Perspectives in Organisations by Dr. Rabindra Kumar Pradhan and Purnima Mathur. (2008), Delhi: Academic Excellence. |
| 2 | Emotional Intelligence at Work By Dalip Singh New Delhi: Response Books, 2006 (Sage). |
| 3 | Emotional Intelligence: Optimizing Human Performance at Work By Rabindra Kumar Pradhan and N S Thingujam (2012). Germany: Lap Lambert Academic Publishing |
| 4 | The Handbook of Emotional Intelligence: Theory, Development, Assessment, and Application at Home, School and in the Workplace By Reuven Bar-On and James D. A. Parker (2000). Jossey-Bass |

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## FACULTY OF SCIENCE

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| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2013-14 |
| Subject code | VAC04 | Subject Name | Educational Leadership |

Learning Outcome:

After having gone through this course, students will get to learn different types of leadership such as turnaround, transformative and institutional. They are also expected to emulate qualities that go into making charismatic leaders.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Educational Management & Leadership: Issues & challenges and Professional Development & the Reflective Practitioner<br>Professional Ethics & Values in Teaching and Key Challenges for Educational Leaders: Grooming Capable & Authentic Educational Leaders<br>Emotional Intelligence & Educational Leadership<br>Leadership for Managing Diversity & Inclusion in Education | 15 |
| 2 | Educational Leadership in a changing World : 21st Century Challenges<br>Innovative Pedagogy, Technology & Turnaround Leadership: The Stakeholders TM Perspectives<br>Transformative Leadership for engaging Higher Education & Social Change : A Strategic Approach<br>Institutional Leadership & Quality of Education : A Vision for nurturing Academic Leadership & Sustainable Education | 15 |

Reference Books

| | |
|---|---|
| 1 | Educational Leadership: Key Challenges and Ethical Tensions ; Author-Patrick Duignan, Cambridge University Press ; 2. |
| 2 | Educational Leadership: Context, Strategy and Collaboration; Author- Margaret Preedy, Nigel Bennett and Christine Wise, SAGE publication |

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| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2013-14 |
| Subject code | VAC05 | Subject Name | Life Skills Development |

Learning Outcome:

Students are expected to take with them this very vital skill-set called life-skills where they will put to use their critical thinking to cope with challenging situations in life and are also expected to excel in their career by becoming more self-aware.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **LIFE SKILL:** Definition and Importance of Life Skills, Life Skills Education, Life Skills Approach in Education and Training, Classification of Life Skills - Generic, Problem Specific and Area Specific Skills, Social & Negotiation Skills<br>**SELF-AWARENESS AND EFFECTIVENESS**<br>**Self-Awareness:** Definition, Importance, Dimensions, Components, Methods and Strategies for nurturing Self-Awareness<br>**Self-Effectiveness:** Body Image, Self Esteem, Punctuality, Honesty, Loyalty, Dependability, Reliability | 15 |
| 2 | **THINKING AND COPING SKILLS:** Nature, Elements of Thought and Types of Thinking<br>**Creative and Critical Thinking:** Definition, Nature, Stages<br>**Problem Solving and Decision Making:** Introduction of Problem Solving and Decision Making process<br>**Coping Skills:** Coping with Emotions: Definition, Characteristics,<br>Coping with stress: Definition, Sources of Stress, Strategies to Manage Stress<br>**LIFE SKILLS AND CAREER**<br>**Education:** Goal Setting, Time Management, Effective Learning: Study Skills and Memory Techniques, Examination Preparation<br>**Work/Career:** Factors Influencing Career Choice, Career Planning: Importance, Steps Interview: Types, Preparation, Do's and Don'ts, Life Skills for Effective Learning, Successful Career Planning & Development and Interview | 15 |

Text Books

| | |
|---|---|
| 1 | Life Skills Education by Dr. K. Ravikanth Rao, Dr. P. Dinakar - Neelkamal Publications Pvt. Ltd. |

Reference Books

| | |
|---|---|
| 1 | Personality Development and soft skills by Barun K Mitra-OXFORD |
| 2 | Career Counselling: A Handbook by Arulmani. G. and Arulmani Sonali Nag- Tata Mc Graw Hill Publishing Co |
| 3 | Psychology for Living- Adjustment, Growth and Behaviour Today(8th Edn.), by Duffy Grover Karen, Atwater Eastwood Pearson Education Inc, New Delhi. |

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## FACULTY OF SCIENCE

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| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2013-14 |
| Subject code | VAC06 | Subject Name | Quantitative Aptitude and Logical Reasoning |

Learning Outcome:

On successful completion of the course the students will be able to Understand the basic concepts of quantitative ability, logical reasoning and are expected to acquire satisfactory, gain competency in the use of verbal reasoning to be able to appear in various competitive exams like CAT, CMAT, GATE, GRE, GATE, UPSC, GPSC etc.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **OPERATIONS ON NUMBERS, H.C.F. & L.C.M OF NUMBERS, DECIMAL FRACTIONS:** Face value & Place Value, Types of numbers, Even & Odd numbers, Prime numbers, Tests of divisibility, Factors & Multiples, HCF or GCM or GCD, LCM, Product of HCF & LCM, Co primes, HCF & LCM of Fractions, Conversion of Decimal into Vulgar Fraction, Operations & Comparison on decimal fractions, Recurring Decimal, Basic Formulae for decimal fractions<br>**SIMPLIFICATION OF NUMBERS:** Square Roots & Cube Roots, BODMAS Rule, Modulus of a real number, Facts and Formulae of square roots and cube roots<br>**AVERAGE, PROBLEMS ON NUMBERS, PROBLEMS ON AGES AND PERCENTAGE:** Facts and Formulae of Average Concept of Percentage, Express x% as fraction, Express a/b as percent, Results on Population<br>**SIMPLE INTEREST:** Concept of principal and interest, Facts and formulae for simple interest | 15 |
| 2 | **PERMUTATION & COMBINATIONS:** Factorial notation, Number of permutations, Number of combinations, Facts and formulae of permutation and combinations<br>**PROBABILITY:** Experiment and Random experiment, Sample space, Probability of Occurrence of an event, Results on probability<br>**TIME & WORK, TIME & DISTANCE:** Facts and formulae for time and work, Facts and formulae for time and distance<br>**ODD MAN OUT & SERIES:** Facts, exercises and solutions for odd man out, Facts, exercises and solutions for series problems | 15 |

Text Books

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|---|---|
| 1 | QUANTITATIVE APTITUDE for competitive examinations by Dr.R.S. Aggarwal, S. CHAND publication |

Reference Books

| | |
|---|---|
| 1 | QUANTITATIVE APTITUDE for competitive examinations by ABHIJIT GUHA, Mc Graw Hill Education |
| 2 | GENERAL INTELLIGENCE AND TEST OF REASONING, Vikas Publishing House |

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| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2014-15 |
| Subject code | VAC07 | Subject Name | Stochastic Processes |

Learning Outcome:

Students are expected to achieve competencies like presenting the defining properties of various stochastic process models, creating a computerised sample of any type of continuous or discrete time stochastic process, identifying appropriate stochastic process model(s) for a given research or applied problem, supplementing logical and rational evidence of important theoretic results and implementing the theory to model real phenomena and answer some questions in applied sciences.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to stochastic process, Problems in random variables and distributions, Problems in Sequence of random variables, Definition, classification and Examples<br><br>Definition and simple stochastic process, Simple stochastic processes , Stationary processes, Autoregressive processes<br><br>Discrete-time Markov chains: Introduction, Definition and Transition Probability Matrix, Chapman-Kolmogorov Equations | 15 |
| 2 | Discrete-time Markov chains (contd.) : Classification of States and Limiting Distributions, Limiting and Stationary Distributions, Limiting Distributions, Ergodicity and stationary distributions, Time Reversible Markov Chain, Application of Irreducible Markov chains in Queueing Models, Reducible Markov Chains<br><br>Continuous-time Markov chains : Definition, Kolmogrov Differential Equation and Infinitesimal<br><br>Generator Matrix, Limiting and Stationary Distributions, Birth Death Processes, Poisson processes, M/M/1 Queueing model, Simple Markovian Queueing Models | 15 |

Reference Books


| | |
|---|---|
| 1 | J Medhi, Stochastic Processes, 3 rd edition, New Age International Publishers, 2009 |
| 2 | Liliana Blanco Castaneda, Viswanathan Arunachalam, Selvamuthu Dharmaraja, Introduction to Probability and Stochastic Processes with Applications, Wiley, 2012. |
| 3 | Kishor S. Trivedi, Probability and Statistics with Reliability, Queuing, and Computer Science Applications, 2nd Edition, Wiley, 2002. |

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## FACULTY OF SCIENCE

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| Programme | B.Sc./M.Sc. | | Branch/Spec. | All |
| Semester | II/IV/VI | | Effective from Academic Year | 2014-15 |
| Subject code | VAC08 | Subject Name | Human Molecular Genetics | |

Learning Outcome:

Students will learn to explain and consider problems arising from human genetics and will gain clear understanding of concepts in genetics: mutation /polymorphisms, heredity, Mendelian genetics, complex genetics. Besides, they will be able to conduct basic experiments and learn to interpret and evaluate the findings on their own.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Fundamentals of central dogma (DNA, RNA and proteins; mutations)<br>Chromosome structure and function (organization; structure-function relationship; chromosome abnormalities)<br>Genes in pedigree (Mendelian pedigree patterns, complications to pedigree patterns)<br>DNA cloning and hybridization techniques (vector based cloning; nuclei acid hybridizations; PCR-based DNA analyses) | 15 |
| 2 | Mutation and instability of human DNA (mutation and polymorphism; pathogenic mutations, repeat expansions)<br>Molecular pathology (types of mutations; animal models for human disease)<br>Identifying human disease genes (functional cloning versus positional cloning; mutation screening)<br>Complex diseases; The Human Genome and HapMap projects | 15 |

Reference Books


| | |
|---|---|
| 1 | "Human Molecular Genetics 4 Tom Strachan, Andrew P. Read Garland Science/Taylor & Francis Group, 2011 |

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| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2014-15 |
| Subject code | VAC09 | Subject Name | NMR Research |

Learning Outcome:

Students will have acquired understanding of basic principles of NMR, concepts of 1D and 2D NMR experiments Homonuclear 2D NMR, Heteronuclear 2D NMR. Further, they will be able to determine structure of molecules.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to NMR spectroscopy, Chemical shifts and J-coupling, One-dimensional proton NMR, One dimensional NMR of X-nuclei (13C, 15N, 31P and 19F) | 15 |
| 2 | Homonuclear 2D NMR, Heteronucler 2D NMR, Structure determination of molecules, Advanced topics (Solvent suppression, Drug Discovery, DOSY) | 15 |

Reference Books

| | |
|---|---|
| 1 | Basic One and Two Dimensional NMR: by Horst Fiebrolin. |
| 2 | NMR Spectroscopy Explained: by Neil Jacobsen |
| 3 | Understanding NMR spectroscopy: by James Keeler |
| 4 | Introduction to Spectroscopy: by Pavia et al |

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| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2014-15 |
| Subject code | VAC10 | Subject Name | Fiber Optics |

Learning Outcome:

Students are expected to identify and do classification of the structures of Optical fiber and its types. They will also gain knowledge about channel impairments like losses and dispersion, optical sources and detectors, design considerations of fiber optic systems and eventually, they will be able to conduct experiments, leading to well-founded results.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction, need for optical communication, salient features of optical fibers, ray theory of light guidance, numerical aperture, modes of a fiber, single and multimode fibers, step-index and graded-index fibers, fiber fabrication techniques<br><br>Transmission characteristics of optical fibers, attenuation, pulse broadening mechanism, intermodal dispersion, bit rate - length product, material dispersion, electromagnetic wave analysis of light propagation in an infinitely extended medium, em waves in dielectrics, boundary conditions<br><br>Electromagnetic analysis of planar optical waveguides, TE and TM modes, planar mirror waveguide, dielectric symmetric step-index, planar waveguide, symmetric and anti-symmetric modes, b-V curves, modal fields<br><br>Power associated with modes of dielectric symmetric planar waveguide, asymmetric planar waveguide, single polarization single mode waveguide, excitation of guided modes by prism coupling technique, radiation modes, optical fiber waveguide, EH and HE modes, weakly guiding fibers, LP modes, mode cut-offs, b-V curves | 15 |
| 2 | Optical fiber modes, field patterns, degeneracies, fractional power in the core, single mode fiber, cut-off wavelength, mode field diameter, bend loss, splice loss, waveguide dispersion, group delay<br>Total chromatic dispersion, pulse broadening and chirping, dispersion in gradedindex and multilayer fibers, optical fiber components and devices, directional coupler, power splitter, WDM coupler, polarization controllers, fiber Bragg gratings<br>Various types of fiber Bragg gratings, fabrication methods, applications, long period gratings, optical fiber amplifier, erbium doped fiber amplifier, dispersion management, dispersion shifted fiber, dispersion compensating fiber, sources for optical fiber communication, light emitting diode, internal and external quantum efficiencies, LED characteristics, laser diode<br>Detectors for optical communication, p-i-n photodetector, APD, System design, dispersion and attenuation limited systems, BER, power budgeting of fiber link, recent advances | 15 |

Reference Books


| | |
|---|---|
| 1 | Ghatak A K and Thyagarajan K, “Introduction to Fiber Optics”, Cambridge University Press |
| 2 | Saleh B E A and Teich M C, “Fundamentals of Photonics,” Wiley-Interscience |
| 3 | Agrawal G P, “ Optical Fiber Communication System,” Wiley-Interscience |
| 4 | Keiser G, “Optical Fiber Communications”, McGraw Hill |

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|---|---|
| 5 | Snyder A and Love J, “Optical Waveguide Theory”, Chapmann and Hall |
| 6 | Senior J M, “Optical Fiber Communications,” Pearson Prentice Hall |

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## FACULTY OF SCIENCE

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|---|---|---|---|---|
| Programme | B.Sc./M.Sc. | | Branch/Spec. | All |
| Semester | II/IV/VI | | Effective from Academic Year | 2016-17 |
| Subject code | VAC11 | Subject Name | Introduction to Research | |

Learning Outcome:

Students are likely to gain a deeper insight into what is research, te constituents of research and some of the ethical and sure-shot techniques to carry out research and disseminate their findings to the world.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | A group discussion on what is research, Overview of research, Literature survey<br>Experimental skills, Data analysis, Modeling skills | 15 |
| 2 | Technical writing, Technical Presentations, Creativity in Research<br>Creativity in Research, Group discussion on Ethics in Research | 15 |

Reference Books

| | |
|---|---|
| 1 | Research Methodology- Methods and Techniques, Kothari, C.K.,New Age International, New Delhi. |
| 2 | Research Methodology- A Step-By-Step Guide for Beginners, Ranjit Kumar, (Pearson Education, Delhi) |

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|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2016-17 |
| Subject code | VAC12 | Subject Name | Basic Python Programming |

Learning Outcome:

Students are expected to acquire programming skills, object-oriented skills in core Python, and develop the skill of designing and writing the Graphical user Interfaces along with the database applications in it (Python).

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction to Python:**<br>Installation and working with Python, Features of Python, The Basics: Literal Constants, Numbers, Strings, Variables, Identifier Naming, Data Types, Objects, Logical and Physical Lines, Indentation, Operators and Expressions, Control Flow statements: if, while loop, for loop, break, continue, Library: NumPy, Pandas | 10 |
| 2 | **Using Modules and Data Structures:**<br>Modules: Introduction, the from.Import statement, Creating your own Modules, Data Structures: List, Tuple, Dictionary, Sequences, Object-Oriented Programming: classes, objects, The Self, object Methods, The_init_method, Class and Object Variables, Inheritance, polymorphism, Exceptions: Errors, Handling Exceptions, Raising Exceptions, Using Finally | 10 |
| 3 | **String and File Manipulation:**<br>String Functions, Manipulating files and directories, Text files: reading/writing text and numbers from/to a file, creating and reading a formatted file. | 10 |

Reference Books


| | |
|---|---|
| 1 | Fundamental of Python: First Programs By Kenneth A. Lambert |
| 2 | Programming Python By Mark Lutz |

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## FACULTY OF SCIENCE

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|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2017-18 |
| Subject code | VAC13 | Subject Name | Image Processing |

Learning Outcome:

Students are expected to analyze, evaluate, and interpret the various techniques for image enhancement and restoration in the frequency domain using different modes of transforms, compression, and segmentation.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **INTRODUCTION:** What Is Digital Image Processing? The Origins of Digital Image Processing, Examples of Fields that Use Digital Image Processing, Fundamental Steps in Digital Image Processing, Components of an Image Processing System.<br>**DIGITAL IMAGE FUNDAMENTALS:** Elements of Visual Perception, Light and the Electromagnetic Spectrum, Image Sensing and Acquisition, Basic Concepts in Sampling and Quantization, Some Basic Relationships Between Pixels, An Introduction to the Mathematical Tools Used in Digital Image Processing.<br>**IMAGE ENHANCEMENTS IN THE SPATIAL DOMAIN:** Background, Some Basic Intensity Transformation Functions, Histogram Processing, Fundamentals of Basics of Spatial Filtering, Smoothing and Sharpening Spatial Filters | 15 |
| 2 | **IMAGE RESTORATION AND IMAGE SEGMENTATION:** A model of the Image Degradation/Restoration Process, Noise Models, Restoration in the Presence of Noisy Only-Spatial Filtering, Periodic Noise Reduction by Frequency Domain Filtering, Linear, Position-Invariant Degradations, Estimating the Degradation Function, Geometric Mean Filter, Image Reconstruction from Projections.<br>**IMAGE SEGMENTATION:** Fundamentals, Point, Line and Edge Detection, Thresholding, Region Based Segmentation, Segmentation Using Morphological Watersheds | 15 |

Text Books

| | |
|---|---|
| 1 | Digital Image Processing by Rafael C. Gonzalez and Richard E. Woods. |

Reference Books

| | |
|---|---|
| 1 | Digital Image Processing by S. Sridhar Oxford University Press |
| 2 | Fundamentals of Image Processing by Anil K Jain |
| 3 | The Image Processing Handbook by John C Russ, CRC & IEEE Press |
| 4 | Digital Image Processing using MATLAB by Rafael C. Gonzalez, Richard E. Woods, Steven |

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|---|---|---|---|---|
| Programme | B.Sc./M.Sc. | | Branch/Spec. | All |
| Semester | II/IV/VI | | Effective from Academic Year | 2017-18 |
| Subject code | VAC14 | Subject Name | Basic concept of Digital Media Marketing | |

Learning Outcome:

Students are likely to grasp the fundamentals of Mobile, Email, Digital, and Social Media Marketing to create the creative content, strategy, and its amplification for rapidly growing e-marketing in Digital world.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Digital Media Marketing:** Overview of the digital marketing, Digital and traditional marketing, Need of digital marketing, Objective of digital marketing, Different ways for digital marketing, Online marketing plan, Digital marketing strategies, promote business online, Introduction to online advertising -Email, Website, Blog, Blog posting, Blog integration with social media. | 10 |
| 2 | **Social Media Marketing:** Social networking, Social Media channels, Bookmarking, SMM tools, Content writing, Building brand, Lead generation, Facebook marketing, Facebook insight, Instagram and Linkedin marketing, Twitter, Building followers, Social media strategies. | 10 |
| 3 | **E-Mail & Mobile Marketing:** Overview of E-mail marketing, Email strategy and planning, Email Campion, Email Tools, Mail Chimp, Email Scheduling, Email Automation, Mobile Commerce, Mobile Integration, Mobile analytics. | 10 |

Reference Books


| | |
|---|---|
| 1 | eMarketing, The Essential guide to marketing in a digital world, Rob stokes, Minds , 5th Edition,Publication-Quirk |
| 2 | Digital marketing for Dummies , Ryan Deiss and Russ Hennesberry, 2017 |

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| Programme | B.Sc./M.Sc. | | Branch/Spec. | All |
| Semester | II/IV/VI | | Effective from Academic Year | 2017-18 |
| Subject code | VAC15 | Subject Name | Social Networks | |

Learning Outcome:

Students are enabled to analyse online dynamical modelling of social networks and the dimensions of Web.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to Graph Theory and Python , Analyzing Online Social Network Datasets , Power Law and Emergent Properties, Strength of Weak Ties, Homophily and Social Influence, Structural Balance | 15 |
| 2 | The Structure of the Web, Link Analysis and Web Search, Link Prediction, Information Cascades, Diffusion Behavior in Networks, The Small World Phenomenon | 15 |

Reference Books


| | |
|---|---|
| 1 | Networks, Crowds and Markets by David Easley and Jon Kleinberg, Cambridge University Press, 2010 (available for free download). |
| 2 | Social and Economic Networks by Matthew O. Jackson, Princeton University Press, 2010. |

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| Programme | B.Sc./M.Sc. | | Branch/Spec. | All |
| Semester | II/IV/VI | | Effective from Academic Year | 2018-19 |
| Subject code | VAC16 | Subject Name | Introduction to Internet of Things | |

Learning Outcome:

Students will be able to understand the characteristics of IoT and that will make them able to produce large amounts of data. That can also be used in applications such as Artificial Intelligence and Machine Learning.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to IoT, Sensing, Actuation, Basics of Networking, Communication Protocols, Sensor Networks, Machine-to-Machine Communications, Interoperability in IoT, Introduction to Arduino Programming, Integration of Sensors and Actuators with Arduino, Introduction to Python programming, Introduction to Raspberry Pi, Implementation of IOT with Raspberry Pi | 15 |
| 2 | Introduction to SDN, SDN for IoT, Data Handling and Analytics, Cloud Computing, Sensor-Cloud, Fog Computing, Smart Cities and Smart Homes, Connected Vehicles, Smart Grid, Industrial IoT, Case Study: Agriculture, Healthcare, Activity Monitoring | 15 |

Reference Books


| | |
|---|---|
| 1 | "The Internet of Things: Enabling Technologies, Platforms, and Use Cases", by Pethuru Raj and Anupama C. Raman (CRC Press) |
| 2 | "Internet of Things: A Hands-on Approach", by Arshdeep Bahga and Vijay Madisetti (Universities Press) |

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| Programme | B.Sc./M.Sc. | | Branch/Spec. | All |
| Semester | II/IV/VI | | Effective from Academic Year | 2018-19 |
| Subject code | VAC17 | Subject Name | Artificial Intelligence: Knowledge Representation and Reasoning | |

Learning Outcome:

Students are prepared to master the languages and techniques of KR that will help them to learn many computational tasks including text interpretation and cognitive robotics and to solve complex real-life problems.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction**<br><br>**Propositional Logic:** Language, Semantics and Reasoning, Syntax and Truth Values, Valid Arguments and Proof Systems, Rules of Inference and Natural Deduction, Axiomatic Systems and Hilbert Style Proofs, The Tableau Method, The Resolution Refutation Method<br><br>**First Order Logic (FOL):** Syntax, Semantics, Entailment and Models, Proof Systems, Forward Chaining, Unification, Forward Chaining Rule Based Systems, The Rete Algorithm,<br><br>Programming in a Rule Based Language, The OPS5 Expert System Shell<br><br>**Representation in FOL:** Skolemization, Knowledge Representation, Properties and Categories, Reification and Abstract Entities, Resource Description Framework (RDF), The Event Calculus: Reasoning About Change<br><br>**Mapping Natural Language to FOL:** Understanding = Fulfilling Expectations, Conceptual Dependency (CD) Theory, Understanding Language, Conceptual Analysis: Mapping English to CD Theory<br><br>**Programming in Logic:** Deductive Retrieval in Backward Chaining, Logic Programming, Prolog, Depth First Search and Efficiency Issues, Controlling Search, The Cut Operator in Prolog | 15 |
| 2 | **Theorem Proving in FOL:** Incompleteness of Forward and Backward Chaining, The Resolution Refutation Method for FOL, Clause Form and The Resolution Rule, FOL with Equality, Complexity<br><br>**Knowledge Structures:** Semantic Nets using Frames, Scripts, Script Applier Mechanism (SAM), Goals, Plans and Actions, Plan Applier Mechanism (PAM): Expectations and Recognition, PAM: Top Down and Bottom Up Reasoning<br><br>**Ontology and Description Logics:** A Description Logic, Normalisation, Structure Matching, Classification, A-box Reasoning, Extensions, ALC, Further Extensions<br><br>**Inheritance:** Taxonomies and Inheritance, Beliefs, Credulous and Skeptical Reasoning<br><br>**Default Reasoning:** Introduction to Default Reasoning, Circumscription, Minimal Models, The | 15 |

| | | |
|---|---|---|
| | Event Calculus Revisited, Default Logic, Autoepistemc Logic<br>**Reasoning in Multi-agent Systems:** Epistemic Logic: Kripke Semantics in a Multi Agent Scenario, The Muddy Children Puzzle | |
| Text Books | | |
| 1 | Ronald J. Brachman, Hector J. Levesque: Knowledge Representation and Reasoning, Morgan Kaufmann, 2004. | |
| 2 | Deepak Khemani. A First Course in Artificial Intelligence, McGraw Hill Education (India), 2013. | |
| Reference Books | | |
| 1 | Schank, Roger C., Robert P. Abelson: Scripts, Plans, Goals, and Understanding: An Inquiry into Human Knowledge Structures. Hillsdale, NJ: Lawrence Erlbaum, 1977. | |
| 2 | R. C. Schank and C. K. Riesbeck: Inside Computer Understanding: Five Programs Plus Miniatures, Lawrence Erlbaum, 1981. | |
| 3 | Murray Shanahan: A Circumscriptive Calculus of Events. Artif. Intell. 77(2), pp. 249-284, 1995. | |
| 4 | John F. Sowa: Conceptual Structures: Information Processing in Mind and Machine, Addison Wesley Publishing Company, Reading Massachusetts, 1984. | |
| 5 | John F. Sowa: Knowledge Representation: Logical, Philosophical, and Computational Foundations, Brooks/Cole, Thomson Learning, 2000. | |

# GANPAT UNIVERSITY

## FACULTY OF SCIENCE

| | | | |
|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2018-19 |
| Subject code | VAC18 | Subject Name | Introduction to Machine Learning |

**Learning Outcome:**

Students are expected to design and implement machine learning solutions to classification, regression, and clustering problems; and be able to evaluate and interpret the results of the algorithms.

**Theory syllabus**

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introductory Topics, Linear Regression and Feature Selection, Linear Classification, Support Vector Machines and Artificial Neural Networks, Bayesian Learning and Decision Trees, Evaluation Measures | 15 |
| 2 | Hypothesis Testing, Ensemble Methods, Clustering, Graphical Models, Learning Theory and Expectation Maximization, Introduction to Reinforcement Learning | 15 |

**Reference Books**


| | |
|---|---|
| 1 | T. Hastie, R. Tibshirani, J. Friedman. The Elements of Statistical Learning, 2e, 2008. |
| 2 | Christopher Bishop. Pattern Recognition and Machine Learning. 2e. |

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|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2018-19 |
| Subject code | VAC19 | Subject Name | MATLAB Programming For Numerical Computation |

Learning Outcome:

Students are expected to use MATLAB Programming for scientific computations and solve practical problems in Linear algebra.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to MATLAB Programming, This module will introduce the students to MATLAB programming through a few examples. Students who have used MATLAB are still recommended to do this module, as it introduces MATLAB in context of how we use it in this course, Basics of MATLAB programming, Array operations in MATLAB, Loops and execution control, Working with files: Scripts and Functions, Plotting and program output | 4 |
| 2 | Approximations and Errors, Taylor's / Maclaurin series expansion of some functions will be used to introduce approximations and errors in computational methods, Defining errors and precision in numerical methods, Truncation and round-off errors, Error propagation, Global and local truncation errors | 4 |
| 3 | Numerical Differentiation and Integration, Methods of numerical differentiation and integration, trade-off between truncation and round-off errors, error propagation and MATLAB functions for integration will be discussed, Numerical Differentiation in single variable, Numerical differentiation: Higher derivatives, Differentiation in multiple variables Newton-Cotes integration formulae, Multi-step application of Trapezoidal rule, MATLAB functions for integration | 4 |
| 4 | Linear Equations, The focus of this module is to do a quick introduction of most popular numerical methods in linear algebra, and use of MATLAB to solve practical problems, Linear algebra in MATLAB, Gauss Elimination, LU decomposition and partial pivoting, Iterative methods: Gauss Siedel, Special Matrices: Tri-diagonal matrix algorithm | 3 |
| 5 | Nonlinear Equations, After introduction to bisection rule, this module primarily covers Newton-Raphson method and MATLAB routines fzero and fsolve, Nonlinear equations in single variable, MATLAB function fzero in single variable, Fixed-point iteration in single variable, Newton-Raphson in single variable, MATLAB function solve in single and multiple variables, Newton-Raphson in multiple variables | 4 |
| 6 | Regression and Interpolation, The focus will be practical ways of using linear and nonlinear regression and interpolation functions in MATLAB, Introduction Linear least squares regression(including lsqcurvefit function), Functional and nonlinear regression (including lsqnonlin function), Interpolation in MATLAB using spline and pchip | 4 |

| | | |
|---|---|---|
| 7 | Ordinary Differential Equations (ODE) – Part 1, Explicit ODE solving techniques in single variable will be covered in this module, Introduction to ODEs; Implicit and explicit Euler's methods, Second-Order Runge-Kutta Methods, MATLAB ode45 algorithm in single variable, Higher order Runge-Kutta methods, Error analysis of Runge-Kutta method | 4 |
| 8 | Ordinary Differential Equations (ODE) – Practical aspects, This module will cover ODE solving in multiple variables, stiff systems, and practical problems. The importance of ODEs in engineering is reflected by the fact that two modules are dedicated to ODEs, MATLAB ode45 algorithm in multiple variables, Stiff ODEs and MATLAB ode15s algorithm<br>Practical example for ODE-IVP, Solving transient PDE using Method of Lines | 3 |
| Reference Books | | |
| 1 | MATLAB and its Applications in Engineering, Raj Kumar Bansal, Ashok Kumar Goel,<br>Manoj Kumar Sharma, Pearson. | |
| 2 | Getting started with MATLAB: A quick Introduction for scientists & engineers, Rudra Pratap | |

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|---|---|---|---|---|
| Programme | B.Sc./M.Sc. | | Branch/Spec. | All |
| Semester | II/IV/VI | | Effective from Academic Year | 2018-19 |
| Subject code | VAC20 | Subject Name | Vedik Mathematics | |

Learning Outcome:

After successful completion of the course, students will be able to perform complex mathematical calculations mentally and set aside their calculators. Students can invent their own methods and they are not limited to one method.

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Addition , Subtraction, Multiplication and Division:**<br>Introduction to Vedic Maths, History of Vedic Maths, Vedic Maths Formulae, High Speed Addition, Super-Fast Subtraction, Genius Mental Multiplication Techniques, Nikhilam Division. | 15 |
| 2 | **Squares & Cubes:**<br>Squaring of numbers in patterns, Squaring numbers with any number of digits, Square root, Cubing, Square root by observation, Cube root by observation. | 15 |

Reference Books

| | |
|---|---|
| 1 | Introductory Vedik Mathematics by Bachubhai B. Raval, Krishnachandra Prakashan |
| 2 | Vedik Ganan kriya by Bachubhai B. Raval, Krishnachandra Prakashan |

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|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2020-21 |
| Subject code | VAC21 | Subject Name | Women's Grooming and Professional Etiquettes |

Learning Outcome:

1. Learners will be familiar with appropriate dress and grooming in a formal setup
2. Learners will understand the three components of professional etiquettes – appearance, communication and behavior
3. Will be able to make first positive impression in professional settings

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | **Introduction**<br>Etiquette and communication<br>Do manners matter?<br>How to make an impression?<br>The personal touch | 3 |
| 2 | **Grooming**<br>Formal dressing<br>Casual dressing<br>Accessories for men<br>Footwear<br>General appearance<br>What to wear for different occasions?<br>Dealing with body odor<br>Dealing with bad breath<br>Dealing with hair<br>Using perfume | 6 |
| 3 | **Body language**<br>Facial expressions<br>Eye contact<br>Posture<br>Hand gestures<br>Hand shakes<br>Personal space | 4 |
| 4 | **Business card etiquettes**<br>Carrying business cards<br>Exchanging business cards<br>Receiving and storing business cards | 2 |

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|---|---|---|
| 5 | **E-mail etiquettes**<br>Drafting business email<br>Understanding the use of cc, bcc and replying to all options<br>Effective caption line/subject line<br>Effective salutations and complimentary close | 3 |
| 6 | **Cellular phone etiquettes**<br>Voice mail etiquette<br>Telephone etiquette --one on one<br>Conversations<br>Telephone etiquette-- conference calls and transferring calls | 4 |
| 7 | **Netiquettes-manners in online world**<br>Opening and closing<br>Tone of messages<br>Courtesy<br>Usage of fonts<br>Social media, Zoom and google meet etiquette | 4 |
| 8 | **Dining etiquettes at business meetings**<br>Napkin etiquettes<br>Drinking soup<br>Navigating the place setting<br>American and continental styles of eating<br>Seating arrangements<br>Cutlery etiquettes<br>Posture and behavior<br>Passing the food<br>Do's and Don'ts | 4 |
| | Total | 30hrs |

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|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2020-21 |
| Subject code | VAC22 | Subject Name | Men's Grooming and Professional Etiquettes |

Learning Outcome:

1. Learners will be familiar with appropriate dress and grooming in a formal setup
2. Learners will understand the three components of professional etiquettes – appearance, communication and behavior
3. Will be able to make first positive impression in professional settings

Theory syllabus

| Topics | Content | Hrs |
|---|---|---|
| 1 | **Introduction**<br>Etiquette and communication<br>Do manners matter?<br>How to make an impression?<br>The personal touch | 3 |
| 2 | **Grooming**<br>Formal dressing<br>Casual dressing<br>Accessories for men<br>Footwear<br>General appearance<br>What to wear for different occasions?<br>Dealing with body odor<br>Dealing with bad breath<br>Dealing with hair<br>Using perfume | 6 |
| 3 | **Body language**<br>Facial expressions<br>Eye contact<br>Posture<br>Hand gestures<br>Hand shakes<br>Personal space | 4 |
| 4 | **Business card etiquettes**<br>Carrying business cards<br>Exchanging business cards<br>Receiving and storing business cards | 2 |
| 5 | **E-mail etiquettes**<br>Drafting business email<br>Understanding the use of cc, bcc and replying to all options<br>Effective caption line/subject line<br>Effective salutations and complimentary close | 3 |
| 6 | **Cellular phone etiquettes**<br>Voice mail etiquette<br>Telephone etiquette --one on one<br>Conversations<br>Telephone etiquette-- conference calls and transferring calls | 4 |
| 7 | **Netiquettes-manners in online world**<br>Opening and closing | 4 |

| | | |
|---|---|---|
| | Tone of messages<br>Courtesy<br>Usage of fonts<br>Social media, Zoom and google meet etiquette | |
| 8 | **Dining etiquettes at business meetings**<br>Napkin etiquettes<br>Drinking soup<br>Navigating the place setting<br>American and continental styles of eating<br>Seating arrangements<br>Cutlery etiquettes<br>Posture and behavior<br>Passing the food<br>Do's and Don'ts | 4 |
| | Total | 30 hrs |

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## FACULTY OF SCIENCE

| | | | |
|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2020-21 |
| Subject code | VAC23 | Subject Name | IELTS |

Learning Outcome:

1. Learners will be familiar with appropriate dress and grooming in a formal setup
2. Learners will understand the three components of professional etiquettes – appearance, communication and behavior
3. Will be able to make first positive impression in professional settings

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Introduction to the basic structure of IELTS | 1 |
| 2 | IELTS listening test concept and its various question types, explanation and practice | 7 |
| 3 | IELTS reading test concept and its various question types, explanation and practice | 7 |
| 4 | IELTS writing test concept and its various question types, explanation and practice | 7 |
| 5 | IELTS listening test concept and its various question types, explanation and practice | 7 |
| 6 | Final test | 1 |

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|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2020-21 |
| Subject code | VAC24 | Subject Name | Communication for Professional Success and Employability (CPSE) |

Learning Outcome:

1. Learners will be familiar with appropriate dress and grooming in a formal setup
2. Learners will understand the three components of professional etiquettes – appearance, communication and behavior
3. Will be able to make first positive impression in professional settings

Theory syllabus

| Unit | Content | Hrs |
|---|---|---|
| 1 | Icebreaking, Significance and need for effective communication | 2 |
| 2 | Definition, Characteristics, Skills and guide to effective communication | 2 |
| 3 | Presentation skills | 2 |
| 4 | Group discussion | 2 |
| 5 | Debate | 2 |
| 6 | Extempore | 2 |
| 7 | Enhancing listening skills | 2 |
| 8 | Effective reading | 2 |
| 9 | Effective writing skills | 2 |
| 10 | Developing speaking skills | 2 |
| 11 | Interview skills | 2 |
| 12 | Small talk | 2 |
| 13 | Corporate Communication | 2 |
| 14 | Context based speaking | 2 |
| 15 | Social Communication skills | 2 |
| | Total | 30 hrs |

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|---|---|---|---|
| Programme | B.Sc./M.Sc. | Branch/Spec. | All |
| Semester | II/IV/VI | Effective from Academic Year | 2020-21 |
| Subject code | VAC25 | Subject Name | Innovation Startup and Entrepreneurship Program (Induction Program) |

Learning Outcome:

1. Identify entrepreneurial ideas and create innovative business models to effectively design value propositions, assemble and lead a well-compromised team, pursue big ideas that really matter to customers, domain, and GDP of the country, and craft a financial model that minimizes risks and maximizes your success.
2. Explore the marketing of innovations and gain understanding of short-term finance alternatives.

Theory syllabus

| Topics | Content | Hrs |
|---|---|---|
| 1 | About the Program, Schemes & Grants For Startups, Foundation of Entrepreneurship | 2 |
| 2 | Unlock your Creativity | 2 |
| 3 | Prepare for your Launchpad | 2 |
| 4 | Coffee with Entrepreneurs and Team building Workshop | 2 |
| 5 | Business is a career- In Conversation with Business Mentor | 2 |
| 6 | Meet the Motivators | 2 |
| 7 | detail Project Report & How to Prepare Pitch Deck | 2 |
| 8 | Moderating Session - I Hands On Training | 2 |
| 9 | Feasibility Analysis - Review of An Idea | 2 |
| 10 | Marketing Management | 2 |
| 11 | How to build an Online Presence for a Business | 2 |
| 12 | Exclusive Session: Building something big beyond the imagination | 2 |
| 13 | Unlock your Super brain- Workshop | 2 |
| 14 | Start-up which can create social impact- Social Entrepreneurship | 2 |
| 15 | Final Day Presentation | 2 |
| | Total | 30 hrs |

# Ganpat University
# Centre for Health and Applied Sciences

## VALUE ADDITION PROGAMS - "Programs that Enhance the Skill"

**Objective:** The value-added courses offered beyond the working hours of the institute. The value-added courses are a blend of theory classes/experimental learning/project-based learning/activity-based learning. The students have option to choose the courses according to their desires and inclinations. To provide value added course in order to equip them to enhance their curriculum and gain knowledge which will enable them to face the formidable challenges of the future.

**Following Value Added Courses offered by Institute:**

| Sr. No. | Name of Value-Added Courses Offered | Course Code | Year of Introduction |
|---|---|---|---|
| 1 | Personality Development | CVC01 | 2018-19 |
| 2 | Functional Foods and Nutraceuticals | CVC02 | 2019-20 |
| 3 | Effective Writing and Presentation Skill | CVC03 | 2019-20 |
| 4 | Bhagwat Geeta | UHV01 (DYSBG) | 2020-21 |

**Contact Hours:** 30 Hours or more

**Course Faculty:** Expert faculty from Ganpat University, outside university & Industry.

**Eligibility:** Courses are open for all CHAS students.

**Registration:** Submit the registration form duly filled by participants. Final list of participants is to be displayed on the notice board.

**General Timing:** 10.00 am – 1.00 pm on working Saturday of University.

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Faculty of
Architecture,
Design & Planning

# Clay Modeling Workshop



The most easily recognized form of sculpting is clay modeling, that is, the creation of a 3-dimensional piece of art typically using some type of clay: Plastilina (oil-based clay), self-hardening (non-firing) clay, ceramic/pottery clay, wax or other polymer-based material.

***13 February, 2019***

**Faculty of Architecture and Planning,**
**Ganpat University, Kherva-384012**

*www.gnu.fadp.ac.in*
8460652622

# CREATIVE IMPRESSION



PAPER
MARBLING



MINIATURE
PAINTING



CANVAS
PARINTING

5TH MARCH
2022

09.00am
ONWARDS

Faculty fo Architecture,
Design & Planning,
Ganpat University,
Kherva-384012

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Ganpat University
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Faculty of
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# Cynotype Workshop



# Brief

**The cyanotype process uses a mixture of iron compounds, which oxidize when exposed to UV light and are washed in water to create Prussian Blue images. The technique was invented in 1841 by Sir JohnHerschel and was popularised by photographer and botanist Anna Atkins.**

**Expert: Rajarshi Smart**

**Date:** *1st and 2nd JUNE 2022*
**Time**: *9.00 AM onwards.*

**Location:** *Faculty of Architecture, Design and Planning, Ganpat University, Kherva-384012*

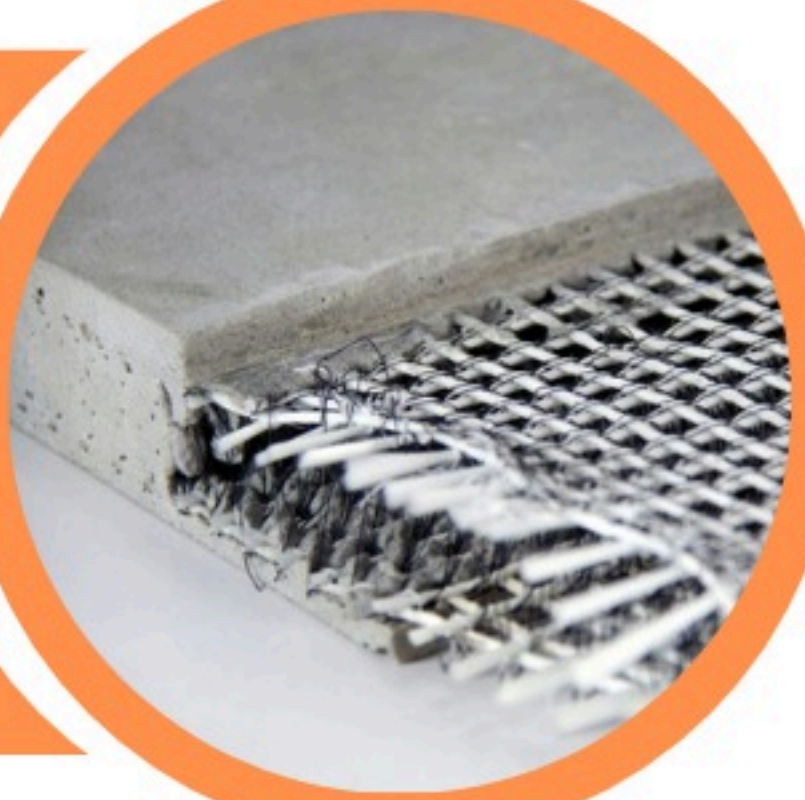
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MOB: +91-8460652622

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# FERRO CEMENT

Ferrocement is a construction material consisting of wire meshes and cement mortar. Applications of ferrocement in construction is vast due to the low self weight, lack of skilled workers, no need of framework etc. It was developed by P.L.Nervi, an Italian architect in 1940.



12 FEBRUARY 2019 | 7:00PM

FADP, GANPAT UNIVERSITY,
KHERVA-384012

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Faculty of
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in collaboration with

IGBC

# World Green Building Week 2021

22-23 September 2021
10:00 AM - 1:00 PM

## DAY 1
September 22, 2021
Time: 10:00 AM - 1:00 PM

## Green Sketching Campaign

Registration @ https://tinyurl.com/WGBWC

## DAY 2
September 23, 2021
Time: 10:00 AM - 1:00 PM



Guest of Honour
**Ar. Jayesh Hariyani**
Co-Chair, IGBC Ahmedabad Chapter
Chairman & Managing Director
INI Design Studio

## Expert Lectures



### Sustainable Architecture

**Ar. Anup Naik**
Director - Architecture
Urban Frame, Space Matrix Group
Bengaluru

10 :15 AM - 11:15 AM

Mr. Anup Naik serves as a Director of Space Matrix Design Consultants Pte. Ltd. Mr. Naik is extremely passionate

Venue
Conference Hall
New MBA Building

### Green Building Practice



**Ar. Arpan Johari**
Principal Architect of
AW Design,
Ahmedabad

11:30 AM - 12:30 PM

Arpan Johari is a practicing Architect with keen interest in Sustainability and Urbanism. He is the founder and

Join with zoom https://us02web.zoom.us/j/81252139957

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# LIGHT WORKSHOP

Metal sculpting, or alloy casting, is the process of creating objects of metal by pouring liquid metal into molds to form them in sculptures or other items. Copper, brass, bronze, and aluminum are the most common materials poured into molds. Making a metal sculpture is relatively easy and inexpensive.



14 February 2019

FACULTY OF ARCHITECTURE, DESIGN & PLANNING, GANPAT UNIVERSITY, KHERVA-384012

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Faculty of
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In continuation of
**World Architecture Day** celebration...

# LINOCUT WORKSHOP

"Linocut, also called linoleum cut, type of print made from a sheet of linoleum into which a design has been cut in relief. This process of printmaking is similar to woodcut, but, since linoleum lacks a grain, linocuts can yield a greater variety of effects than woodcuts can."



Time: 9AM Onwards
Date: 9th Oct 2021 to 10th Oct 2021
Venue: FADP, New MBA Building, Ganpat University-Kherva

**RSVP:**
**Nirmit Oza +91-8460652622**
**Tapan Patel +91-9662128811**
**Vivek Patva +91-9409320005**

**Ganpat Vidhyanagar, Mehsana-Gozariya Highway**
**PO-384012, North Gujarat, INDIA**
**Email: info@ganpatuniversity.ac.in**
**Toll Free No.:1800 233 12345**

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# METAL WORKSHOP

Metal sculpting, or alloy casting, is the process of creating objects of metal by pouring liquid metal into molds to form them in sculptures or other items. Copper, brass, bronze, and aluminum are the most common materials poured into molds. Making a metal sculpture is relatively easy and inexpensive.



14 February 2019

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# Souvenir Design




13 AUGUST 2020

FACULTY OF ARCHITECTURE,
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# mURAL WORKSHOP

Metal sculpting, or alloy casting, is the process of creating objects of metal by pouring liquid metal into molds to form them in sculptures or other items. Copper, brass, bronze, and aluminum are the most common materials poured into molds. Making a metal sculpture is relatively easy and inexpensive.

14 February 2019

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