

ZEAL INSTITUTE OF BUSINESS ADMINISTRATION, COMPUTER APPLICATION AND RESEARCH (ZIBACAR)

NARHE | PUNE | INDIA

DTE CODE: 6152



Criteria 1

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

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| Sr. No | Particulars | | | |
|--------|---|--|--|--|
| 1 | List of Courses Relevant to Cross Cutting Issues | | | |
| | - MBA Department | | | |
| | - MCA Department | | | |
| 2 | Students Photograph | | | |
| 3 | University provision for Links and Books regarding Human Values | | | |
| 4 | List of web Links for Sessions on Human Values, Environment and Sustainability | | | |
| 5 | List of Books on Human Rights | | | |



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PUN CODE: IMMP013170

DTE CODE: 6152

AISHE CODE: C-41828

List of Courses Relevant to Cross Cutting Issue Cross Cutting Issues- Professional Ethics, Gender, Human Values, Environment and Sustainability

MCA Department

| Sr. No | Course - | Course Name | List of Courses Relevant to Cross Cutting Issues | |
|-----------|----------|---|---|--|
| 1 | IT-22 | Software Project Management | Environment and Sustainability | |
| 2 | MT-21 | Optimization Technique | Environment and Sustainability | |
| 3 | IT-33 | Software Testing and Quality Assurance | Environment and Sustainability | |
| 4 | BM41 | PPM and OB | Professional Ethics Human Values | |
| 5 | SS11 | Soft Skills I | Professional Ethics Human Values | |
| 6 | SS21 | Soft Skills II | Professional Ethics Human Values | |
| 7 | SS31 | SoftSkills III | Professional Ethics Human Values | |
| 8 | CS I | Cyber Security I | Professional Ethics Human Values | |
| 9 | CS II | Cyber Security II | Professional Ethics Human Values | |
| 10 | CS III | Cyber Security III | Professional Ethics Human Values | |
| 11 | HR I | Human Values I | Professional Ethics Human Values | |
| 12 | HR II | Human Values II | Professional Ethics Human Values | |
| 13 | HR III | Human Values III | Professional Ethics Human Values | |



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1.3.1 Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum - MCA

| Sr. No. | Course | Cross cutting issue relevant to | Implication | |
|------------|--|---|--|--|
| 1 | Fundamentals of Computer | Environmental Sustainability | Motivated students and faculties to use digital media f course material. How different generation computers helps in energy conservation. | |
| 2 | C Programming with Data Structure | Human Values & Professional Ethics | Addressed the working of stack, queue by correlating Human Values and Professional Ethics | |
| 3 | Software Engineering | Professional Ethics | Software Engineering course deals with design of Software Requirements Specification (SRS) which is a comprehensive description of the intended purpose and environment for software under development. The SRS fully describes what the software will do and how it will be expected to perform. Methods of defining SRS are described by the IEEE (Institute of Electrical and Electronics Engineers) specification 830-1998. The IEEE is a professional body which regulates their own ethics in Software development with regard to SRS development. | |
| 4 | Database Management System | Human Values | Addressed cardinality concepts using human values and family relations | |
| 5 | Principles and Practices of Management and Organizational Behavior | Gender & Human Values & Professional Ethics | Addresses management principles in the organization and gender independent roles in team building, leadership. Encouragement is given to the students to explore the moral point of view and te develop a | |



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| | | | personal value system. Addresses Personal Values like Dignity of Labour, Sensitivity, Cleanliness, Politeness, Honesty. | |
|----|--------------------------------------|---------------------------------------|--|--|
| 6 | Business Process Domains | Human Values & Professional Ethics | Course implies processes and practices in business and their applications | |
| 7 | Soft Skill – Word Power | Human Values | Addresses vocabulary of English and competency for business English | |
| 8 | Essentials of Networking | Professional Ethics | Addresses different Network communication standards used worldwide, communication types and barrier | |
| 9 | Discrete Mathematics | Human values | Correlates logic and relations with ethical human values like do & don'ts, AND & OR | |
| 10 | Essentials of Marketing | Professional Ethics | Helps to figure out the functionalities of Marketing and IT enabled practices for organizations | |
| 11 | Soft Skill - Oral Communication | Human Values & Professional Ethics | Course focus on conversation with colleagues, Dialogues with Higher authorities | |
| 12 | Probability & Combinatorics | Human Values & Professional Ethics | Helps to Count similar things in sophisticated ways & Correlates mathematical underpinnings of probability with human values & professional ethics | |
| 13 | Multimedia Tools for Presentation | Professional Ethics | Various multimedia tools and software to make the presentation effective | |
| 14 | Soft Skill – Presentation | Professional Ethics | Addresses presentation ski.ls needed in business presentations | |
| 15 | Design And Analysis of Algorithm | Gender & Human Values | Addresses Space & time complexity importance for a software and correlates with gender equity chance given by god to achieve the life set position. | |
| 16 | Advance Internet Technologies | Professional Ethics | Provide extension to web development skills for student to enhance their skills | |
| 17 | IT Infrastructure Architecture | Professional Ethics | Addresses students to acquire knowledge of advance computer architecture & infrastructure requirement to | |



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| | | | startup a IT organization | |
|----|---|---------------------------------------|--|--|
| 18 | Data Centre Architecture & Storage Management | Environmental Sustainability | Focuses Layout of datacenters, cooling system options and environmental control, Fire Protection and Security Systems | |
| 19 | Introduction to Information Security | Human Values & Professional Ethics | Addresses on do and don'ts in using computer systems which correlates human and professional values | |
| 20 | Office Automation Tools | Professional Ethics | Gives in-depth loos on automation tools and its applications in the various areas of business Implies the importance of Centralized processing system with distributed and correlates the same with human | |
| 21 | Enterprise Resource Planning | Human Values & Professional Ethics | Implies the importance of Centralized processing syste with distributed and correlates the same with human values | |
| 22 | Data Communication & Computer Networks | Professional Ethics | Gives exposure to various computer networks, technologies behind networks and application protocol | |
| 23 | Data Warehouse, Mining, BI Tools& applications | Professional Ethics | Reveals importance of BI in emerging world by getting familiar with the d∃ta-warehousing and data mining techniques | |
| 24 | Information Security & Audit | Professional Ethics | Addresses about values of Information and how the Information security practices are meticulously implemented in IT companies worldwide | |
| 25 | Network Administration I | Gender & Professional Ethics | Offer fundamental knowledge about the network administration and also gives equal opportunity to male as well as female in network administration | |
| 26 | Windows Server Configurations | Gender & Professional Ethics | Put forward complete knowledge of windows server configuration & prepare the students for certification like MCITP (Microsof: Certified IT Professional) | |
| 27 | IT Infrastructure | Professional Ethics | Gives knowledge of project and operations management | |



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| | Monitoring | | | |
|----|---|--|---|--|
| 28 | Linux Administration I | Professional Ethics | Aware the installation, basic configuration and file system | |
| 29 | Optimization Techniques | Human Values | Optimum utilization of resources and optimum schede & path calculations, also helps to solve real life / simulated problems Helps to understand and solve real life problems scientifically & improves the decision making ability with the evidence of statistical techniques. Helps students to prepare for mock interviews with preparation of resumes & CV and for interviews. Empowers students in doing socket programming & develop server side applications Boosts students to implement concepts of object oriented data models, applications, familiarize with the data-warehousing and data-mining techniques Students adopt the skills and knowledge to understand how Cloud Computing Architecture can enable transformation, business development and agility in a organization. | |
| 30 | Research Methodology & Statistical Tools | Gender, Human Values & Professional Ethics | scientifically & improves the decision making ability | |
| 31 | Soft Skills -Interview | Gender equity & Professional Ethics | Helps students to prepare for mock interviews with | |
| 32 | Advanced Java | Professional Ethics | | |
| 33 | Python programming | Professional Ethics | Boosts students to implement concepts of object orient | |
| 34 | Advance DBMS | Professional Ethics | methodology Gain an awareness of the basic issues in objected oriented data models, applications, familiarize with the | |
| 35 | Cloud Computing | Professional Ethics | transformation, business development and agility in an | |
| 36 | Identity and Access Management | Professional Ethics | Intended to understand how IDA solutions are implemented in Windows Server 2008. | |
| 37 | IT Advisory Services | Gender equity & Professional Ethics | Students with the knowledge, skills were encourages for budding business model as IT Advisor. | |
| 38 | Infrastructure Security Audit | Professional Ethics | Students get aware about IT Security standards practices practicing globally | |
| 39 | E Commerce & Knowledge | Gender equity & | Students get exposure about different areas were e- | |



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| | Management | Professional Ethics | commerce plays vita_role and also creates affinity to participate in e-business activities. |
|----|---|--|--|
| 40 | Cyber Laws & Intellectual Property Rights | Gender equity & Professional Ethics | Aspirant gets knowledge about Cyber Crime, it's types and the IT Act and Cyber laws, also get motivated do work as legal advisor in cyber world by getting relevant degree |
| 41 | Customer Relationship Mgmt& Supply Chain Mgmt | Professional Ethics | Students recognize how IT is an enabler for SCM and CRM. Also functionalities of CRM in service sector |
| 42 | Software Quality Assurance & Control | Professional Ethics | Students got exposure about different Software Quality standards like ISO 9000 & Six Sigma |
| 43 | Network Administration II | Professional Ethics | Advanced knowledge about the network administration on VLAN, IP Routing, OSPF, IGRP, EIGRP etc |
| 44 | Wireless Networks | Professional Ethics | Addresses IEEE 802 11, 3G, 4G evolutions used in wireless communication |
| 45 | Software Project Management | Professional Ethics | Focuses process of software project management, cost estimation, use of project Management tools, configuration management, user roles and software teams |
| 46 | Project | Environmental Sustainability & Professional Ethics | Allowed students to take printout of both side of page, also instead of submitting 3 hard copies of project; permitted to submit only 2 hard copies and one soft copy. Also permitted to submit synopsis in soft copy. Students get exposure about practical implementation of professional ethics learnt through varied courses |
| 47 | Soft Skills - Group Discussion | Gender equity & Professional Ethics | Team building, Team briefing, Role of Team leader, Conflict resolution, Methodology of Group discussions, Role Functions in Group Discussion, Improving group performance, Mock group discussions |



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| 48 | ASP .Net using C# | Gender equity & Professional Ethics | Student gets ready to earn application development technology and may start their own business. | |
|----|--|--|--|--|
| 49 | Service Oriented Architecture | Gender equity & Professional Ethics | Helps to learn technology underlying the service design & various WS specification standards | |
| 50 | Quality verification | Professional Ethics | Awareness about the quality parameters and measure like ISO 9001, ISO 27001, LISA, EISA, | |
| 51 | Infrastructure Auditing & Implementation | Gender equity & Professional Ethics | Students with the knowledge, skills of Infrastructure Auditing get motivated to face the global challenges one might foresee in any venture. | |
| 52 | IT Service Management | Professional Ethics | Helps to extend the knowledge scope from Techniqu Management, and from Software Engineering to Ser- Science | |
| 53 | Digital and e-business Infrastructure and security mechanism | Professional Ethics | Knowledge of E-commerce and digital payments | |
| 54 | Entrepreneurship Development | Gender equity & Professional Ethics | Promoted and encourages students to learn process of starting enterprise and different professional ethics to be follow. | |
| 55 | Project | Environmental Sustainability | Allowed students to take printout of both side of page, also instead of submitting 3 hard copies of project; permitted to submit only 2 hard copies and one soft copy. Also permitted to submit synopsis in soft copy. Students get exposure about practical implementation of professional ethics learnt through varied courses | |





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AJSHE CODE: C-41828



Program Name: MCA

Course Name: Optimization Technique

Course Code: MT-21

Course Contents

Prerequisite:

Basic Software Engineering process

Course Objectives:

- 1. To learn process of Software Project Management.
- 2. To Study role of Project Manager in Project Management.
- 3. To learn Agile Project Management Framework.
- To study various role of Agile Team and Tools.
- 5. To understand project planning and tracking.

Course Outcomes:

Student will be able to

CO1: Understand the process of Software Project Management Framework and Apply estimation techniques. (Apply)

CO2: Learn the philosophy, principles and lifecycle of an agile project. (Understand)

CO3: Demonstrate Agile Teams and Tools and Apply agile project constraints and trade-offs for estimating project size and schedule (Apply)

CO4: Explain Project Tracking and Interpretation of Progress Report (Understand)

CO5: Analyze Problem statement and evaluate User Stories (Analyze)

Course Structure:

1. Linear Project Management Framework

- 1.1 Overview of project Management
- 1.2 Project management life cycle-IEEE Life Cycle
- 1.3 Project Management Process
- 1.4 Role of Project Manager
- 1.5 Quality Metrics
- 1.6 Risk Management Process (Case Study Based) 1.6.1 Risk Identification
- 1.6.2 Risk Analysis
- 1.6.3 Risk Mitigation
- 1.6.4 RMMM
- 1.7 Hands on MS Project Tool- Resource Allocation, Scheduling, Gannt chart

2. Linear Software Project Estimation:

2.1 Different methods of Cost estimation

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- 2.1.1 COCOMO-I & II model (Problem Statement)
- 2.1.2 Delphi cost estimation
- 2.2 Function Point Analysis (Problem Statement)
- 2.3 The SEI Capability Maturity Model CMM
- 2.4 Software Configuration management

Note:

Case studies/Numerical Problems based on COCOMO-I and FPA

Extra Reading:

KLOC, Rayleigh Curve, Change Management, Configuration management tool - SVN Tool or Redmine

3. Agile Project Management Framework

- 3.1 Introduction and Definition Agile, Agile Project Life Cycle
- 3.2 Agile Manifesto: History of Agile and Agile Principles
- 3.3 Key Agile Concepts:
 - 3.3.1 User stories, Story points
 - 3.3.2 Product Backlog
 - 3.3.3 Sprint Backlog,
 - 3.3.4 Sprint Velocity
 - 3.3.5 Swim lanes
 - 3.3.6 Minimum Viable Product (MVP)
 - 3.3.7 Version and Release
- 3.4 Agile Project Management v/s Traditional Project Management

Note:

Case studies based on agile vs. traditional project

Extra Reading:

Study Scrum Agile Framework, Agile project management delivery & methodology framework, Software project team management and different team structures

4 Agile Teams, Size and Schedule

- 4.1 Dynamic System Development Method
- 4.2 Value-Driven Development
- 4.3 Team and roles of an Agile Team
 - 4.3.1 Scrum Master
 - 4.3.2 Product Owner
 - 4.3.3 Development Team
- 4.4 Product Vision and Product Roadmap
- 4.5 Project Objective and Key Metrics
- 4.6 Introduction to User Stories
- 4.7 Estimate the Product Backlog
- 4.8 Techniques for estimating Story Points
- 4.9 Plan Product Releases
- 4.10 Product Prioritization

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Note:

Case studies based on Estimation of Product backlog & Story points, design your team and Add screenshots with the caption, Design User stories, log efforts and task in detail

Extra Reading:

Personnel Management, Release & iteration planning, extreme Programming (XP), Values and Principles, Team Dynamics and Collaboration

5.Tracking Agile Project and Reports

- 5.1 Introduction
- 5.2 Plan and Execute Iteration
- 5.3 Facilitate Retrospective, Making Team Decisions and Closing out Retrospective
- 5,4 Agile Reports
 - 5.4.1 Daily Reports
 - 5.4.2 Sprint Burn down Chart and Reports
- 5.5 Benefits of Agile Project Management

Note: Case studies based on No. of iterations and Project Report, Sprint Chart

Extra Reading: Use of MS Project to track agile project, Agile project management tools, Feature-Driven Development, Agile Metrics

6. Implementation with Agile Tools

- 6.1 Introduction of Agile Tools
- 6.2 Hands on GitHub
 - 6.2.1 Create Project using Kanban
 - 6.2.2 Project Repositories
 - 6.2.3 Continuous Integration
 - 6.2.4 Project Backlog
 - 6.2.5 Team Management
 - 6.2.6 Progress Tracking
 - 6.2.7 Releases
- 6.3 Implementation of Problem statement with Agile Tools- GitHub
- 6.3.1Designing Product Vision, Product Backlog,
- 6.3.2 Sprint Backlog, Estimate Story Points
- 6.3.3 Iteration Release

Note:

Case study on design of product vision & backlog with features and user stories, Estimation of story points, Design Iteration Plan, Iteration progress and close iteration in detail

Extra Reading:

Agile modelling, Explore various Agile Tools

List of Practical's (if any)

 Design Project Management plan template by using MS-Project tool. (Resource allocation, Scheduling, Cost Calculation and Gantr Chart)

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- Create project plan using agile methodologies for the development of web page of Library Management System as a minimum viable product using 3 resources as per sprint planning.
- Calculate the effort to execute the task and prioritize the task to execute in the current sprint and keep rest of the task in backlog.
- 4. Demo of the task developed by the developer in the Sprint.
- Retrospective to discuss about the short coming and improvement of the design and execution of the Sprint task.
- 6. Check in the developed code in the GitHub repository.





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Program Name: MCA

Course Name: Software Project Management

Course Code: IT-22

Course Contents

Prerequisite:

Basic mathematical knowledge is essentials.

Course Objectives:

- 1. To understand the role and principles of optimization techniques in business world.
- 2. To understand the process of problem statement formulation of the business scenario.
- 3. To understand the implementation of various decision-making techniques in the process of decision making.
- 4. To gain the techniques and skills on how to use optimization techniques to support the decision making in business world.

Course Outcomes:

Student will be able to

CO1: Understand the role and principles of optimization techniques in business world (Understand)

CO2: Demonstrate specific optimization technique for effective decision making (Apply)

CO3: Apply the optimization techniques in business environments (Apply)

CO4: Illustrate and infer for the business scenario (Analyze)

CO5: Analyze the optimization techniques in strategic planning for optimal gain. (Analyze)

Course Structure:

1. Linear Programming

- 1.1. Various definitions, statements of basic theorems and properties, Advantages and Limitations, 1.2. Application areas of Linear programming
- Linear Programming Concept
- 1.4. Simplex Method and Problems
- 1.5. Two Phase Simplex Method and problems,

Note:

Case study-based problems

Extra Readings:

Formulation of Linear programming, Solution of Linear programming, Solution of Linear programming,

2. Markov Chains & Simulation Techniques:

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- 2.1 Markov chains: Applications related totechnical functional areas,
- 2.2 Steady state Probabilities and its implications,
- 2.3 Decision making based on the inferences Monte Carlo Simulation.

Extra Readings:

Application of Markov chain in Queuing theory, Simulation techniques used in Machine learning and bioinformatics

3. Sequential model and related Problems

- 3.1 Processing n jobs through 2 machines
- 3.2 Processing n jobs through 3 machines
- 3.3 Processing n jobs through m machine

Extra Readings:

Processing of n jobs through m machines

4. PERT & CPM

- 4.1 Basic differences between PERT and CPM.
- 4.2 Network diagram
- 4.3 Time estimates (Forward Pass Computation, Backward Pass Computation
- 4.4 Critical Path
- 4.5 Probability of meeting scheduled date of completion,
- 4.6 Calculation on CPM network.
- 4.7 Various floats for activities
- 4 8 Event Slack
- 4.9 Calculation on PERT network.
- 4.10 Application of schedule based on cost analysis and crashing
- 4.11 Case study-based problems

Extra Readings:

Optimal Cost estimation by crashing the network, Explore the MS Project tool.

5. Game Theory

- 5.1 Introduction
- 5.2 n X m zero sum game with dominance
- 5.3 Solution using Algebraic, Arithmetic and Matrix strategy

Extra Readings:

Learn the difference between Sequential and Simultaneous game

6. Decision Analysis

- 6.1 Introduction to Decision Analysis
- 6.2 Types of Decision-making environment
- 6.3 Decision making under uncertainty and under risk
- 6.4 Concept of Decision Tree

Extra Readings:

1.3.1



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Decision models in Econometrics and computer science.

List of Practicals (if any)

Practicals to be conducted on the following topics. It is expected that, Applications to be covered using Python and /or R.

- 1. Linear Programming
- 2. Markov Chain and Simulation Techniques
- 3. Sequential models and related problems
- 4. CPM and PERT
- 5. Game Theory
- Decision Analysis

Research Software:

- 1. MS Excel Solver
- 2. TORA
- 3. Python and / or R programming

Websites:

- 1. www.orsi.in
- 2. www.atozoperationalresearch.com

Websites for practical sessions:

- https://towardsdatascience.com/linear-programming-and-discrete-optimization-with-pythonusing-pulp-449f3c5f6e99
- 2. https://github.com/topics/operations-research?l=python
- https://github.com/Gabeqb/Linear-Programming-With-Python/commit/a61be0d5fc8e66dd38f3d094bb80cef6a9a04152

Journals:

- 1. International Journal of Operations Research and Management science
- 2. International Journal of Operations and Quantitative Management
- 3. Indian Journal of Advance Operations Management.

Recommended Certifications:

- 1. Data science with Python
- 2. Data science with R programing
- 3. Certification in Machine Learning
- 4. Certification in Tableau





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Program Name: MCA

Course Name: Software Testing and Quality Assurance

Course Code: IT-33

Course Contents

Course Objectives:

- To understand the principles of software development emphasizing processes and activities of quality assurance
- To study fundamental concepts in software testing, including software testing objectives, process, strategies and methods.
- 3. To understand test design techniques based on functionality and structure of software
- 4. To understand test planning, monitoring and control process
- 5. To gain the techniques and skills on how to use software testing tools to support software testing activities

Course Outcomes:

Student will be able to

CO1: Understand the role of software quality assurance in contributing to the efficient delivery of software solutions. (Understand)

CO2: Demonstrate specific software tests with well-defined objectives and targets. (Apply)

CO3: Apply the software testing techniques in commercial environments. (Apply)

CO4: Construct test strategies and plans for software testing. (Analyze)

CO5: Demonstrate the usage of software testing tools for test effectiveness, efficiency and coverage (Apply)

Course Structure:

1. Software Quality Assurance Fundamentals

- 1.1. Definition of Quality, Quality Assurance, Quality Control, Difference between QA and QC, Software Quality Assurance Challenges
- 1.2. Software Quality Assurance, SQA Planning & Standards (ISO 9000, Six Sigma)
- 1.3. SQA Activities
- 1.4. Building Blocks of SQA
- 1.5. Software Quality factors
- 1.6. Software Quality Metrics: Process Metrics & Product Metrics
- 1.7. Software Reliability & Reliability Measurement Factors: ROCOF, MTTF, MTTR, MTBF,

PUNE 4

POFOD, Availability

Extra Reading:

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ISO/IEC 9126, ISO/IEC 25010:2011, Malcom Balridge

2. Software Testing Fundamentals

- 2.1. Definition & Objectives of Testing
- 2.2. Role of testing and its effect on quality
- 2.3. Causes of software failure: Definition of -Error, Bug, Fault, Defect and Failure,
- 2.4. Economics of Testing
- 2.5. Seven Testing Principles
- 2.6. Software Testing Life cycle
- 2.7. Validation & Verification Concepts V Model and W Model
- 2.8. Agile Testing- Test Driven Software Development
- 2.9. Levels of Testing- 2.9.1. Unit (Component) Testing
- 2.9.2. Integration Testing
- 2.9.3. System Testing
- 2.9.4. User Acceptance Testing (UAT)
- 2.10. Test Types 2.10.1. Functional testing (Black-box)
- 2.10.2. Non-functional testing (Testing of software product characteristics)
- 2.10.3. Structural testing (White-box)
- 2.10.4. Testing related to changes Confirmation (Re-testing) and Regression Testing
- Non-Functional Testing Types 2.11.1. Performance (Load & Stress)
- 2.11.2, Usability
- 2.11.3. Maintainability
- 2.11.4, Portability





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Program Name: MCA

Course Name: PPM and OB Course Code: BM - 41

Course Contents

Course Objectives:

 This course aims to improve students understanding of Management & human behavior in organization and the ability to lead people to achieve more effectively toward increased organizational performance.

Course Outcomes:

Student will be able to

CO1: Describe and analyze the interactions between multiple aspects of management.
(Understand)

CO 2: Analyze the role of planning and decision making in Organization (Analyze)

CO 3: Justify the role of leadership qualities, Motivation and Team Building. (Analyze)

CO 4: Analyze stress management and conflict management (Analyze)

CO 5: Describe Personality and Individual Behavior (Understand)

Course Structure:

Management:

- 1.1. Meaning and Definition
- 1.2. The need, scope and process of Management
- 1.3. Managerial levels/Hierarchy
- 1.4. Managerial functions: Planning, Organizing, Staffing Directing, Controlling
- 1.5. Types of managers & its Skill: Functional, Specialize, Generalize
- 1.6. Social responsibility of management

2. Nature & Development of Management Thought:

- 2.1. Historical perspective
- Evolution of Management: Introduction to Scientific Management by Taylor, Administrative Management by Fayol, Contribution of Peter Drucker
- 2.3. System approach-with reference to management, organization and MIS
- 2.4. Contingency approach

3. Decision making:

- 3.1. Introduction
- Decision making environment. Decision making under certainty, under uncertainty, under risk
- 3.3. Types of Decision, decision making processes & Tools
- 3.4. Individual Vs Group decision making E-41

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3.5. Herbert Simon's Model & Principle of Rationality

Note:

Case studies should be covered on this topic

4. Organization, Organizational Behavior & Organizational Culture:

- 4.1. Definition and Need for Organization
- 4.2. Introduction to OB, Organizing Process
- 4.3. Organizational structure (Functional organization, Product Organization, Territorial Organization)
- 4.4. Introduction- Development and Levels of Organizational Culture
- 4.5. Types of Corporate Culture

5. Motivation and Leadership:

- 5.1. Concept of Motivation, Benefits to organization and Manager
- 5.2. Maslow's need Hierarchy theory
- 5.3. Herzberg's Motivation- Hygiene Theory
- 5.4. Theory X and Y, Theory Z
- 5.5. Definition, Nature, Qualities of Leader, Leader V/s Manager
- Leadership Styles (Autocratic, Participative, Laissez faire or subordinate-centered, Bureaucratic leadership, Transformational leadership, Transactional leadership)

6. Team Building:

- 6.1. Concept of Team, Nature, Benefits from team,
- 6.2. Types of Teams
- 6.3. Creating Effective Teams, Turning Individuals into Team Player.

Note:

Case studies should be covered on this topic

7. Stress Management and Conflict management:

- 7.1. Work stress: Meaning of stress, Stressors, Sources of Stress, Types of stress
- 7.2. Stress Management strategies
- 7.3. Concept of Conflict, Functional versus Dysfunctional Conflict
- 7.4. Five stage Conflict Process, Types of Conflict (Task Conflict, Relationship Conflict, Process Conflict, Personality Conflict, Intergroup Conflict)
- 7.5. Managing Conflict (Styles for Handling Dysfunctional Conflict, Third-Party Interventions)
 Note:

Case studies should be covered on this topic

8. Personality and Understanding Individual Behavior:

- 8.1. Introduction, Definition of Personality Determinants of Personality
- 8.2. Personality Theories -Personality and Organization
- 8.3. Personality Structure -Personality and Behavlor
- 8.4. Ego State, Johari window- Transactional Analysis

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Program Name: MCA Course Name: Soft Skills I

Course Code: SS11

Course Contents

The syllabi should consist of practical and the theoretical aspects as well. For every component there shall be the practical and theoretical contents as well.

Objectives:

1. To make students well versed with at the business communication skills.

| Development of Proficiency in English: Practice on Oral and spoken communication skill & testing -voice & accent, voice clarity, voice modulation & intonation, word stress etc. Feedback and questioning Technique Objectiveness in Argument Development etiquettes and manners Study of different pictorial expression of non-verbal communication and its analysis Concepts of effective communication: Components of effective communication: Communication process and handling them KISS (Keep it short and sweet) is communication—Composing effective messages. Non-Verbal Communication: Expression, Posture, Gesture, Eycontact, appearance (dress code). | | 9 |
|--|--|---|
| CANADA CONTRACTOR OF THE PROPERTY OF THE PROPE | Punctuation Meaning & opposites Real Life conversations Vocabulary building Understanding the Audience, Need analysis through presentation feedback form | 6 |
| Presentation Skill practice Preparing in presentation Delivery of presentation | Conceptof4methodsforpresentation6 Prepara6tion&introduction Presentation Evaluation/feedback Summarization/ConclusionTeamBuildin ggames,TogetherEveryoneAchievesMiracle(TE AM),issueswhenthereisnoteamwork,Leadership energingthroughteam,Howtoidentifyteamplayer | 6 |
| 3.1 | Page 47 out of 63 | |



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| 4 | Team Building /Coordination Skills Team Building Practices through group exercises, team ask /role play Ability to mixing & accommodation Ability to work together | Concept of Group Group Dynamics Teambuilding | 4 |
|---|---|--|---|
| 3 | Tele-etiquette Receiving Call, Transferring calls Taking Message/ Voice Mails Making Outgoing Calls Receiving Fax | Working principle of Mini exchange and its features and facilities. | 2 |
| 6 | Self-Management Self-Evaluation, Self-Discipline Self-Criticism Recognition of one's own limits and deficiencies Independency etc. Thoughtful & Responsible Self-Awareness | Self-Management Identifying one's strengths and weaknesses Planning & Goal setting Managing self-emotions, ego, pride. | 2 |
| 7 | TeamManagementTechniquePracticebygame play&otherlearningmethodologyforachievingta rgetsandgettingoffrightfirsttime. | Time Management concept Attendance, Discipline & Punctuality Act in time on commitment Quality/Productive Time | 1 |





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AISHE CODE: C-41828



Program Name: MCA

Course Name: Cyber Security I

Course Code: CS I

Course Contents

Introduction to Cyber Security / Information Security

Syllabus for 'Introduction to Cyber Security / Information Security' program for students of University of Pune is given below.

The program will be of 4 credits and it will be delivered in 60 clock hours

Course material for this program will be developed by CINS

These clock hours also includes practical sessions and demonstrations wherever required.

Module 1: Pre-requisites in Information and Network Security

Chapter 1: Overview of Networking Concepts

- 1. Basics of Communication Systems
- 2. Transmission Media
- 3. Topology and Types of Networks
- 4. TCP/IP Protocol Stacks
- 5. Wireless Networks
- 6. The Internet

Chapter 2: Information Security Concepts

- 1. Information Security Overview: Background and Current Scenario
- 2. Types of Attacks
- 3. Goals for Security
- 4. E-commerce Security
- 5. Computer Forensics
- 6. Steganography

Chapter 3: Security Threats and Vulnerabilities

- Overview of Security threats
- 2. Weak / Strong Passwords and Password Cracking
- 3. Insecure Network connections
- 4. Malicious Code
- 5. Programming Bugs
- 6. Cyber crime and Cyber terrorism
- Information Warfare and Surveillance

Chapter 4: Cryptography / Encryption

- 1. Introduction to Cryptography / Encryption
- 2. Digital Signatures
- 3. Public Key infrastructure





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- 4. Applications of Cryptography
- 5. Tools and techniques of Cryptography

Module 2: Security Management

Chapter I: Security Management Practices

- 1. Overview of Security Management
- 2. Information Classification Process
- 3. Security Policy
- 4. Risk Management
- 5. Security Procedures and Guidelines
- Business Continuity and Disaster Recovery
- 7. Ethics and Best Practices

Chapter 2: Security Laws and Standards

- 1. Security Assurance
- 2. Security Laws
- 3. IPR
- 4. International Standards
- 5. Security Audit
- 6. SSE-CMM / COBIT etc

Module 3: Information and Network Security

Chapter 1: Access Control and Intrusion Detection

- 1. Overview of Identification and Authorization
- Overview of IDS
- 3. Intrusion Detection Systems and Intrusion Prevention Systems

Chapter 2: Server Management and Firewalls

- 1. User Management
- 2. Overview of Firewalls -
- 3. Types of Firewalls
- 4. DMZ and firewall features

Chapter 3: Security for VPN and Next Generation Technologies

- 1. VPN Security
- 2. Security in Multimedia Networks
- 3. Various Computing Platforms: HPC, Cluster and Computing Grids
- Virtualization and Cloud Technology and Security

Module 4: System and Application Security

Chapter 1: Security Architectures and Models

- 1. Designing Secure Operating Systems
- 2. Controls to enforce security services



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3. Information Security Models

Chapter 2: System Security

- 1. Desktop Security
- 2. email security: PGP and SMIME
- 3. Web Security: web authentication, SSL and SET
- 4. Database Security

Chapter 3: OS Security

- 1. OS Security Vulnerabilities, updates and patches
- 2. OS integrity checks
- 3. Anti-virus software
- 4. Configuring the OS for security
- 5. OS Security Vulnerabilities, updates and patches

Chapter 4: Wireless Networks and Security

- 1. Components of wireless networks
- 2. Security issues in wireless





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PUN CODE: IMMP013170

DTE CODE: 6152

AISHE CODE: C-41828



Program Name: MCA

Course Name: Human Values I

Course Code: HR I

Course Contents

I) Basic Concept:

- a) Human Values- Dignity, Liberty, Equality, Justice, Unity in Diversity, Ethics and Morals
- b) Meaning and significance of Human Rights Education

II) Perspectives of Rights and Duties:

- a) Rights: Inherent-Inalienable-Universal- Individual and Groups
- b) Nature and concept of Duties
- c) Interrelationship of Rights and Duties

III) Introduction to Terminology of Various Legal Instruments:

- a) Meaning of Legal Instrument- Binding Nature
- b) Types of Instruments: Covenant-Charter-Declaration-Treaty-Convention-Protocol-Executive Orders and Statutes

IV) United Nations And Human Rights:

- a) Brief History of Human Rights- International and National Perspectives
- b) Provision of the charters of United Nations
- c) Universal Declaration of Human Rights- Significance-Preamble
- d) Civil and Political Rights-(Art. 1-21)
- e) Economic, Social and Cultural Rights-(Art.22-28)
- f) Duties and Limitations-(Art. 29)
- g) Final Provision (Art. 30)





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NARHE PUNE | INDIA

PLIN CODE: IMMP013170

DTE CODE: 6152

AISHE CODE: C-41828



Program Name: MCA

Course Name: Human Values II

Course Code: HR II

Course Contents

I) General Introduction:

- a) Meaning and Concept of Vulnerable and Disadvantaged
- b) Groups, Customary, Socio Economic and Cultural Problems of
- c) Vulnerable and Disadvantaged Groups

II) Social status of women and children in International and national perspective:

- a) Human Rights and Women's Rights -International and National Standards
- b) Human Rights of Children-International and National Standards

III) Status of Social and Economically Disadvantaged people:

- a) Status of Indigenous People and the Role of the UN
- b) Status of SC/ST and Other Indigenous People in the Indian Scenario
- c) Human Rights of Aged and Disabled
- d) The Minorities and Human Rights

IV) Human rights of vulnerable groups:

- a) Stateless Persons
- b) Sex Workers
- c) Migrant Workers
- d) HIV/AIDS Victims





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PUN CODE: IMMP013170

DTE CODE: 6152

AISHE CODE: C-41828



Program Name: MCA

Course Name: Human Values III

Course Code: HR III

Course Contents

1. Human Rights in Indian Context:

- a) Indian Bill of Rights AndSarvodaya
- b) Preamble- Fundamental Rights- Directive Principles-Fundamental Duties

II. Human Rights- Enforcement Mechanism:

- a) Human Rights Act, 1993
- b) Judicial Organs- Supreme Court (Art 32) And High Courts(Art 226)
- c) Human Rights Commission- National and State of Maharashtra
- d) Commission of Women, children, Minority, SC/ST
- e) Survey of International Mechanism

III. Human Rights Violations and Indian Polity:

- a) Inequalities in society-population-illiteracy-poverty-caster-inaccessibility of legal redress
- b) Abuse of Executive Power-Corruption-Nepotism and favoritism
- c) Human Rights and Good Governance

IV. Role of Advocacy Groups:

- a) Professional Bodies: Press, Media, Role of Lawyers-Legal Aid
- b) Educational Institutions
- c) Role of Corporate Sector
- d) NGO's



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DTE CODE: 6152

AISHE CODE: C-41828



🎑 GPS Map Camera



ZIBACAR, Maharashtra, India

ZIBACAR S.No. 39, Narhe, Narhe, Pune, Maharashtra 411041, India

Lat 18.448565°

Long 73.824865°

07/03/23 12:51 PM GMT +05:30

Lecture on "Core Values" in progress for students





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Lecture on "Human Values" in progress for students





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Lecture on "Human Values and Professional Ethics" in progress for students





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Lecture on "Human Values and Professional Ethics" in progress for students





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Lecture on "Human Values and Professional Ethics" in progress for students





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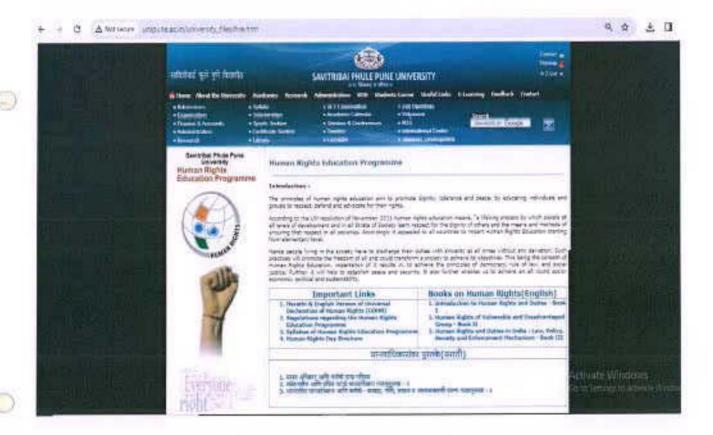
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University provision for Links and Books regarding Human Values





Brown

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List of Web links for Cross Cutting Issues- Professional Ethics, Gender, Human Values, Environment and Sustainability

| Sr. No. | Web Links | Topic | Cross Cutting Issues Covered Professional Ethics/ Gender/ Human Values/ Environment and Sustainability |
|------------|---|---|--|
| 1. | http://eclm.unipune.ac.in/view.aspx?vid=88 | Human Rights Education Programme Basic Concept of Equality | Human Values |
| 2. | http://eclm.unipune.ac.in/view.aspx?vid=15 0 | Relationship between Values and Human Rights | Human Values |
| 3 | https://eclm.unipune.ac.in/View.aspx?vid=7 | An Overview Of Human Rights 1 | Human Values |
| 4 | https://eclm.unipune.ac.in/View.aspx?vid=7 | Human Rights Civil Political Rights | Human Values |
| 5 | https://eclm.unipune.ac.in/View.aspx?vid=7 8 | Human Rights Economic Social Cultural Rights 2 | Human Values |
| 6 | https://eclm.unipune.ac.in/View.aspx?vid=89 | Human Rights Education Programme Brief History of Human Rights | Human Values |
| 7 | https://eclm.unipune.ac.in/View.aspx?vid=9 0 | Human Rights Education Programme Introduction | Human Values |
| 8 | https://eclm.unipune.ac.in/View.aspx?vid=9 | Human Rights Education Programme Overview Of Human Rights Programme | Human Values |
| | https://www.youtube.com/watch?v=5lrn4c | Environmental | Environment and |

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| 9 | DQZzo | Sustainability – Ideal way to save Nature | sustainability |
|----|---|---|-----------------------------------|
| 10 | https://www.youtube.com/watch/v=2EZ50 wxosDg | The Power of Sustainability | Environment and sustainability |
| 11 | https://www.youtube.com/watch?v=x7fxjq_ Tij0 | Professional Values & Ethics | Professional Ethics |
| 12 | https://www.youtube.com/watch?v=vsv0rO VDstE&list PLdrzzHoWTuwWKKIaB- xbGbePhfstmsRC- | Ethics in the Workplace - Skills for Success | Professional Ethics |
| 13 | https://www.youtube.com/watch?v=b_n6i1u g0tQ&list=PLdrzzHoWTuwWKKlaB- xbGbePhfstmsRC-&index=3 | Ethics in the Workplace - A Good Work Ethic | Professional Ethics |
| 14 | https://www.youtube.com/watch?v=ahH_P_ 5yVSo&list=PLdrzzHoWTuwWKKIaB- xbGbePhfstmsRC-&index=5 | Business Ethical Dilemmas and Stakeholders | Professional Ethics |
| 15 | https://www.youtube.com/watch?v=BAswj8 evFZk | How Ethics Can Help You Make Better Decisions | Professional Ethics |
| 16 | https://www.youtube.com/watch?v=7n9IOH 0NvyY | Why Gender Equality Is Good for Everyone | Gender and Professional Ethics |



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List of Books for Cross Cutting Issues- Professional Ethics, Gender, Human Values, Environment and Sustainability

| Sr. No. | Name of Book | Author | Cross Cutting Issues Covered Professional Ethics/ Gender/ Human Values/ Environment and Sustainability |
|---------|--|-----------------------------|---|
| 1 | Professional Ethics: Need for the 21st Century | R. Subramanian | Professional Ethics |
| 2 | PROFESSIONAL ETHICS AND HUMAN VALUES | Govindrajan, M. Natrajan | Professional Ethics |
| 3 | PROFESSIONAL ETHICS AND HUMAN VALUES | Premvir Kapoor | Professional Ethics |
| 4 | This Changes Everything: Capitalism vs. The Climate | Naomi Klein | Environment and Sustainability |
| 5 | Cradle to Cradle: Remaking the Way We Make Things | William McDonough | Environment and Sustainability |
| 6 | Introduction to Human Rights and Duties | SPPU | Human Values |
| 7 | Human Rights of Vulnerable and Disadvantaged Group - Book II | SPPU | Human Values |
| 8 | Human Rights and Duties in India : Law, Policy, Society and Enforcement Mechanism - Book III | SPPU | Human Values |
| 9 | Marathi & English Version of Universal Declaration of Human Rights (UDHR) | SPPU | Human Values |

Director

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| | Semester I | | | | |
|---------|--------------------------------------|-------------|----|-----|-----|
| Sr. No. | Course Title | Course Code | CP | EXT | INT |
| 1 | Java Programming | IT11 | 3 | 50 | 25 |
| 2 | Data Structure and Algorithms | IT12 | 3 | 50 | 25 |
| 3 | Object Oriented Software Engineering | IT13 | 3 | 50 | 25 |
| 4 | Operating System Concepts | IT14 | 3 | 50 | 25 |
| 5 | Network Technologies | IT15 | 3 | 50 | 25 |
| 6 | Open Course 1 | OC11 | 1 | | 25 |
| 7 | Open Course 2 | OC12 | 1 | | 25 |
| | * Practicals | | | | |
| 8 | Practical | IT11L | 5 | 50 | 75 |
| 9 | Mini Project | ITC11 | 5 | 50 | 75 |
| | Soft Skills | | | | |
| 10 | Soft Skills - I | SS11 | 1 | | 25 |
| | | | 28 | 350 | 350 |

| | Semeste | rll | | | |
|---------|--------------------------------|-------------|-------|-----|-----|
| Sr. No. | Course Title | Course Code | CP | EXT | INT |
| 1 | Python Programming | IT21 | 3 | 50 | 25 |
| 2 | Software Project Management | IT22 | 3 | 50 | 25 |
| 3 | Optimization Techniques | MT21 | 3 | 50 | 25 |
| 4 | Advanced Internet Technologies | IT23 | 3 | 50 | 25 |
| 5 | Advanced DBMS | IT24 | 3 | 50 | 25 |
| 6 | Open Course 3 | OC21 | 1 | - | 25 |
| 7 | Open Course 4 | OC22 | 1 | | 25 |
| | * Practicals | | i sun | | |
| 8 | Practical | IT21L | 5 | 50 | 75 |
| 9 | Mini Project | ITC21 | 5 | 50 | 75 |
| | Soft Skills | | | | - 1 |
| 10 | Soft Skills - II | SS21 | 1 | | 25 |
| | | | 28 | 350 | 350 |

-

| | Semester III | | | | |
|---------|--|-------------|-----|-----|-----|
| Sr. No. | Course Title | Course Code | CP | EXT | INT |
| 1 | Mobile Application Development | IT31 | 3 | 50 | 25 |
| 2 | Data Warehousing and Data Mining | (T32 | 3 | 50 | 25 |
| 3 | Software Testing and Quality Assurance | IT33 | 3 | 50 | 25 |
| 4 | Knowledge Representation & Artificial Intelligence - ML, DL | IT34 | 3 | 50 | 25 |
| 5 | Cloud Computing | IT35 | 3 | 50 | 25 |
| 6 | Open Course 5 | OC31 | 1 | | 25 |
| 7 | Open Course 6 | OC32 | 1 | | 25 |
| | * Practicals | | | | |
| 8 | Practical | IT31L | 5 | 50 | 75 |
| 9 | Mini Project | ITC31 | 5 | 50 | 75 |
| | Soft Skills | | 100 | 35 | - |
| 10 | Soft Skills- III | SS31 | 1 | | 25 |
| | | | 28 | 350 | 350 |

| Semester IV | | | | | | |
|-------------|--------------|-------------|----|-----|-----|--|
| Sr. No. | Course Title | Course Code | CP | EXT | INT | |
| 1 | DevOps | IT41 | 3 | 50 | 25 | |
| 2 | PPM and OB | BM41 | 3 | 50 | 25 | |
| 2 | Project | ITC41 | 22 | 250 | 300 | |
| | | | 28 | 350 | 350 | |

| Semester | Credit | IE | UE |
|--------------|--------|------|------|
| Semester I | 28 | 350 | 350 |
| Semester II | 28 | 350 | 350 |
| Semester III | 28 | 350 | 350 |
| Semester IV | 28 | 350 | 350 |
| Total | 112 | 1400 | 1400 |
| 200 | , | | 2800 |



| - | | ELECTIVES INSTITUTE LEVEL (GE – IL) COURSES – 2 Credits E | |
|------------|--------------|---|---------|
| | I S I | 50 Marks CCE , 00 Marks ESE | |
| Course No. | Course Code | Course | Semeste |
| | Maximum | 3 courses to be selected from the following list in Semeste | er I |
| 113 | GE - IL - 01 | Verbal Communication Lab | 1 |
| 114 | GE - IL - 02 | Enterprise Analysis & Desk Research | 1 |
| 115 | GE - IL - 03 | Selling & Negotiation Skills Lab | - 4 |
| 116 | GE - IL - 04 | MS Excel | Ü |
| 117 | GE - IL - 05 | Business Systems & Procedures | 1 |
| 118 | GE - IL- 06 | Managing Innovation | 1 |
| 119 | GE - IL- 07 | Foreign Language – I | |
| | Maximum | I course to be selected from the following list in Semeste | r ti |
| 213 | GE - IL - Q8 | Written Analysis and Communication Lab | 11 |
| 214 | 6E-1L-09 | Industry Analysis & Desk Research | 11 |
| 215 | GE - IL - 10 | Entrepreneurship Lab | 11 |
| 216 | GE-IL-11 | 5PSS | - 1 |
| 217 | GE-IL-12 | Foreign Language – II | II |
| | | | |



The syllabus

Course I

Introduction to Human Rights and Duties

Credit: 1

1) Basic Concept

- Human Values- Dignity , Liberty, Equality , Justice, Unity in Diversity, Ethics and Morals
- b) Meaning and significance of Human Rights Education

II) Perspectives of Rights and Duties

- a) Rights: Inherent-Inalienable-Universal- Individual and Groups
- b) Nature and concept of Duties
- c) Interrelationship of Rights and Duties

III) Introduction to Terminology of Various Legal Instruments

- a) Meaning of Legal Instrument-Binding Nature
- Types of Instruments: Covenant-Charter-Declaration-Treaty-Convention-Protocol-Executive Orders and Statutes

IV) United Nations And Human Rights

- a) Brief History of Human Rights-International and National Perspectives
- b) Provision of the charters of United Nations
- c) Universal Declaration of Human Rights- Significance-Preamble
- d) Civil and Political Rights-(Art. 1-21)
- e) Economic, Social and Cultural Rights-(Art.22-28)
- f) Duties and Limitations-(Art. 29)
- g) Final Provision (Art. 30)

Course II

Human rights of vulnerable and disadvantaged groups

Credit: 1

I) General Introduction

- a) Meaning and Concept of Vulnerable and Disadvantaged
- b) Groups, Customary, Socio-Economic and Cultural Problems of
- c) Vulnerable and Disadvantaged Groups

II) Social status of women and children in International and national perspective

- a) Human Rights and Women's Rights International and National Standards
- b) Human Rights of Children-International and National Standards

III) Status of Social and Economically Disadvantaged people

- a) Status of Indigenous People and the Role of the UN
- b) Status of SC/ST and Other Indigenous People in the Indian Scenario
- c) Human Rights of Aged and Disabled
- d) The Minorities and Human Rights

IV) Human rights of vulnerable groups

- a) Stateless Persons
- b) Sex Workers
- c) Migrant Workers
- d) HIV/AIDS Victims



Course III

Human Rights and Duties in India: Law, Policy, Society and Enforcement

Mechanism

Credit: 1

I. Human Rights in Indian Context

- a) Indian Bill of Rights And Sarvodaya
- b) Preamble- Fundamental Rights- Directive Principles-Fundamental Duties

II. Human Rights- Enforcement Mechanism

- a) Human Rights Act, 1993
- b) Judicial Organs- Supreme Court (Art 32) And High Courts(Art 226)
- c) Human Rights Commission-National and State of Maharashtra
- d) Commission of Women, children, Minority, SC/ST
- e) Survey of International Mechanism

III. Human Rights Violations and Indian Polity

- a) Inequalities in society-population-illiteracy-poverty-caster-inaccessibility of legal redress
- b) Abuse of Executive Power-Corruption-Nepotism and favoritism
- c) Human Rights and Good Governance
- d)

IV. Role of Advocacy Groups

- a) Professional Bodies: Press, Media, Role of Lawyers-Legal Aid
- b) Educational Institutions
- c) Rale of Corporate Sector
- d) NGO's



Savitribai Phule Pune University

Dr. V. B. Gaikwad MSc, MPHL Ph.D.



Telephane: 020-25601255/2560007 Tele Fax: +91-020-25601256

Empit Scal@oripuncacin

Director, Board of College & University Development Corestation, Page-411 007

Ref.BCUD/ 76

Dt. 18.03.2015

To,
The Principal/ Directors.
All Affiliated colleges
All Recognized institute
Savitribai Phule Pune University,
Pune

Subject: Guidelines regarding evaluation of Cyber security courses of 4 credits.

Dear Sir/Madam,

As per decision taken by the University authorised, Cyber Security courses of 4 credits has been incorporated in the syllabi of Post graduate courses. We hereby, would like to give the guidelines for the evaluation of these courses. We hereby, would like to give the guidelines for the evaluation of these courses attached herewith.

With regards,

Dr. V. B. Galkwad Director, BCUD



GUIDELINES FOR EVALUATION OF CYBER SECURITY COURSES OF 4 CREDITS

From the academic year 2014-15, the cyber security courses for 4 credits have been incorporated in the curriculum of Post-graduate degree programmes of Savitribai Phule Pune University.

Cyber security courses has been divided into 4 modules namely:

| Name of Modules | No. Of credit | No. Of hours | No of Marks |
|--|---------------|--------------|-------------|
| Module . 1 Pre-requisites in Network and Information Security | One credit | 14 | 25 |
| Module : 2 Security Management | One credit | 13 | 25 |
| Module : 3 Information and Network Security | One credit | 13 | 25 |
| Module:4 System and Application Security | One credit | 20 | 25 |

 Evaluation comprises of the Internal Assessment of the aforesaid modules are on the basis of following components:

| Name of module | Examination pattern | | Marks | | |
|--------------------------|---|---|---------|----|--|
| Module 1 | Written Examination | Objective questions, MCQs, define/answer in one sentence | 7 | 15 | |
| | | Two descriptive questions of short answers | 8 | | |
| | Hands on /Practical examination along with viva | | | | |
| Orden book benefit and a | *************************************** | | Total | 25 | |
| Module 2 | Written Examination | Objective questions, MCQs, define/answer in one sentence | 7 | 15 | |
| | | Two descriptive questions of short answers : | 8 | | |
| | Hands on /Practi | cal examination along wi | th viva | 10 | |
| 2212224 | | | Total | 25 | |
| Module 3 | Written Examination | Objective. MCOs, | 7 | 15 | |

| | | define/answer in one sentence | | |
|------------|------------------------|---|---------|-----|
| | | Two descriptive questions of short answers | 8 | |
| | Hands on /Pract | ical examination along wi | th viva | 10 |
| NA - 1-1-7 | | VALUE VALUE | Total | 25 |
| Module 4 | Written Examination | Objective questions, MCQs, define/answer in one sentence | 7 | 15 |
| | | questions of short | 8 | |
| | Hands on /Practi | rni examination along wh | th viva | 10 |
| | | | iotal | 25 |
| | GRA | ND TOTAL | | 100 |

 Course- related skill-based practical work will be entirely based on the skills to be developed in the students. It may include the topics as has been prescribed in the syllabil of every module.

 Practical components may be based on laboratory work, on job industrial training, working with NGO or similar organizations, project, group discussion, presentation etc. unless otherwise clearly specified in the given syllabi of all the courses.

 College is supposed to maintain the record of marks allotted to the practical work carried out by the students.

There shall be combine passing (written exam + practical, viva) of 40%.

Savitribai Phule Pune University

Dr. V. B. Gailtwad M.Sc., M.Phil., Ph.D.



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Director,

Board of College & University Development

Ganeshkhind, Pune-411 007

Ref.BCUD/ 72

Dt. 18,03,2015

To. The Principal/ Directors. All Affiliated colleges All Recognized institute Savitribal Phule Ponu University, Pune

Subject: Guidelines regarding evaluation of Human Rights Education Programme (2 credits)

Dear Sir/Madam.

As per decision taken by the University authorised, Human Education Programme of 2 credits has been incorporated in the syllabi of Post graduate courses. We hereby, would like to give the guidelines for the evaluation of these courses attached herewith.

With regards,

Dr. V. B. Galkwad Director, BCUD



GUIDELINES FOR EVALUATION OF HUMAN RIGHTS EDUCATION PROGRAMME FOR 2 CREDITS

- Students of all the Post graduate programmes have to undergo the Human Rights Education programme
- The Courses under the programme will have no affect on the credit/grade of the students of their regular course of study. The grades earned in the papers of this programme will reflect separately in the mark statement of each student.
- In the HRE Programme there will be three courses.

| Paper code | Course Name | Credits | Marks |
|------------|---|---------|-------|
| HRE 101 | Introduction to Human Rights and Duties (Mandatory) | 1 | 25 |
| HRE 102 | Human Rights of Vulnerable and Disadvantaged Groups (Optional) | i | 25 |
| HRE: 103 | Human Rights and Duties in India: Law, Policy, Society and Enforcement mechanism. (Optional) | 1 | 25 |

- In the three courses, students have to opt for only two courses during their entire Post Graduate Programme Among the three papers, (HRE 101 Introduction to Human Rights and Duties) is a compulsory course. In the other two papers (HRE 102 Human Rights of Vulnerable and Disadvantaged Groups and HRE 103 Human Rights and Duties in India: Law, Policy, Society and Enforcement Mechanism) the students are free to select any one paper as per the decision of the head of the institute.
- At no point of time any two courses should be taken together. (This rule is applicable for the students in part I or from the new academic year).
- The Coordinators of each institute appointed by the Directors/Principal shall monitor the programme under the Supervision of the Head of the institute.

- It would be a self-study programme. The students will have to study the materials of each paper, based on the materials uploaded on the University Website. Apart from the materials available on the website, students are free to refer to any reference book of their choice stated in the bibliography. Apart from the reading materials, a video of Lectures delivered by some of the eminent professors will also be available on the University Web Site.
- For evaluation of the papers, any of the models prescribed in the credit pattern for Internal Assessment regulations may please be adopted depending on the Models suitable to the institute.
- Individual faculty member shall have the flexibility to design the concurrent evaluation components in a manner so as to give a balanced assessment of student capabilities across Knowledge, Skills and Abilities based on following assessment tools:
 - Case Study/ Caselet/ Situation Analysis
 - 2. Class Test
 - 3. Open book test
 - 4. Study tour/ Field visit and report of the same.
 - 5. Small group Project
 - 6. Group Discussion
 - 7. Role Play/ Story telling
 - 8. Thematic Presentation
 - Industry Analysis
 - 10.In depth viva
 - 11.Quiz
 - 12. Model Development / Simulation exercises
- A pass in the two papers is compulsory.
- Each Paper carries only One Credit. This means a credit is equal to 25 marks.
 Hence, the minimum applicable per credit as per the credit system rules need
 to be adopted as the passing minimum. Based on the marks that are secured
 by each student the grade may be decided depending on the mark obtained in
 each paper.
- If any student fails to secure the minimum passing grade of E in any of the two
 papers, such student may have to repeat such paper and has to pass the paper
 compulsorily otherwise they won't be conferred the degree.
- The Coordinators of each institute need to maintain a record of the evaluation methods adopted by the respective institute.