SYLLABUS

MBA (CM)

4th SEMESTER

To produce world-class professionals who have excellent analytical skills, communication skills, team building spirit and ability to work in cross cultural environment.

To produce international quality IT professionals, who can independently design, develop and implement computer applications.

Professionals who dedicate themselves to mankind, who are environment conscious, follow social norms and ethics.

School of Computer Science & IT,

Devi Ahilya Vishwa Vidyalaya, Indore

www.scs.dauniv.ac.in

Course Name: **MBA (CM) 4th Semester**

Subject Code: **CS-4422**

Subject Name: **ERP Applications**

Aim of the Subject

The aim of this course is to acquaint students with different ERP modules & applications.

Learning Outcomes

The students are expected to learn following after completion of the course:

- Students will understand ERP vendor selection, ERP implementation life cycle and ERP success criteria.
- calls for it. Recite algorithms that employ this paradigm. Synthesize divide-and-conquer
- Students will develop understanding about CRM/HRM perspectives of ERP, SCM and business integration with ERP.
- Students will learn about SAP, Open source ERP features and components.
- Students will be able to model any organization with an ERP application.

Unit 1

Overview of ERP - An Overview of ERP software solution in small, medium and large sized enterprises, ERP vendor selection methods and criteria, ERP implementation life cycle, data migration in ERP. People organization in implementation – consultants, vendors and employees, ERP tools and software, pros and cons of ERP implementation, ERP implementation success factors.

Unit 2

ERP modules structure - Role of ERP in Sales and Distribution, sub-modules of the Sales and Distribution module, master data management, order management, warehouse management, shipping and transportation, billing and sales support, foreign trade, integration of Sales and Distribution module with other modules, Accounting & Finance, Manufacturing & Production Planning, Material & Capacity Planning, Quality Management; JIT / Repetitive Manufacturing, Materials Requirement Planning (MRP) - Master Production Schedule (MPS), Bill of Materials (BOM), Inventory Records, Manufacturing Resource Planning (MRP-II) modules of an ERP System.

Unit 3

CRM & HRM perpective of ERP - Role of ERP in CRM, Concept of CRM, objectives of CRM, benefits of CRM, components of CRM, types of CRM, role of ERP in human resource

management, workflow of ERP in human resource management system, advantages of ERP in human resource management system, functions of human resource management module, features of human resource management module, Maintenance of ERP, ERP add-ons – SCM, Business Integration with ERP.

Unit 4

Different ERP vendors, SAP: Products and technology R/3 overview, SAP advantage, an exposure to Baan Company , Oracle Applications, vertical solutions, Microsoft Corporation, SAP project life cycle, SAP three tier architecture, client dependent vs. client independent, SAP GUI, SAP programming language and security, transaction codes, SAP basis, introduction to ABAP data types, control statements, logical operators, ABAP data elements, tables, structures, aggregated objects of ABAP dictionary, introduction to Open source ERP features and components.

Unit 5

Future Directions in ERP: New trends in ERP, ERP and E-business, market snapshot, modelling an organization using Orange HRM, Sales force CRM, Odoo, hands-on on any ERP application and making a small project on any ERP package application.

Text Book(s)

1. Sams teach yourself SAP in 24 hours, 5th Edition, Missbach Anderson, Pearson Education.

Reference Material(s)

1. ERP: Making It Happen: The Implementers' Guide to Success with Enterprise Resource Planning, Thomas F. Wallace and Michael H. Kremzar, WILEY.

2. A Guide to ERP Benefits, Implementation and Trends, Lineke Sneller RC, Bookboon.

3. Concepts in Enterprise

Course Name: **MBA (CM) 4th Semester**

Subject Code: **CS-6313**

Subject Name: **Software Testing & Quality Assurance**

Aim of the Subject

To enable students understand the inportance and concepts of testing in achieving quality software.

Learning Outcomes

The students are expected to learn following after completion of the course:

- Proficiency in designing quality software.
- Proficiency in testing skills
- Knowledge of modern techniques of manual and automated testing
- Proficiency in creating, managing and tracking the testcases.
- Proficiency in tools for configuration management, test case management and automated testing.

Unit 1

Software Testing : Introduction and background, Big picture of software development process and testing component in every phase of the process.

Software testing terms and definitions: Black box & white box testing, static and dynamic testing, unit, integration, system, validation, acceptance, regression testing. Unit test Automation with JUnit.

Unit 2

Techniques of black box testing: Preparing tests-to-pass and tests-to-fail, equivalence partitioning, data and state testing.

White box testing: formal reviews of the code, programming standards and guidelines, preparing code review checklists, Data & Code coverage techniques.

Unit 3

Configuration and Compatibility testing: Isolating configuration bugs, identifying requirements of hardware, software and network, Identifying platform and application versions, backward and forward compatibility, Data sharing compatibility.

Foreign Language testing: Translation issues, ASCII, EBCDIC, Hotkeys and shortcuts, extended characters, computation on characters, localization, compatibility and configurability issues.

Unit 4

Documentation testing: Types of documentation testing, preparing checklists before documentation testing, Security testing. Website testing: Web page fundamentals.

Automation Testing : Techniques and methods, Seminar on popular tools like Selenium, Hands on experience on these tools.

Test Planning: Test Phases, Resource, manpower requirements, test strategy, test schedule, bug reporting mechanisms, metrics and statistics.

Writing and tracking testcases, Introduction to automated bug tracking and testcase management systems .

Unit 5

Usability: Importance and Impact on SDLC, Generations of User Interfaces, The Usability Engineering Lifecycle, Usability Heuristics, Usability Testing, Usability Assessment Methods beyond Testing, Interface Standards, International User Interfaces.

CMM: Process, Need for Process Improvement & Standards, Assessment, Improvement and Compliance against Matured Processes, Software Quality tradeoffs, Introduction: CMM Level I to V, Case Studies.

Text Book(s)

Software testing and quality assurance by Ron Petton

Reference Material(s)

Software Testing and Quality Assurance: Theory and Practice: by Tripathy, Priyadarshi, Naik