



**DAAR-UL-REHMAT TRUST's**  
**A.E. KALSEKAR DEGREE COLLEGE**

KAUSA, MUMBRA  
Permanently Affiliated to University of Mumbai  
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**NAME OF THE PAPER: Software Project Management SEM: V**

<b>SYLLABUS (UNIT WISE)</b>	<b>OBJECTIVES</b>	<b>OUTCOME</b>
<b>UNIT - I</b>	<b>To introduce the fundamental concepts of software engineering.</b>	<b>Identify suitable life cycle models to be used.</b>
<b>UNIT -II</b>	<b>To build an understanding on various phases of software development.</b>	<b>Analyze a problem and identify and define the computing requirements to the problem.</b>
<b>UNIT III</b>	<b>To introduce various software process models.</b>	<b>Translate a requirement specification to a design using an appropriate software engineering methodology.</b>
<b>UNIT IV</b>	<b>Gain understanding on reasons for majority of software projects failure and on ways in which the failure probability can be reduced.</b>	<b>Formulate appropriate testing strategy for the given software system. Understand reasons for failure of software projects fails and how to reduce failure probability.</b>
<b>UNIT -V</b>	<b>Develop the Understanding for software projects based on current technology, by managing resources economically and keeping ethical values.</b>	<b>Develop software projects based on current technology, by managing resources economically and keeping ethical values.</b>

**NAME OF THE PAPER: Software Quality Assurance SEM: VI**

<b>SYLLABUS (UNIT WISE)</b>	<b>OBJECTIVES</b>	<b>OUTCOME</b>
<b>UNIT - I</b>	<b>The objective of this course is to solve the problems or error of the software related quality.</b>	<b>Develop an understanding of software quality and approaches to assure software quality.</b>
<b>UNIT - II</b>	<b>Define and highlight importance of software testing and software quality.</b>	<b>Able to create and apply a software quality assurance plan for all software projects.</b>
<b>UNIT -III</b>	<b>Describe the software quality assurance techniques.</b>	<b>Create and manage a software quality assurance team.</b>
<b>UNIT - IV</b>	<b>Implementation of software assurance techniques to make software free from cons.</b>	<b>Able to conduct and facilitate inspections, product reviews, walk-throughs, and audits.</b>



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<b>UNIT - V</b>	<b>Planning and tracking and oversight in the implementation of the project management process.</b>	<b>Create and maintain appropriate metrics to measure and maintain quality</b>
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**NAME OF THE PAPER: Internet of Things SEM: V**

SYLLABUS (UNIT WISE)	OBJECTIVES	OUTCOME
<b>UNIT - I</b>	<b>To Introduce the Internet of Things an Overview and Design Principles for Connected Devices</b>	<b>Develop an understanding of the definition and significance of the Internet of Things.</b>
<b>UNIT -II</b>	<b>Introduction to Embedded System and Prototyping Embedded Devices</b>	<b>Describe the given Characteristics of the specified Embedded System. Understand home automation in IoT.</b>
<b>UNIT III</b>	<b>Prototyping the Physical Design and Prototyping Online Components</b>	<b>Know the practical use of devices in IoT Technology.</b>
<b>UNIT IV</b>	<b>Techniques for Writing Embedded Code</b>	<b>Develop the algorithm, flowchart and C's Program for the given Microcontroller to perform the given operations (data transfer, arithmetic/logic, decision control and looping operations.</b>
<b>UNIT -V</b>	<b>Moving to Manufacture and Ethics</b>	<b>Understand IoT Market perspective and to implement data and knowledge management.</b>

**NAME OF THE PAPER: Security in Computing SEM: VI**

SYLLABUS (UNIT WISE)	OBJECTIVES	OUTCOME
<b>UNIT - I</b>	<b>Introduction to Computer and Information Security.</b>	<b>Explain the importance of the given components of computer security. Explain Principle of Information Security.</b>
<b>UNIT - II</b>	<b>Understand User Authentication and Access Control.</b>	<b>Apply the relevant authentication method for the given situation with example. Explain technique of the given type of attacks on passwords.</b>
<b>UNIT -III</b>	<b>Gain knowledge on Firewalls and its parameters and configuration.</b>	<b>Compare types of firewalls on the given parameters. Explain function of the given type of firewall configuration.</b>



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<b>UNIT - IV</b>	<b>Understand the fundamentals and classifications of Intrusion Detection System.</b>	<b>Compare various IDS Techniques on the given parameters. Describe features of the IDS Technique.</b>
<b>UNIT - V</b>	<b>Develop and Understand Virtual Machines and Cloud Computing.</b>	<b>Explain the given IP Security Protocol with modes. Virtual Machines, Cloud Computing.</b>

**NAME OF THE PAPER: Advanced Web Programming SEM: V**

<b>SYLLABUS (UNIT WISE)</b>	<b>OBJECTIVES</b>	<b>OUTCOME</b>
<b>UNIT - I</b>	<b>Introduce creating a simple Active Server Page ASP.NET application that delivers dynamic content to the Web.</b>	<b>Be able to create a simple Active Server Page ASP.NET application that delivers dynamic content to the Web.</b>
<b>UNIT -II</b>	<b>Understand the ASP.NET concepts such as Web Forms and handling events, Web Controls and input validation.</b>	<b>Understand Web Forms and handling events,</b>
<b>UNIT III</b>	<b>Understand the new web application architecture and Web Services, and debug in the new integrated development environment.</b>	<b>Understand Web Controls and input validation, using the new web application architecture and Web Services, and debugging in the new integrated development environment.</b>
<b>UNIT IV</b>	<b>Understand the Web form Fundamentals.</b>	<b>Understanding the anatomy of an ASP.NET Application and Configuring the ASP.NET Application.</b>
<b>UNIT -V</b>	<b>Develop web application with ASP.Net with database connectivity.</b>	<b>Develop web application with ASP.Net with database connectivity</b>

**NAME OF THE PAPER: Business Intelligence SEM: VI**

<b>SYLLABUS (UNIT WISE)</b>	<b>OBJECTIVES</b>	<b>OUTCOME</b>
<b>UNIT - I</b>	<b>Familiarize students with key concepts and issues related to business intelligences and decision support systems.</b>	<b>Understand key concepts and issues related to business intelligences and decision support systems.</b>
<b>UNIT - II</b>	<b>Provide understanding of concepts like data warehouses, design methods, data extracting, transforming and loading processes and OLAP systems.</b>	<b>Understand concepts like data warehouses, design methods, data extracting, transforming and loading processes and OLAP systems.</b>



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<b>UNIT -III</b>	<b>To Understanding various classification and clustering methods in business Intelligences.</b>	<b>Develop understanding of classification and evaluation of classification clustering methods and its evaluation</b>
<b>UNIT - IV</b>	<b>Enable students to employ basic BI tools and mathematical models.</b>	<b>Learn to use basic BI tools, mathematical models.</b>
<b>UNIT - V</b>	<b>Understand knowledge management and artificial intelligence and expert systems.</b>	<b>Develop an overview of artificial intelligence (AI) principles and approaches and development of expert systems</b>

**NAME OF THE PAPER: Artificial Intelligence SEM: V**

<b>SYLLABUS (UNIT WISE)</b>	<b>OBJECTIVES</b>	<b>OUTCOME</b>
<b>UNIT - I</b>	<b>Present an overview of artificial intelligence (AI) principles and approaches.</b>	<b>Identify the various characteristics of Artificial Intelligence, principles and approaches.</b>
<b>UNIT -II</b>	<b>Develop a basic understanding of the building blocks of AI as presented in terms of intelligent agents i.e., Beyond Classical Search:</b>	<b>Develop a basic understanding of the building blocks of AI as presented in terms of intelligent agents i.e., Beyond Classical Search:</b>
<b>UNIT III</b>	<b>Develop a basic understanding of the building blocks of AI as presented in terms of intelligent agents i.e., Adversarial Search and logic Agents</b>	<b>Develop a basic understanding of the building blocks of AI as presented in terms of intelligent agents i.e., Adversarial Search and logic Agents</b>
<b>UNIT IV</b>	<b>Develop a basic understanding of the building blocks of AI as presented in terms of intelligent agents i.e., First Order Logic and Interference in First Order Logic</b>	<b>Develop a basic understanding of the building blocks of AI as presented in terms of intelligent agents i.e., First Order Logic and Interference in First Order Logic</b>
<b>UNIT -V</b>	<b>Also provide an opportunity to students to implement an AI system in a team environment and Knowledge representation,</b>	<b>Implement a small AI system in a team environment.</b>



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**NAME OF THE PAPER: Principles of Geographic Information Systems SEM: VI**

<b>SYLLABUS (UNIT WISE)</b>	<b>OBJECTIVES</b>	<b>OUTCOME</b>
<b>UNIT - II</b>	<b>Develop the understanding of Data Management and Processing Systems, Hardware and Software Trends Geographic Information Systems.</b>	<b>Explore mapped data. Relate GIS with remote sensing technologies.</b>
<b>UNIT -III</b>	<b>Develop the understanding of Spatial Referencing and Positioning, using GIS analysis tools.</b>	<b>Analyze spatial data, using GIS analysis tools</b>
<b>UNIT - IV</b>	<b>Develop the understanding Classification of analytical GIS Capabilities.</b>	<b>Develop and manage geo databases. Create maps, images and apps to communicate spatial data in a meaningful way to others</b>
<b>UNIT - V</b>	<b>Explain Data Visualization, IS and Maps, The Visualization Process and Visualization Strategies.</b>	<b>Apply Python as a GIS computer language.</b>

**NAME OF THE PAPER: Enterprise Java SEM: V**

<b>SYLLABUS (UNIT WISE)</b>	<b>OBJECTIVES</b>	<b>OUTCOME</b>
<b>UNIT - I</b>	<b>Introduce and develop the understanding of General Network Design and Network Design Models.</b>	<b>Explain and develop the understanding of General Network Design and Network Design Models.</b>
<b>UNIT -II</b>	<b>Provide necessary knowledge to design and develop dynamics, databasedriven application using J2EE and Network devices.</b>	<b>Have the knowledge to design and develop dynamics, database-driven application using J2EE and Network devices.</b>
<b>UNIT III</b>	<b>Develop the Understanding of Wireless LAN Design, WAN Technologies and the Enterprise Edge WAN Design</b>	<b>Explain and develop the Understanding of Wireless LAN Design, WAN Technologies and the Enterprise Edge WAN Design.</b>
<b>UNIT IV</b>	<b>Develop the understanding various version of Internet Protocol, Allocation of IP and various Route Distributions</b>	<b>Explain and develop the understanding various version of Internet Protocol, Allocation of IP and various Route Distributions</b>
<b>UNIT -V</b>	<b>Managing Security and Management Network</b>	<b>Explain and develop Managing Security and Management Network</b>



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**NAME OF THE PAPER: Cyber Laws SEM: VI**

<b>SYLLABUS (UNIT WISE)</b>	<b>OBJECTIVES</b>	<b>OUTCOME</b>
<b>UNIT - I</b>	<b>Understand, explore and acquire a critical understanding of Cyber Law.</b>	<b>Understand, explore, and acquire a critical understanding of Cyber Law.</b>
<b>UNIT - II</b>	<b>Understand, explore and understand Contracts in the Infotech World Jurisdiction in the Cyber World.</b>	<b>Understand, explore and understand Contracts in the Infotech World Jurisdiction in the Cyber World</b>
<b>UNIT -III</b>	<b>Acquire in-depth knowledge of Information Technology Act and legal framework of Right to Privacy, data security and data protection</b>	<b>Understand Information Technology Act and legal framework of right to privacy, data security and data protection.</b>
<b>UNIT - IV</b>	<b>Understand relationship between Commerce and Cyberspace</b>	<b>Understand the relationship between Commerce and Cyberspace</b>
<b>UNIT - V</b>	<b>Develop competencies for dealing with frauds, deceptions, other Cyber Crimes and Protection of Cyber Consumers in India.</b>	<b>Develop competencies for dealing with frauds, deceptions (Confidence Tricks, Scams), other cybercrimes and Protection of Cyber Consumers in India.</b>