

# Jawahar Education Society's Institute of Technology, Management & Research, Nashik

Approved by AICTE and DTE,Goverment of Maharashtra, Affiliated to University of Pune

### Department of Computer Engineering

### **Course Outcomes (CO)**

Syllabus Pattern:-2019

Class:-TE Semester:- I

Sr. No	Subject	Course Outcomes (CO)
1	310241: Database Management Systems	CO1: Analyze and design Database Management System using ER model CO2: Implement database queries using database languages CO3: Normalize the database design using normal forms CO4: Apply Transaction Management concepts in real-time situations CO5: Use NoSQL databases for processing unstructured data CO6: Differentiate between Complex Data Types and analyze the use of appropriate data types
2	310242: Theory of Computation	CO1: Understand formal language, translation logic, essentials of translation, alphabets, language representation and apply it to design Finite Automata and its variants  CO2: Construct regular expression to present regular language and understand pumping lemma forRE  CO3: Design Context Free Grammars and learn to simplify the grammar  CO4: Construct Pushdown Automaton model for the Context Free Language  CO5: Design Turing Machine for the different requirements outlined by theoretical computerscience  CO6: Understand different classes of problems, classify and analyze them and study concepts of NP completeness
3	310243: Systems Programming and Operating System	CO1: Analyze and synthesize basic System Software and its functionality. CO2: Identify suitable data structures and Design & Implement various System Software CO3: Compare different loading schemes and analyze the performance of linker and loader CO4: Implement and Analyze the performance of process scheduling algorithms CO5: Identify the mechanism to deal with deadlock and concurrency issues CO6: Demonstrate memory organization and memory management policies

4	310244: Computer Networks and Security	CO1: Summarize fundamental concepts of Computer Networks, architectures, protocols and technologies CO2: Illustrate the working and functions of data link layer CO3: Analyze the working of different routing protocols and mechanisms CO4: Implement client-server applications using sockets CO5: Illustrate role of application layer with its protocols, client-server architectures CO6: Comprehend the basics of Network Security
5	Elective I 310245(D): Software Project Management	CO1: Comprehend Project Management Concepts CO2: Use various tools of Software Project Management CO3: Schedule various activities in software projects CO4: Track a project and manage changes CO5: Apply Agile Project Management CO6: Analyse staffing process for team building and decision making in SoftwareProjects and Management
6	310249: Seminar and Technical Communication	CO1: Analyze a latest topic of professional interest CO2: Enhance technical writing skills CO3: Identify an engineering problem, analyze it and propose a work plan to solve it CO4: Communicate with professional technical presentation skills



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#### **Course Outcomes (CO)**

Syllabus Pattern:-2019

Class:-TE Semester:- II

Sr. No	Subject	Course Outcomes (CO)
1	310251: Data Science and Big Data Analytics	CO1: Analyze needs and challenges for Data Science Big Data Analytics CO2: Apply statistics for Big Data Analytics
		CO3: Apply the lifecycle of Big Data analytics to real world problems
		CO4: Implement Big Data Analytics using Python programming
		<b>CO5:</b> Implement data visualization using visualization tools in Python programming
		CO6: Design and implement Big Databases using the Hadoop ecosystem
	310252: Web Technology	CO1: Implement and analyze behavior of web pages using HTML and CSS
2		CO2: Apply the client side technologies for web development
		CO3: Analyze the concepts of Servlet and JSP
		CO4: Analyze the Web services and frameworks
		CO5: Apply the server side technologies for web development
		CO6: Create the effective web applications for business functionalities
		using latest webdevelopment platforms
	310253: Artificial Intelligence	<b>CO1:</b> Identify and apply suitable Intelligent agents for various AI applications
		CO2: Build smart system using different informed search /
		uninformed search or heuristicapproaches
3		CO3: Identify knowledge associated and represent it by ontological
		engineering to plan astrategy to solve given problem
		CO4: Apply the suitable algorithms to solve AI problems
		CO5: Implement ideas underlying modern logical inference systems
		<b>CO6:</b> Represent complex problems with expressive yet carefully constrained
		language of representation
4	Elective II 310254(D):	<b>CO1:</b> Analyze the problem statement (SRS) and choose proper design
		technique for designingweb-based/ desktop application
	Software	<b>CO2:</b> Design and analyze an application using UML modeling as fundamental tool
	Modelling and	CO3: Evaluate software architectures
	Architecture	<b>CO4:</b> Use appropriate architectural styles and software design patterns
	Architecture	CO5: Apply appropriate modern tool for designing and modeling

310255: Internship	<ul> <li>CO1: To demonstrate professional competence through industry internship.</li> <li>CO2: To apply knowledge gained through internships to complete academic activities in aprofessional manner.</li> <li>CO3: To choose appropriate technology and tools to solve given problem.</li> <li>CO4: To demonstrate abilities of a responsible professional and use ethical practices in day today life.</li> <li>CO5: Creating network and social circle, and developing relationships with industry people.</li> <li>CO6: To analyze various career opportunities and decide carrier goals.</li> </ul>
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