

**AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER**  
**DEPARTMENT OF ELECTRONICS & COMPUTER ENGINEERING**

**COURSE OUTCOMES (CO)**

**TE. 2019 Course**

**Database Management (310341), TE-Sem-V, 2023-24**

After successfully completing the course students will be able to,

<b>Co. No.</b>	<b>Description</b>	<b>Bloom's Taxonomy Level</b>
C301.1	<b>Understand</b> the underlying concepts of a database system	2
C301.2	<b>Design</b> a database schema for a given problem-domain using data model	6
C301.3	<b>Formulate</b> , using SQL/DML/DDD commands, solutions to a wide range of query and update problems	3,6
C301.4	<b>Implement</b> transactions, concurrency control, and be able to do Database recovery	3
C301.5	<b>Understand</b> various Database Architectures and its applications	2
C301.6	<b>Understand</b> distributed database management systems.	2

**Advanced Java Programming (310342), TE-Sem-V, 2023-24**

After successfully completing the course students will be able to,

<b>Co. No.</b>	<b>Description</b>	<b>Bloom's Taxonomy Level</b>
C302.1	<b>Design</b> and <b>develop</b> GUI applications using Applets.	6
C302.2	<b>Apply</b> relevant AWT/ swing components to handle the given event.	3
C302.3	<b>Design</b> and <b>develop</b> GUI applications using Abstract Windowing Toolkit (AWT), Swing and Event Handling.	6
C302.4	<b>Learn</b> to access database through Java programs, using Java Database Connectivity (JDBC)	2
C302.5	<b>Invoke</b> the remote methods in an application using Remote Method Invocation (RMI).	3
C302.6	<b>Develop</b> program for client /server communication using Java Networking classes.	6

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**TE. 2019 Course**

**Data Communication (310343), TE-Sem-V, 2023-24**

After successfully completing the course students will be able to,

<b>Co. No.</b>	<b>Description</b>	<b>Bloom's Taxonomy Level</b>
C303.1	<b>Understand</b> network communication using the layered <b>concept</b> , Open System Interconnect (OSI) and the Internet Model.	2
C303.2	<b>Types</b> of transmission media, network devices; and parameters of <b>evaluation</b> of performance for each media and device.	5
C303.3	To <b>explain</b> the <b>design</b> of, and algorithms used in, the physical, data link layers.	2,6
C303.4	working principles of LAN and <b>understand</b> concepts behind physical and logical addressing, subnetting and supernetting.	2
C303.5	The functions performed by a Network Management System and to <b>analyze</b> connection establishment and congestion control with respect to TCP Protocol.	4
C303.6	The principles and operations & <b>design</b> of various application layer protocols like HTTP, SMTP, FTP.	6

**Microcontroller & Applications (310344), TE-Sem-V, 2023-24**

After successfully completing the course students will be able to,

<b>Co. No.</b>	<b>Description</b>	<b>Bloom's Taxonomy Level</b>
C304.1	<b>Understand</b> architecture and features of 8051 microcontroller along with instruction set.	2
C304.2	<b>Define</b> software and hardware development tools, <b>illustrate</b> interfacing with different peripherals.	1,2
C304.3	<b>Design and Develop</b> interfacing to real world devices using 8051 microcontroller.	6
C304.4	<b>Describe</b> architecture of MSP430, their targeted application and features along with instruction set.	1,2
C304.5	<b>Explain</b> different GPIO registers, its programming and I/O multiplexing. <b>Develop</b> applications by interfacing peripherals with MSP430 microcontroller.	6
C304.6	<b>Develop</b> applications based on 8051 and MSP430 microcontroller.	2

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**COURSE OUTCOMES (CO)**

**TE. 2019 Course**

**Elective –I Block Chain Technology (310345B), TE-Sem-V, 2023-24**

After successfully completing the course students will be able to,

<b>Co. No.</b>	<b>Description</b>	<b>Bloom's Taxonomy Level</b>
C305.1	<b>Understand</b> the basic concepts and architecture of Blockchain Technology	2
C305.2	<b>Demonstrate</b> distributed decentralized system, its applications and regulations	3
C305.3	<b>Demonstrate</b> the application of hashing in cryptography	3
C305.4	<b>Demonstrate</b> the verification process through Ethereum and consensus in blockchain technology.	3
C305.5	<b>Illustrate</b> the concepts of Bitcoin and its process in blockchain technology.	4
C305.6	<b>Understand</b> and illustrate Blockchian with allied technologies such as cloud computing, AI, IoT, Robotics	2