

Course outcomes 2018 scheme

1) Course Name: Engineering Mathematics 18MAT31

C201.1	Use Laplace transform and inverse Laplace transform in solving differential/integral equation arising in network analysis, control systems and other fields of engineering.
C201.2	Demonstrate Fourier series to study the behaviour of periodic functions and their applications in system communications, digital signal processing and field theory.
C201.3	Make use of Fourier transform and Z-transform to illustrate discrete/continuous function arising in wave and heat propagation, signals and systems.
C201.4	Solve first and second order ordinary differential equations arising in engineering problems using single step and multistep numerical methods.
C201.5	Determine the external of functionals using calculus of variations and solve problems arising in dynamics of rigid bodies and vibrational analysis.

2) Course Name: Data Structures and Applications 18CS32

C202.1	Use different types of data structures, operations and algorithms
C202.2	Apply searching and sorting operations on files
C202.3	Use stack, Queue, Lists, Trees and Graphs in problem solving
C202.4	Implement all data structures in a high-level language for problem solving

3) Course Name: Analog And Digital Electronics 18CS33

C203.1	Design and analyze application of analog circuits using photo devices, timer IC, power supply and regulator IC and op-amp.
C203.2	Explain the basic principles of A/D and D/A conversion circuits and develop the same
C203.3	Simplify digital circuits using Karnaugh Map , and Quine-McClusky Methods
C203.4	Explain Gates and flip flops and make us in designing different data processing circuits, registers and counters and compare the types
C203.5	Develop simple HDL programs

4) Course Name: Computer Organization 18CS34

C204.1	Explain the basic organization of a computer system.
C204.2	Demonstrate functioning of different sub systems, such as processor, Input/output, and memory.
C204.3	Illustrate hardwired control and micro programmed control, pipelining, embedded and other computing systems.
C204.4	Design and analyse simple arithmetic and logical units

5) Course Name: Software Engineering 18CS35

C205.1	Design a software system, component, or process to meet desired needs within realistic constraints.
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C205.2	Assess professional and ethical responsibility
C205.3	Function on multi-disciplinary teams
C205.4	Use the techniques, skills, and modern engineering tools necessary for engineering practice
C205.5	Analyze, design, implement, verify, validate, implement, apply, and maintain software systems or parts of software systems

6) Course Name: Discrete Mathematical Structures 18CS36

C206.1	Use of propositional and predicate logic in knowledge representation and truth verification.
C206.2	Demonstrate the application of discrete structures in different fields of computer science.
C206.3	Solve problems using recurrence relations and generating functions
C206.4	Apply different mathematical proofs, techniques in proving theorems.
C206.5	Compare graphs, trees and their applications.

7) Course Name: Engineering Mathematics - IV 18MAT41

C211.1	Use the concepts of analytic function and complex potentials to solve the problems arising in electromagnetic field theory.
C211.2	Utilize conformal transformation and complex integral arising in aerofoil theory, fluid flow visualization and image processing.
C211.3	Apply discrete and continuous probability distributions in analyzing the probability models arising in engineering field.
C211.4	Make use of the correlation and regression analysis to fit a suitable mathematical model for the statistical data.
C211.5	Construct joint probability distributions and demonstrate the validity of testing the hypothesis

8) Course Name: Design And Analysis Of Algorithms 18CS42

C212.1	Describe computational solution to well known problems like searching, sorting etc.
C212.2	Estimate the computational complexity of different algorithms.
C212.3	Devise an algorithm using appropriate design strategies for problem solving.

9) Course Name: Operating Systems 18CS43

C213.1	Demonstrate need for OS and different types of OS
C213.2	Apply suitable techniques for management of different resources
C213.3	Use processor, memory, storage and file system commands
C213.4	Realize the different concepts of OS in platform of usage through case studies

10) Course Name: Microcontroller And Embedded Systems 18CS44

C214.1	Describe the architectural features and instructions of ARM microcontroller
C214.2	Apply the knowledge gained for Programming ARM for different applications.
C214.3	Interface external devices and I/O with ARM microcontroller.
C214.4	Interpret the basic hardware components and their selection method based on the characteristics and attributes of an embedded system.

C214.5	Develop the hardware /software co-design and firmware design approaches.
C214.6	Demonstrate the need of real time operating system for embedded system applications

11) Course Name: Object Oriented Concepts 18CS45

C215.1	Explain the object-oriented concepts and JAVA.
C215.2	Develop computer programs to solve real world problems in Java
C215.3	Develop simple GUI interfaces for a computer program to interact with users, and to understand the event-based GUI handling principles using swings.

12) Course Name: Data Communication 18CS46

C216.1	Explain the various components of data communication.
C216.2	Explain the fundamentals of digital communication and switching
C216.3	Compare and contrast data link layer protocols
C216.4	Summarize IEEE 802.xx standards

13) Course Name: Management and Entrepreneurship for IT Industry 18CS51

C301.1	Define management, organization, entrepreneur, planning, staffing, ERP and outline their importance in entrepreneurship
C301.2	Utilize the resources available effectively through ERP
C301.3	Make use of IPRs and institutional support in entrepreneurship

14) Course Name: Computer Networks & Security 18CS52

C302.1	Explain principles of application layer protocols
C302.2	Outline transport layer services and infer UDP and TCP protocols
C302.3	Classify routers, IP and Routing Algorithms in network layer
C302.4	Explain the Wireless and Mobile Networks covering IEEE 802.11 Standard
C302.5	Define Multimedia Networking and Network Management

15) Course Name: Database Management System 18CS53

C303.1	Identify, analyze and define database objects, enforce integrity constraints on a database using RDBMS
C303.2	Use Structured Query Language (SQL) for database manipulation
C303.3	Design and build simple database systems
C303.4	Develop application to interact with databases.

16) Course Name: Automata Theory and Computability 17CS54

C304.1	Acquire fundamental understanding of the core concepts in automata theory and Theory of Computation
C304.2	Learn how to translate between different models of Computation (e.g., Deterministic and Non-deterministic and Software models).
C304.3	Design Grammars and Automata (recognizers) for different language classes and become knowledgeable about restricted models of Computation (Regular, Context Free) and their relative powers
C304.4	Develop skills in formal reasoning and reduction of a problem to a formal model, with an emphasis on semantic precision and conciseness.

C304.5	Classify a problem with respect to different models of Computation.
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17) Course Name: Application Development Using Python 18CS55

C305.1	Demonstrate proficiency in handling of loops and creation of functions.
C305.2	Identify the methods to create and manipulate lists, tuples and dictionaries
C305.3	Discover the commonly used operations involving regular expressions and file system
C305.4	Interpret the concepts of Object-Oriented Programming as used in Python
C305.5	Determine the need for scraping websites and working with CSV, JSON and other file formats.

18) Course Name: Unix Programming 18CS56

C306.1	Explain Unix Architecture, File system and use of Basic Commands
C306.2	Illustrate Shell Programming and to write Shell Scripts
C306.3	Categorize, compare and make use of Unix System Calls
C306.4	Build an application/service over a Unix system.

19) Course Name: System Software And Compilers 18CS61

C311.1	Explain system software
C311.2	Design and develop lexical analyzers, parsers and code generators
C311.3	Utilize lex and yacc tools for implementing different concepts of system software

20) Course Name: Computer Graphics And Visualization 18CS62

C312.1	Design and implement algorithms for 2D graphics primitives and attributes.
C312.2	Illustrate Geometric transformations on both 2D and 3D objects
C312.3	Apply concepts of clipping and visible surface detection in 2D and 3D viewing, and Illumination Models.
C312.4	Decide suitable hardware and software for developing graphics packages using OpenGL.

21) Course Name: Web Technology And Its Applications 18CS63

C313.1	Adapt HTML and CSS syntax and semantics to build web pages.
C313.2	Construct and visually format tables and forms using HTML and CSS
C313.3	Develop Client-Side Scripts using JavaScript and Server-Side Scripts using PHP to generate and display the contents dynamically.
C313.4	Appraise the principles of object oriented development using PHP
C313.5	Inspect JavaScript frameworks like jQuery and Backbone which facilitates developer to focus on core features.

22) Course Name: Data Mining And Data Warehousing 18CS641

C3141.1	Identify data mining problems and implement the data warehouse
C3141.2	Write association rules for a given data pattern.
C3141.3	Choose between classification and clustering solution

23) Course Name: Data Mining and Data Warehousing 18CS651

C3151.1	Understand data mining problems and implement the data warehouse
C3151.2	Demonstrate association rules for a given data pattern.
C3151.3	Discuss between classification and clustering solution.

24) Course Name: Cloud Computing And Its Applications 18CS643

C3143.1	Explain cloud computing, virtualization and classify services of cloud computing
C3143.2	Illustrate architecture and programming in cloud
C3143.3	Describe the platforms for development of cloud applications and List the application of cloud.

25) Course Name: Mobile Application Development 18CS651

C3151.1	Create, test and debug Android application by setting up Android development environment
C3151.2	Implement adaptive, responsive user interfaces that work across a wide range of devices.
C3151.3	Infer long running tasks and background work in Android applications
C3151.4	Demonstrate methods in storing, sharing and retrieving data in Android applications
C3151.5	Analyze performance of android applications and understand the role of permissions and security
C3151.6	Describe the steps involved in publishing Android application to share with the world

26) Course Name: Artificial Intelligence And Machine Learning 18CS71

C401.1	Appraise the theory of Artificial intelligence and Machine Learning.
C401.2	Illustrate the working of AI and ML Algorithms.
C401.3	Demonstrate the applications of AI and ML.

27) Course Name: Big Data And Analytics 18CS72

C402.1	Understand fundamentals of Big Data analytics.
C402.2	Investigate Hadoop framework and Hadoop Distributed File system.
C402.3	Illustrate the concepts of NoSQL using MongoDB and Cassandra for Big Data.
C402.4	Demonstrate the MapReduce programming model to process the big data along with Hadoop tools.
C402.5	Use Machine Learning algorithms for real world big data.
C402.6	Analyze web contents and Social Networks to provide analytics with relevant visualization tools.

28) Course Name:User Interface Design 18CS734

C4034.1	Design the User Interface, design, menu creation, windows creation and connection between menus and windows
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29) Course Name:Network Management18CS742

C4042.1	Analyze the issues and challenges pertaining to management of emerging network technologies such as wired/wireless networks and high-speed internets
C4042.2	Apply network management standards to manage practical networks
C4042.3	Formulate possible approaches for managing OSI network model.
C4042.4	Use on SNMP for managing the network
C4042.5	Use RMON for monitoring the behavior of the network
C4042.6	Identify the various components of network and formulate the scheme for the managing them

30) Course Name: Internet of Things 18CS81

C411.1	Interpret the impact and challenges posed by IoT networks leading to new architectural models.
C411.2	Compare and contrast the deployment of smart objects and the technologies to connect them to network.
C411.3	Appraise the role of IoT protocols for efficient network communication.
C411.4	Elaborate the need for Data Analytics and Security in IoT.
C411.5	Illustrate different sensor technologies for sensing real world entities and identify the applications of IoT in Industry

31) Course Name: Storage Area Networks 18CS822

C4122.1	identify key challenges in managing information and analyze different storage networking technologies and virtualization
C4122.2	Explain components and the implementation of NAS
C4122.3	Describe CAS architecture and types of archives and forms of virtualization
C4122.4	Illustrate the storage infrastructure and management activities