

COURSE OUTCOMES

REGULATION: 2017

S.NO	COURSE NAME	COURSE OUT COMES	
1	C101 - Mathematical Foundations For Computer Applications (MA5161)	C101.1	Basic knowledge of matrix, set theory, functions and relations concepts needed for designing and solving problems
		C101.2	Logical operations and predicate calculus needed for computing skill
		C101.3	Design and solve Boolean functions for defined problems.
		C101.4	Apply the acquired knowledge of formal languages to the engineering areas like Compiler Design
		C101.5	Apply the acquired knowledge of finite automata theory and to design discrete problems to solve by computers
2	C102 - Computer Organization (MC7101)	C102.1	Perform conversions and arithmetic operations in various number systems
		C102.2	Simplify using laws of Boolean algebra and Karnaugh map method
		C102.3	Design various combinational and sequential circuits
		C102.4	Differentiate between various addressing modes
		C102.5	Trace the flow of execution of an instruction in a processor
		C102.6	Differentiate between the various mapping policies used in cache memories
		C102.7	Discuss the implementation of virtual memory
		C102.8	Discuss the various types of I/O transfers
3	C103 - Problem Solving And programming (MC5102)	C103.1	Able to design a computational solution for a given problem.
		C103.2	Able to break a problem into logical modules that can be solved (programmed).
		C103.3	Able to transform a problem solution into programs involving programming constructs.
		C103.4	To write programs using structures, strings, arrays, pointer and files for solving complex computational problem.

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	C103 - P	C103.5	Able to introduce modularity using functions and pointers which permit ad hoc run-time polymorphism.
4	C104 - Database Management Systems (MC5103)	C104.1	Understand the basic concepts of the database and data models.
		C104.2	Design a database using ER diagrams and map ER into Relations and normalize the relations
		C104.3	Acquire the knowledge of query evaluation to monitor the performance of the DBMS
		C104.4	Develop a simple database applications using normalization.
		C104.5	Acquire the knowledge about different special purpose databases and to critique how
		C104.6	They differ from traditional database systems.
5	C105 - Data structures (MC5104)	C105.1	Able to analyze algorithms and determines their time complexity.
		C105.2	Able to understand the concepts of data types, data structures and linear structures.
		C105.3	Able to apply data structures to solve various problems
		C105.4	Able to understand non-linear data structures.
		C105.5	Able to apply different Sorting, Searching and Hashing algorithms.
6	C106 - Data Structures Laboratory (MC5111)	C106.1	Work with basic data structures that are suitable for the problems to be solved efficiently.
		C106.2	Design and implement linear, and tree and its applications.
		C106.3	Design sorting technique, its algorithm design and analysis
7	C107 - Database Management Systems Laboratory (MC5112)	C107.1	Design and Implement databases
		C107.2	Formulate complex queries using SQL
		C107.3	Design and Implement applications that have GUI and access databases for backend connectivity
8	Communication Skill Laboratory (EC8681)	C108.1	Students will be able to make presentations and participate in group discussions with high level of self-confidence.
		C108.2	Students will be able to perform well in the interviews

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	C108 - Computer Laboratory	C108.3	They will have adequate reading and writing skills needed for workplace situations
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9	C109 - Object Oriented Programming (MC5201)	C109.1	Able to understand and design the solution to a problem using object-oriented programming concepts.
		C109.2	Able to use proper class protection mechanism to provide security.
		C109.3	Able to demonstrate the use of virtual functions to implement polymorphism.
		C109.4	Understand and implement the features of C++ including templates, exceptions and file handling for providing programmed solutions to complex problems
		C109.5	Able to reuse the code with extensible Class types, User-defined operators and function Overloading
10	C110 - Software Engineering (MC5203)	C110.1	Able to understand the problem domain to choose process models and to develop SRS
		C110.2	Able to model software projects using appropriate design notations
		C110.3	Able to measure the product and process performance using various metrics
		C110.4	Able to evaluate the system with various testing techniques and strategies
		C110.5	Able to analyze, design, verify, validate, implement, and maintain software systems.
11	C111 - Operating Systems (MC5204)	C201.1	Able to understand the operating system components and its services
		C201.2	Implement the algorithms in process management and solving the issues of IPC
		C201.3	Able to demonstrate the mapping between the physical memory and virtual memory
		C201.4	Able to understand file handling concepts in OS perspective
		C201.5	Able to understand the operating system components and services with the recent OS
12	C112 - Computer Graphics And Multimedia (MC5205)	C112.1	Gain proficiency in various algorithms of 2D Computer graphics and trend their use in various real-life systems.
		C112.2	Enhance the perspective of Modern computer system with modelling, analysis and interpretation of 3D visual information.
		C112.3	Able to understand different forms of Multimedia and gain knowledge about Audio and Video.
		C112.4	Able to understand the Networks used for Multimedia and to communicate with Multimedia Applications.

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	C11	C112.5	Able to design and implement a number of Multimedia Applications and to do Research in Multimedia Industry.
13	C113 - Object Oriented Programming Laboratory (MC7303)	C113.1	Develop programs in object oriented paradigm
		C113.2	implement data structure using C++
		C113.3	Suggest appropriate data structure for any given data set
		C113.4	Modify or suggest new data structure for an application.
		C113.5	File handling in object oriented environment
14	C114 -Graphics And Multimedia Laboratory (MC5212)	C115.1	Function as designers, applying Mathematics knowledge for various calculations, involving tools for analyzing the world, accessing and interpreting the information and representing what they know to others.
		C115.2	Gain knowledge about the creation of text, image, graphic and animation files.
		C115.3	Learn about authoring tools for packaging multimedia systems and to use a variety of common software packages to complete the experiments.
15	C115 - Operating Systems And Embedded Systems Laboratory (CS6511)	C205.1	Perform arithmetic operation using 8085 microprocessor and 8051 microcontroller along with I/O interfacing.
		C205.2	Improved Employability and entrepreneurship capacity due to knowledge up gradation on recent trends in embedded systems design.
		C205.3	Create system calls, processes and implement IPC.
		C205.4	Compare the performance of various CPU Scheduling Algorithm
16	C201 -Advanced Data Structures And Algorithms (MC5301)	C201.1	Describe, explain and use abstract data types including stacks, queues and lists
		C201.2	Design and Implement Tree data structures and Sets implementation
		C201.3	Able to understand and implement non linear data structures -graphs.
		C201.4	Able to understand various algorithm design and implementation
	networks	C202.1	Able to trace the flow of information from one node to another node in the network
		C202.2	Able to Identify the components required to build different types of networks

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17	C202 - Computer Networks (MC5302)	C202.3	Able to understand the functionalities needed for data communication into layers
		C202.4	Able to choose the required functionality at each layer for given application
		C202.5	Able to understand the working principles of various application protocols and fundamentals of security issues and services available ms
18	C203 - Web Programming Essentials (MC5303)	C203.1	Create a basic website using HTML and Cascading Style Sheets.
		C203.2	Design and implement dynamic web page with validation using JavaScript objects and by applying different event handling mechanisms.
		C203.3	Design rich client presentation using AJAX.
		C203.4	Design and implement simple web page in PHP, and to present data in XML format.
		C203.5	Design front end web page and connect to the back end databases
19	C204 - Programming With Java (MC5304)	C204.1	Implement Java programs.
		C204.2	Make use of hierarchy of Java classes to provide a solution to a given set of requirements found in the Java API
		C204.3	Use the frameworks JSP, Hibernate, Spring
		C204.4	Design and implement server side programs using Servlets and JSP
20	C205 - Object Oriented Analysis And Design (MC5305)	C205.1	Demonstrate the fundamental knowledge of various phases of compiler and Programming Language basics.
		C205.2	Represent language tokens using regular expressions, context free grammar and finite automata and design lexical analyzer for a language.
		C205.3	Compare top down with bottom up parsers, and develop appropriate parser to produce parse tree representation of the input.
		C205.4	Write program in runtime environment and evaluate the code generation platform.
		C205.5	Apply optimization techniques to intermediate code and generate machine code for high level language program.
	structures and algorithms (MC5311)	C206.1	Work with basic data structures that are suitable for the problems to be solved efficiently.

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21	C206 - Data Structures And Algorithms Laboratory (MC5311)	C206.2	Design and implement linear, tree, and graph structures and its applications
		C206.3	Design various sorting techniques, its algorithm design and analysis
22	C207 - Web Programming Laboratory (MC5312)	C207.1	Develop simple web applications using scripting languages.
		C207.2	Implement server side and client side programming develop web applications with various web technology concepts.
		C207.3	Design a Web application using various technologies such as AJAX, JQuery and JSON.
		C207.4	Develop an application for social media using HTML5, CSS3, JQuery, AJAX & PHP
23	C208 - Programming With Java Laboratory (MC5313)	C208.1	Apply the Object Oriented features of Java for programming on the internet
		C208.2	Implement, compile, test and run Java program,
		C208.3	Make use of hierarchy of Java classes to provide a solution to a given set of requirements found in the Java API
		C208.4	Understand the components and patterns that constitute a suitable architecture for a web application using java servlets
		C208.5	Demonstrate systematic knowledge of backend and front end by developing an appropriate application.
		C208.6	Implement socket programming and Client side scripting in Java
24	C209 - Resource Management Techniques (MC5401)	C209.1	Understand and apply linear, integer programming to solve operational problem with constraints
		C209.2	Apply transportation and assignment models to find optimal solution in warehousing and Travelling,
		C209.3	To prepare project scheduling using PERT and CPM
		C209.4	Identify and analyze appropriate queuing model to reduce the waiting time in queue.
		C209.5	Able to use optimization concepts in real world problems
25	C210 - Wireless Computing Laboratory (MC5402)	C210.1	Gain the knowledge about various types of Wireless Data Networks and Voice Networks.
		C210.2	understand the architectures, the challenges and the Solutions of Wireless Communication

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25	C210 - Mobile Computing (MC5403)	C210.3	Realize the role of Wireless Protocols in shaping the future Internet.
		C210.4	Able to develop simple Mobile Application Using Android
26	C211 - Advanced Database And Data Mining (MC5403)	C211.1	Create relational data models.
		C211.2	Preprocess the data for mining applications.
		C211.3	Apply the association rules for mining the data.
		C211.4	Design and deploy appropriate classification techniques.
		C211.5	Cluster the high dimensional data for better organization of the data.
		C211.6	Discover the knowledge imbibed in the high dimensional system.
		C211.7	Evolve Multidimensional Intelligent model from typical system.
		C211.8	Evaluate various mining techniques on complex data objects.
27	C212 - Web Application Development (MC5404)	C212.1	Design and implement Internet systems for enhancing education and engineering design
		C212.2	Understand functionality of Internet system
		C212.3	Design a system according to customer needs using the available Internet technologies
		C212.4	Design and develop interactive, client-side, server-side executable web applications.
		C212.5	Develop a rapid application in many areas on most platforms.
		C212.6	Build better Web apps more quickly and with less code
28	C213 - Cloud Computing (MC5004)	C213.1	Apply cryptographic algorithms for encrypting and decryption for secure data transmission
		C213.2	Understand the importance of Digital signature for secure e-documents exchange
		C213.3	Understand the program threats and apply good programming practice

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28	C213 - Security In C	C213.4	Get the knowledge about the security services available for internet and web applications.
		C213.5	Understand data vulnerability and sql injection
		C213.6	Gain the knowledge of security models and published standards
29	C214 - Mobile Application Development Laboratory (MP5411)	C214.1	Install and configure Android application development tools.
		C214.2	Design and develop user Interfaces for the Android platform.
		C214.3	Apply Java programming concepts to Android application development.
		C214.4	Familiar with technology and business trends impacting mobile applications.
		C214.5	competent with the characterization and architecture of mobile applications.
30	C215 - Web Application Development Laboratory (MC5412)	C215.1	Design and develop interactive, client-side, server-side executable web applications.
		C215.2	Develop a simple online application using Spring MVC
		C215.3	Create applications using web services such as JSON, WSDL and SOAP.
		C215.4	Develop a simple database application using Spring JDBC/Struts with CRUD functionality
31	C301 - Cloud Computing (MC5501)	C301.1	Compare the strengths and limitations of cloud computing
		C301.2	Identify the architecture, infrastructure and delivery models of cloud computing
		C301.3	Apply suitable virtualization concept.
		C301.4	Choose the appropriate cloud player, Programming Models and approach.
		C301.5	Address the core issues of cloud computing such as security, privacy and interoperability.
		C301.6	Design Cloud Services and Set a private cloud
	5502)	C302.1	Work with big data platform and Understand the fundamentals of various big data analysis techniques

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32	C302 - Big Data Analytics (MC)	C302.2	Analyze the big data analytic techniques for useful business applications.
		C302.3	Design efficient algorithms for mining the data from large volumes.
		C302.4	Analyze the HADOOP and Map Reduce technologies associated with big data analytics
		C302.5	Explore the applications of Big Data
33	C303 - Software Testing And Quality Assurance (MC5503)	C303.1	Able to test the software by applying various testing techniques.
		C303.2	Able to debug the project and to test the entire computer based systems at all levels.
		C303.3	Able to test the applications in the specialized environment using various automation tools.
		C303.4	Able to evaluate the web applications using bug tracking tools.
		C303.5	Able to apply quality and reliability metrics to ensure the performance of the software
34	C304 - Professional Ethics (MC5006)	C304.4	Helps to examine situations and to internalize the need for applying ethical principles, values to tackle with various situations.
		C304.5	Develop a responsible attitude towards the use of computer as well as the technology.
		C304.6	Able to envision the societal impact on the products/ projects they develop in their career
		C304.7	Understanding the code of ethics and standards of computer professionals.
		C304.8	Analyze the professional responsibility and empowering access to information in the work place
34	C305 - Service Oriented Architecture (MC5012)	C305.1	Able to know the structure of XML and to design and store data in XML
		C305.2	Able to apply SOAP , HTTP and UDDI services in the web applications.
		C305.3	Able to apply SOA architecture and the underlying design principles for the web projects
		C305.4	Able to understand the role of SOA in J2EE and .NET.
		C305.5	Able to know the cloud computing architecture and the types of clouds.

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36	C306 - Cloud And Big Data Laboratory (MC5511)	C306.1	Use the cloud and big data tool kits.
		C306.2	Design and Implement applications on the Cloud environment.
		C306.3	Set up and implement Hadoop clusters
		C306.4	Use the map reduce tasks for various applicationS
37	C307 - Software Testing Laboratory (MC5512)	C307.1	Able to test the software by applying various testing techniques.
		C307.2	Able to debug the project and to test the entire computer based systems at all levels.
		C307.3	Able to test the applications in the specialized environment using various automation tools.
		C307.4	Able to evaluate the web applications using bug tracking tools.
		C307.5	Able to apply quality and reliability metrics to ensure the performance of the software
38	C308 - Project Work	C308.1	Understand the problem statement in a various domain
		C308.2	Identify the problem and do the literature survey
		C308.3	Design a module for solving a problem in the respective area.
		C308.4	Implement a module for solving a problem identified.
		C308.5	Evaluate the module results and make improvements.