

Department of Information Technology		
2015 Scheme SEM-3		
MA201 LINEAR ALGEBRA AND COMPLEX		
Sl. No.	Course Outcomes	Level
C01	To equip the students with methods of solving a general system of linear equations.	
C02	To familiarize them with the concept of Eigen values and diagonalization of a matrix which have many applications in Engineering.	
C03	To understand the basic theory of functions of a complex variable and conformal Transformations.	
CS201 DISCRETE COMPUTATIONAL STRUCTURES		
Sl. No.	Course Outcomes	Level
C01	To introduce mathematical notations and concepts in discrete mathematics that is essential for computing.	
C02	To train on mathematical reasoning and proof strategies.	
C03	To cultivate analytical thinking and creative problem solving skills.	
IT201 Digital System Design		
Sl. No.	Course Outcomes	Level
C01	To impart an understanding of the basic concepts of Boolean algebra and digital circuit design.	
C02	To provide familiarity with the design and implementation of different types of practically used combinational and sequential circuits.	
C03	To provide an introduction to Hardware Description Language	
C04	To expose the students to basics of arithmetic algorithms	
CS205 Data Structures		
Sl. No.	Course Outcomes	Level
C01	To impart a thorough understanding of linear data structures such as stacks, queues and their applications.	
C02	To impart a thorough understanding of non-linear data structures such as trees, graphs and their applications.	
C03	To impart familiarity with various sorting, searching and hashing techniques and their performance comparison.	
C04	To impart a basic understanding of memory management.	
IT203 Data Communication		
Sl. No.	Course Outcomes	Level
C01	Build an understanding of the fundamental concepts of data transmission.	

C02	Familiarize the student with the basics of encoding of analog and digital data	
C03	Preparing the student for understanding advanced courses in computer networking	
HS210 LIFE SKILLS		
Sl. No.	Course Outcomes	Level
C01	To develop communication competence in prospective engineers.	
C02	To enable them to convey thoughts and ideas with clarity and focus.	
C03	To develop report writing skills.	
C04	To equip them to face interview & Group Discussion.	
C05	To inculcate critical thinking process.	
C06	To prepare them on problem solving skills.	
C07	To provide symbolic, verbal, and graphical interpretations of statements in a problem description.	
C08	To understand team dynamics & effectiveness.	
C09	To create an awareness on Engineering Ethics and Human Values.	
C010	To instill Moral and Social Values, Loyalty and also to learn to appreciate the rights of others.	
C011	To learn leadership qualities and practice them.	

HS200 Business Economics		
Sl. No.	Course Outcomes	Level
C01	To familiarize the prospective engineers with elementary Principles of Economics and Business Economics.	
C02	To acquaint the students with tools and techniques that are useful in their profession in Business Decision Making which will enhance their employability;	
C03	To apply business analysis to the “firm” under different market conditions;	
C04	To apply economic models to examine current economic scenario and evaluate policy options for addressing economic issues	
C05	To gain understanding of some Macroeconomic concepts to improve their ability to understand the business climate;	
	To prepare and analyse various business tools like balance sheet, cost benefit analysis and rate of returns at an elementary level	

MA202 Probability distributions, Transforms and Numerical Methods		
Sl. No.	Course Outcomes	Level
C01	To introduce the concept of random variables, probability distributions, specific discrete and continuous distributions with practical application in various Engineering and social life situations.	
C02	To know Laplace and Fourier transforms which has wide application in all Engineering courses.	
C03	To enable the students to solve various engineering problems using numerical	

	methods.	
CS202 Computer Organization and Architecture		
Sl. No.	Course Outcomes	Level
C01	To impart an understanding of the internal organization and operations of a computer.	
C02	To introduce the concepts of processor logic design and control logic design.	
IT202 Algorithm Analysis & Design		
Sl. No.	Course Outcomes	Level
C01	To develop an understanding about basic algorithms and different problem solving strategies.	
C02	To improve creativeness and the confidence to solve non-conventional problems and expertise for analysing existing solutions.	
IT204 Object Oriented Techniques		
Sl. No.	Course Outcomes	Level
C01	To build an understanding of basic concepts of object oriented programming techniques	
C02	To develop programming skills in C++ programming language	
C03	To implement object oriented techniques using C++ language features.	
C04	To develop software using object oriented programming paradigms	
CS208 Principles of Database Design		
Sl. No.	Course Outcomes	Level
C01	· To impart the basic understanding of the theory and applications of database management systems.	
C02	· To give basic level understanding of internals of database systems.	
C03	· To expose to some of the recent trends in databases.	
IT301 Software Architecture and Design Patterns		
Sl. No.	Course Outcomes	Level
C01	· To introduce to the students the basic knowledge of software, software development process and the concepts of software design principles.	
C02	Gain knowledge on how to design UML diagrams.	
C03	To impart knowledge on the different architectural styles and architectural patterns for the software.	
IT303 Theory of Computation		
Sl. No.	Course Outcomes	Level
C01	To study computing machines and their capabilities	
C02	To impart the basic concepts of theory of automata, languages and computation.	

C03	To develop a model for that computers manipulate the data.	
C04	To develop understanding about machines for sequential recognition and computation	
C05	To understand and classify formal languages and grammars	

CS305 Microprocessors and Microcontrollers		
Sl. No.	Course Outcomes	Level
C01	To impart basic understanding of the internal organisation of 8086 Microprocessor and 8051 microcontroller.	
C02	To introduce the concepts of interfacing microprocessors with external devices.	
C03	To develop Assembly language programming skills.	

IT305 Operating systems		
Sl. No.	Course Outcomes	Level
C01	To provide basic knowledge of computer operating system structures and functioning.	
C02	To understand the fundamental concepts, processes and communication	
C03	To understand and analyse implementation of: process synchronization	
C04	To know design issues associated with operating systems	
C05	To familiarise with memory management including virtual memory	

IT307 Computer Networks		
Sl. No.	Course Outcomes	Level
C01	To understand the concepts of Computer networks, its applications, types and Network Software & Hardware.	
C02	To know the various Data Link Layer protocols.	
C03	To study the congestion control algorithms in Network Layer	
C04	To understand the application layer protocols HTTP, FTP, SMTP, P2P, DNS	
C05		

Elective-IT361 Graph Theory		
Sl. No.	Course Outcomes	Level
C01	To understand and apply the fundamental concepts in graph theory	
C02	To apply graph theory based tools in solving practical problems	
C03	To improve the proof writing skills.	

Elective-IT367 Computer Graphics & Multimedia		
Sl. No.	Course Outcomes	Level
C01	To build an understanding of the fundamental concepts of Computer Graphics & Multimedia	
C02	To familiarize with the working principles of various display technologies.	
C03	To prepare for understanding advanced courses in Computer Graphics.	

IT302 Internet Technology		
Sl. No.	Course Outcomes	Level
C01	To impart the basics of web page design	

C02	To understand important components of HTML5 documents and use HTML5 to create web pages	
C03	To learn to use JavaScript in Webpages to enhance the functionality and appearance of web pages	
C04	To know XML schema and transformation	
C05	To design dynamic web pages using PHP.	

CS304 COMPILER DESIGN

Sl. No.	Course Outcomes	Level
C01	To provide a thorough understanding of the internals of Compiler Design.	

IT304 Data Warehousing and Mining

Sl. No.	Course Outcomes	Level
C01	To understand Data Mining, its origin, taxonomy and applications	
C02	To understand types of data and to improve the quality of data and efficiency and the ease of the mining process.	
C03	To understand the supervised learning that is Classification, its applications and approaches	
C04	To understand how to identify associations among objects and to learn various algorithms to find them	
C05	To understand methods and need for finding complex Association Rules	
	To learn the unsupervised learning to identify the relation among the objects and to understand applications and algorithms for Clustering	

IT306 Distributed Systems

Sl. No.	Course Outcomes	Level
C01	To understand the concepts that underlie distributed computing systems along with design and implementation issues.	
C02	To study the key mechanisms and models for distributed systems.	

HS300 Principles of Management

Sl. No.	Course Outcomes	Level
C01	To develop ability to critically analyse and evaluate a variety of management practices in the contemporary context;	
C02	To understand and apply a variety of management and organisational theories in practice;	
C03	To be able to mirror existing practices or to generate their own innovative management competencies, required for today's complex and global workplace;	
C04	To be able to critically reflect on ethical theories and social responsibility ideologies to create sustainable organisations.	

Elective 2- IT364 Software Project Management

Sl. No.	Course Outcomes	Level
C01	To develop awareness regarding the theoretical and methodological issues related to software project management.	

C02	·To develop software projects based on current technologies.	
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IT401 Embedded Systems		
Sl. No.	Course Outcomes	Level
C01	To understand the fundamental concepts in Embedded Systems, Real Time Operating Systems, Arduino and Raspberry Pi	
C02	To impart Embedded System Design Techniques	

IT403 Mobile Computing		
Sl. No.	Course Outcomes	Level
C01	Learn the basics of Mobile computing.	
C02	Learn networking concepts relevant to modern wireless systems.	
C03	·Learn emerging mobile computing ideas and best practices.	
C04	Get hands-on knowledge practice with mobile computing	

IT405 Internetworking with TCP/IP		
Sl. No.	Course Outcomes	Level
C01	To understand the fundamental concepts in Internetworking, Internet Addressing, IP, UDP, and TCP Protocols, Routing Architecture, Network Virtualization and Software Defined Networking	

IT407 Knowledge Engineering		
Sl. No.	Course Outcomes	Level
C01	To get introduced to the basic knowledge representation, problem solving, and learning methods of Artificial Intelligence.	
C02	To solve problems in Artificial Intelligence using Python.	
C03	To familiarize with Fuzzy Logic and knowledge processing in expert systems.	

IT409 Web Application Development		
Sl. No.	Course Outcomes	Level
C01	To give insights of the Internet programming for designing and implementation	
C02	To develop code to handle exceptions and validate data for file and database storage.	
C03	To know usage of recent platforms used in developing web applications such as J2EE, XML ...etc.	
C04	To impart the idea about java beans.	

Elective 3- IT461 Software Testing and Quality Assurance		
Sl. No.	Course Outcomes	Level
C01	To study fundamental concepts in software testing, including software testing objectives, process, criteria, strategies, and methods.	
C02	To learn planning of a test project, designing test cases and data, conducting test	

	operations, managing software problems and defects, and generating a test report.	
C03	To develop an understanding of the meaning and importance of quality in relation to software systems and the software development process.	
C04	To discuss issues and techniques for implementing and managing software quality assurance processes and procedures.	

IT404 Data Analytics		
Sl. No.	Course Outcomes	Level
C01	To understand the data analysis techniques	
C02	To understand the concepts behind the descriptive analytics and predictive analytics of data	
C03	To familiarize with Big Data and its sources	
C04	To familiarize data analysis using R programming	
C05	To understand the different visualization techniques in data analysis	
IT402 Cryptography & Cyber Security		
Sl. No.	Course Outcomes	Level
C01	To understand the mathematics behind Cryptography.	
C02	To understand the security concerns and vulnerabilities	
C03	To familiarize with different types of cryptosystems	
C04	To create an awareness for the design of various cryptographic primitives	
C05	To analyze different types of attacks on various cryptosystems.	
Elective 4-IT464 Information Storage Management		
Sl. No.	Course Outcomes	Level
C01	To understand data creation, the amount of data being created, the value of data to a business, challenges in data storage and data management,	
C02	To understand solutions available for data storage, Core elements of a data center infrastructure, role of each element in supporting business activities	
Elective 5- FS482 Responsible Engineering		
Sl. No.	Course Outcomes	Level
C01	To enable the students to create an awareness on responsibilities and Human Values, to instill Moral and Social Values and Loyalty and to appreciate the rights of others.	