

COURSE OUTCOMES

REGULATION: 2013

| S.NO | COURSE NAME | COURSE OUT COMES | |
|------|--|------------------|--|
| 1 | C101- Technical English – I (HS6151) | C101.1 | Understand the basic grammatical functions and vocabulary. |
| | | C101.2 | Speak and write clearly and communicate using appropriate communicative strategies |
| | | C101.3 | Write Informal letters /blog/email with a wide range of vocabulary |
| | | C101.4 | listen/view and comprehend different spoken discourses and passages in different accents. |
| | | C101.5 | Read and write different genres of texts. |
| 2 | C102 - Mathematics – I (MA6151) | C102.1 | Understand the Concepts of Diagonalization of matrices. |
| | | C102.2 | Apply simple techniques for testing the convergence of sequences and series |
| | | C102.3 | Use the differentiation concepts to differentiate functions |
| | | C102.4 | Apply partial differentiation in functions of several variables. |
| | | C102.5 | Apply integration concepts to compute multiple integrals. |
| 3 | C103 - Engineering Physics – I (PH6151) | C103.1 | Able to classify various crystal structures and its parameters. |
| | | C103.2 | Explain the basics of properties of matter, the thermal properties of materials like thermal conductivity and its application. |
| | | C103.3 | Acquire knowledge on the concepts of quantum theory and its application in tunneling microscopes. |
| | | C103.4 | Understands the basic concepts of Acoustics in buildings and the production of ultrasonic waves and its application in NDT and medical field. |
| | | C103.5 | Understands the concept of photonics and its usage in the production of different types of laser and the principle of fibre optics with its application in various fields. |
| 4 | C104 - Engineering Chemistry-I (CY6151) | C104.1 | Understand the types of water and water treatment techniques. |
| | | C104.2 | Utilize the various adsorbent in industries. |
| | | C104.3 | Classify the types of alloys and understand the component present in the alloys. |
| | | C104.4 | Explain the types of fuels and manufacturing of secondary fuels. |
| | | C104.5 | Illustrate the types of energy resources. |

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| 5 | C105 - Computer programming (GE6151) | C105.1 | Know the organization of digital Computer |
| | | C105.2 | Design C Programs for problems. |
| | | C105.3 | Write and execute C programs using Arrays and Strings for simple applications |
| | | C105.4 | Usage of Pointers and Function in C programming |
| | | C105.5 | Design Programming using Structures and Union |
| 6 | C106 - Engineering Graphics (GE6152) | C106.1 | Discuss about conics and orthographic views of engineering components |
| | | C106.2 | Draw the projection of points, lines and planes |
| | | C106.3 | Classify solids and projection of solids at different positions |
| | | C106.4 | Show sectioned view of solids and development of surface |
| | | C106.5 | Draw isometric projection and perspective views of an object/solid |
| 7 | C107 - Computer Practices Laboratory (GE6161) | C107.1 | Know about Data Manipulation in MS Office Packages |
| | | C107.2 | Apply good programming design methods for program development using Decision making and looping statements. |
| | | C107.3 | Design and implement C programs using strings and arrays. |
| | | C107.4 | Design and implement C programs using functions and string functions. |
| | | C107.5 | Develop recursive functions and develop programs using structures and unions. |
| 8 | C108 - Engineering Practices Laboratory (GE6162) | C108.1 | Apply the knowledge of pipeline connections to household fittings and industrial buildings. |
| | | C108.2 | Prepare the different joints in roofs, doors, windows and furniture. |
| | | C108.3 | Perform step turning operation in a lathe. |
| | | C108.4 | Perform the various welding processes and know about its applications. |
| | | C108.5 | Produce a funnel using sheet metal. |
| 9 | C109 - Physics and Chemistry Laboratory - I (GE6163) | C109.1 | Understand the concept of Laser and its diffraction for different usage |
| | | C109.2 | Able to find the velocity of ultrasonic waves in different liquid. |
| | | C109.3 | Apply principle of diffraction to determine the wavelength of visible spectrum. |
| | | C109.4 | Understand the various parameter affecting the thermal conductivity of poor conductor |
| | | C109.5 | Analyze the various modulus of elasticity of different types of materials. |

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| 10 | C110 - Technical English – II (HS6251) | C110.1 | Understand basic grammar and know to engage in conversation. |
| | | C110.2 | Write and produce different types of technical write ups. |
| | | C110.3 | Read and write different genres of technical texts. |
| | | C110.4 | Create Job applications and Resume / E - Resume |
| | | C110.5 | Express opinions and initiate a discussion using appropriate communicative strategies |
| 11 | C111 - Mathematics – II (MA6251) | C111.1 | Understand the concepts of Vector Calculus and their applications. |
| | | C111.2 | Interpret the Concepts of analytic functions and Conformal mapping. |
| | | C111.3 | Understand the integration concepts on Complex integration |
| | | C111.4 | Demonstrate the main concepts on Laplace transformations and their applications |
| | | C111.5 | Use various techniques in solving differential equations. |
| 12 | C112 - Engineering Physics – II (PH6251) | C112.1 | Gain knowledge on the conducting materials and its properties |
| | | C112.2 | Acquire knowledge on the concepts of carrier concentration in intrinsic and extrinsic semiconductors and its determination using Hall effect. |
| | | C112.3 | Classify the different types of magnetic materials and know the properties of superconductors. |
| | | C112.4 | Understands the basic concepts of dielectric materials and its usage in capacitors and transformers. |
| | | C112.5 | Able to classify the different modern engineering materials and its application in different fields. |
| 13 | C113 - Engineering Chemistry – II (CY6251) | C113.1 | Illustrate the types of electrochemical cell.. |
| | | C113.2 | Summarize the types of corrosion and corrosion prevention methods. |
| | | C113.3 | Explain the types of fuels and manufacturing of secondary fuels. |
| | | C113.4 | Classify the types of alloys and understand the component present in the alloys. |
| | | C113.5 | Analyze the sample using various spectroscopy. |
| 14 | 14 - Digital Principles and System Design (CS6201) | C114.1 | Perform Arithmetic Operations in any number system |
| | | C114.2 | Simplify the boolean expression using k-map and tabulation techniques |
| | | C114.3 | Use boolean simplification techniques to design a combinational hardware |
| | | C114.4 | Design and analyses a digital circuit using combinational and sequential |

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| | C114 Sy | C114.5 | Design reconfigurable digital circuit using PLD |
| 15 | C115 - Programming and Data Structures I (IT6212) | C115.1 | Use the control structures of C appropriately for problems. |
| | | C115.2 | Implement abstract data types for linear data structures. |
| | | C115.3 | Apply the different linear data structures to problem solutions. |
| | | C115.4 | Critically analyse the various algorithms. |
| | | C115.5 | Implement sorting , searching and hash techniques. |
| 16 | C116 - Physics and Chemistry Laboratory - II (GE6262) | C116.1 | Analyze the various Modulus of materials and fluidic property of the the given liquid. |
| | | C116.2 | Acquire the practical knowledge about band gap of a semiconductor and Interference ,Diffraction. |
| | | C116.3 | Gaining the knowledege of electrochemical redox reaction. |
| | | C116.4 | Apply knowledge of measurement of hardness producing ions, alkalinity, conductance,EMF |
| | | C116.5 | Understand the impact of water quality and to solve engineering problems. |
| 17 | C117 - Digital Laboratory (IT6211) | C117.1 | Implement boolean simplification techniques to design a combinational hardware circuit. |
| | | C117.2 | Design and implement combinational and sequential circuits. |
| | | C117.3 | Analyse a given circuit-combinational and sequential. |
| | | C117.4 | Design the different functional units in a digital computer system. |
| | | C117.5 | Design and Implement a simple digital system. |
| 18 | C118 - Programming and Data Structures Laboratory I (IT6212) | C118.1 | Create the C programs by using the basicprograming fundamentals for given application |
| | | C118.2 | Design and implement Cprograms application using file handling concepts |
| | | C118.3 | Use of data structures concept |
| | | C118.4 | Critically analyse the structure usage and application of stacks and queues |
| | | C118.5 | Develop a suitable application using sorting searching and hashing techntechniques |
| | s and Partial ons (MA6351) | C201.1 | Apply various techniques in solving the partial differential equations. |
| | | C201.2 | Evaluate the Fourier Series using the different methods of integral. |

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| 19 | C201 – Transform Differential Equatic | C201.3 | Analyze the application of partial differential equations in a large number of engineering subjects like heat conduction and wave equations |
| | | C201.4 | Apply integration techniques to formulate the Fourier transforms. |
| | | C201.5 | Apply Z - transforms and Difference equations to solve some of the engineering problems. |
| 20 | C202 – Programming and Data Structures II (CS6301) | C202.1 | Explain the fundamentals of Object Oriented Programming. |
| | | C202.2 | Demonstrate the concepts of data abstraction, encapsulation and inheritance. |
| | | C202.3 | Outline the concepts of Exception handling and templates. |
| | | C202.4 | Summarize about tree preliminaries. |
| | | C202.5 | Demonstrate different Non-linear data structures algorithms |
| 21 | C203 – Database Management Systems (CS6302) | C203.1 | K4 To describe a sound introduction to the discipline of database managementSystems. |
| | | C203.2 | To give a good formal foundation on the relational model of data and usage of Relational Algebra. |
| | | C203.3 | To introduce the concepts of basic SQL as a universal Database language. |
| | | C203.4 | To enhance knowledge to advanced SQL topics like embedded SQL, Procedures connectivity through JDBC. |
| | | C203.5 | To demonstrate the principles behind systematic database design approaches By covering conceptual design, logical design through normalization |
| 22 | C204 – Computer Architecture (CS6303) | C204.1 | Explain the computer organization components, instructions and addressing modes |
| | | C204.2 | Demonstrate arithmetic operations |
| | | C204.3 | Interpret the basic of MIPS implementation and pipelining |
| | | C204.4 | Outline the concept of parallelism and multi-core processor |
| | | C204.5 | Classify the memory technologies and I/O systems |
| 23 | C205 – Analog and Digital Communication (CS6304) | C205.1 | Understand the concepts of noise, modulation techniques of analog communication. |
| | | C205.2 | Discuss digital communication techniques ASK, FSK, PSK and QPSK. |
| | | C205.3 | Explain the data and pulse communication techniques, error detection and correction codes. |
| | | C205.4 | Analysethe performance of source and error control codes using theorems. |
| | | C205.5 | Understand the significance and role of the course in present contemporary world. |
| | al ing | C206.1 | Understand the types, characteristics of Ecosystem & Biodiversity. |

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| 24 | C206– Environment Science and Engineer (GE6351) | C206.2 | Understand the types of pollution & its causes. |
| | | C206.3 | Understand the importance of Natural Resources. |
| | | C206.4 | Understand the Environmental problems. |
| | | C206.5 | Explain the importance of women, child education and HIV /AIDS. |
| 25 | C207 – Programming and Data Structures Laboratory II (IT6311) | C207.1 | Select good programming design methods for program development. |
| | | C207.2 | Develop C++ programs for object oriented concepts. |
| | | C207.3 | Develop C++ programs for handling exceptions. |
| | | C207.4 | Develop C++ programs for practical problems using non-linear data structures. |
| | | C207.5 | Develop C++ programs for practical problems using non-linear data structures. |
| 26 | C208 – Database Management Systems Laboratory (IT6312) | C208.1 | Understand the basic key concept of table creation |
| | | C208.2 | To Design and implement a database schema for a given problem-domain |
| | | C208.3 | To Create and maintain tables using PL/SQL |
| | | C208.4 | Create report for computer application |
| | | C208.5 | Application development using PL/SQL & front end tools |
| 27 | C209 – Digital Communication Laboratory (IT6313) | C209.1 | Design the types various continuous and discrete signals. |
| | | C209.2 | Design and verify various modulation & demodulation circuits. |
| | | C209.3 | Demonstrate band pass and baseband digital signaling schemes through simulation of FSK, PSK, QPSK, QAM and DPSK. |
| | | C209.4 | Apply various channel coding schemes and demonstrate their capabilities towards the improvement of noise performance of communication system. |
| | | C209.5 | Simulate and validate the various functional modules of a communication system. |
| 28 | C210 – Probability and Queuing Theory (MA6453) | C210.1 | Understand the fundamental knowledge of the Probability and distributions. |
| | | C210.2 | Understand the basic concepts of one and two dimensional random variables. |
| | | C210.3 | Understand the concept of Markov chain in terms of a transition probability matrix and transition diagram. |
| | | C210.4 | Interpret the Concepts of Queuing models. |
| | | C210.5 | Apply non Markovian queues to open and closed networks. |
| 29 | Microprocessor controller (C6504) | C211.1 | Understand the architecture of 8086 microprocessor. |
| | | C211.2 | Understand the bus structure of 8086 and execute programs based on 8086. |
| | | C211.3 | Construct memory interfacing circuits. |

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| | C211 – N and M (E) | C211.4 | Develop 8051 microcontroller based systems |
| | | C211.5 | Analyze IO interfacing circuits based on 8051 microcontroller. |
| 30 | C212 – Design and Analysis of Algorithms (CS6402) | C212.1 | Interpret the fundamentals of algorithms in problem solving. |
| | | C212.2 | Classify the different algorithm design techniques for problem solving. |
| | | C212.3 | Develop algorithms for various computing problems. |
| | | C212.4 | Analyze the time and space complexity of various algorithms. |
| | | C212.5 | Identify the limitations of algorithms in problem solving. |
| 31 | C213 – Operating Systems (CS6401) | C213.1 | Explain the basic concepts and functions of Operating Systems. |
| | | C213.2 | Outline various threading models, process synchronization deadlocks and CPU scheduling algorithms. |
| | | C213.3 | Compare and contrast various memory management schemes. |
| | | C213.4 | Explain I/O management and file systems |
| | | C213.5 | Explain administrative tasks on Linux Servers and Distinguish iOS and Android OS. |
| 32 | C214 – Software Engineering (CS6403) | C214.1 | Explain the software engineering process and project management. |
| | | C214.2 | Demonstrate software requirements and analysis. |
| | | C214.3 | Outline the software design process and user interface |
| | | C214.4 | Compare and contrast various software testing |
| | | C214.5 | Discuss about the software integration and project management. |
| 33 | C215 – Microprocessor and Microcontroller Laboratory (IT6411) | C215.1 | Demonstrate and apply working of programs in 8086 microprocessor and 8051 microcontroller. |
| | | C215.2 | Explain various assembly language programs. |
| | | C215.3 | Develop the basic knowledge of microprocessor and microcontroller interfacing and their application. |
| | | C215.4 | Design the system using capabilities of stack program counter and status register and show how these are used to execute a machine code program. |
| | | C215.5 | Execute arithmetic, logical operations, unpacked BCD to ASCII using 8051. |
| 34 | C216 – Operating Systems Laboratory (IT6412) | C216.1 | Experiment with Unix commands and shell programming. |
| | | C216.2 | Build ‘C’ program for process and file system management using system calls. |
| | | C216.3 | Choose the best CPU scheduling algorithm for a given problem instance. |
| | | C216.4 | Identify the performance of various page replacement algorithms. |
| | | C216.5 | Develop algorithm for deadlock avoidance, detection and file allocation strategies. |

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| 35 | C217 – Software Engineering Laboratory (IT6413) | C217.1 | Design and implement complex software solutions using state of the art software engineering techniques. |
| | | C217.2 | Work with knowledge of UML, source control, and project management. |
| | | C217.3 | Test and document the software. |
| | | C217.4 | Develop significant projects given deadline. |
| | | C217.5 | Present their work in a professional manner. |
| 36 | C301 – Computer Networks (CS6551) | C301.1 | Understand the basic layers and its functions in computer networks. |
| | | C301.2 | Evaluate the performance of a network. |
| | | C301.3 | Understand the basics of how data flows from one node to another. |
| | | C301.4 | Analyze and design routing algorithms |
| | | C301.5 | Design protocols for various functions in the network. |
| 37 | C302- Graphics and Multimedia (IT6501) | C302.1 | Apply algorithms to draw 2D objects and to implement 2D geometric transformations. |
| | | C302.2 | Describe Projection concepts, Visibility Detection and animation techniques. |
| | | C302.3 | Explain the concepts of multimedia, multimedia architecture and multimedia databases. |
| | | C302.4 | Examine Compression & Decompression techniques, File format and Storage and retrieval technologies. |
| | | C302.5 | Discuss about hypermedia messaging standards & Distributed Multimedia Systems. |
| 38 | C303 - Object Oriented Analysis and Design (CS6502) | C303.1 | Explain OOAD concepts and use case modeling. |
| | | C303.2 | Select an appropriate design pattern |
| | | C303.3 | Illustrate about domain models and conceptual classes. |
| | | C303.4 | Demonstrate the various UML Diagrams. |
| | | C303.5 | Create code from design and Compare various testing techniques. |
| 39 | C304- Digital Signal Processing (IT6502) | C304.1 | Classify the Discrete signals and systems and understand its characteristics. |
| | | C304.2 | Apply the properties of Fourier and Z-transforms to estimate the system response. |
| | | C304.3 | Formulate and construct IIR filtering in digital domain. |
| | | C304.4 | Construct FIR filter in digital domain. |
| | | C304.5 | Explain the finite wordlength effects in Digital filters. |
| | Web (IT6503) | C305.1 | Understand the technologies used in web programming to design web pages. |
| | | C305.2 | Learn to apply the object oriented aspects of scripting |

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| 40 | C305- W Programming | C305.3 | Create database with connectivity using JDBC |
| | | C305.4 | To Build web based application using Socket |
| | | C305.5 | To build application on XML and web services. |
| 41 | C306- Wireless Communication (EC6801) | C306.1 | Understand the characteristics of wireless channels and fading concepts. |
| | | C306.2 | Understand and implement various multiple access techniques and cellular architecture. |
| | | C306.3 | Design and implement different signaling schemes for fading channels. |
| | | C306.4 | Analyze the performance of various multipath mitigation techniques. |
| | | C306.5 | Implement system with transmit/receive diversity and MIMO systems |
| 42 | C307 - Networks Laboratory (IT6511) | C307.1 | Identify the different types of network topologies and protocols |
| | | C307.2 | Identify the different types of network devices and their functions within a network |
| | | C307.3 | Familiarity with the basic protocols of computer networks, and evaluates how they can be used to assist in network design and implementation. |
| | | C307.4 | Understand the concepts of routing mechanisms , network interfaces, and design/performance issues in local area networks and wide area networks |
| | | C307.5 | To improve the design by applying appropriate design patterns. |
| 43 | C308- Web Programming Laboratory (IT6512) | C308.1 | Design web pages using HTML/DHTML and style sheets |
| | | C308.2 | Design a web page based on HTML tags and CSS properties with script functionalities |
| | | C308.3 | Design and implement database applications. |
| | | C308.4 | Create dynamic web pages using server side scripting |
| | | C308.5 | Learn to write PHP Database function. |
| 44 | C309 - Case Tools Laboratory (IT6513) | C309.1 | Outline the problem statement for a given problem. |
| | | C309.2 | Construct USE CASE model to identify the classes and functionality of the system. |
| | | C309.3 | Show the objects interaction for all the system functionality |
| | | C309.4 | Develop code from system design. |
| | | C309.5 | Examine the developed code using testing strategies. |
| 45 | C310- Distributed Systems (CS6601) | C310.1 | Explain the distributed systems architecture. |
| | | C310.2 | Outline the inter process communication in distributed systems. |
| | | C310.3 | Explain the file accessing model and various services in distributed system. |
| | | C310.4 | Demonstrate concurrency control and properties of transaction in Distributed systems. |
| | | C310.5 | Discuss resource and process management in distributed system. |

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| 46 | C311 - Mobile Computing (IT6601) | C311.1 | understand the basic of mobile telecommunication system |
| | | C311.2 | Choose the required functionality at each layer of give application |
| | | C311.3 | Identify solution for each functionality at each layer |
| | | C311.4 | Use simulator tools and design Ad hoc networks |
| | | C311.5 | develop mobile application based on mobile platform |
| 47 | C312 - Artificial Intelligence (CS6659) | C312.1 | Exhibit strong familiarity with a number of important AI techniques, including in particular search, knowledge representation, and planning and constraint management. |
| | | C312.2 | Recognize appropriate AI methods to solve a given problem. |
| | | C312.3 | Discuss a given problem in the language/framework of different AI methods. |
| | | C312.4 | Assess critically the techniques presented and apply them to real world problems |
| | | C312.5 | Model an empirical evaluation of different algorithms on problem formalization, and state the conclusions that the evaluation supports. |
| 48 | C313- Compiler Design (CS6660) | C313.1 | Explain the phases of a Compiler. |
| | | C313.2 | Illustrate the translation of regular expression into parse tree using syntax analyzer |
| | | C313.3 | Construct the intermediate representation considering the type systems |
| | | C313.4 | Apply the optimization techniques for the generated code. |
| | | C313.5 | Use the different compiler construction tools to develop a simple compiler. |
| 49 | C314- Software Architectures (IT6602) | C314.1 | Identify the key elements of software Architecture. |
| | | C314.2 | Understand the six part scenarios of quality attributes. |
| | | C314.3 | Understand the concepts of Architectural Views |
| | | C314.4 | Compare various Architectural styles. |
| | | C314.5 | Explain the various documentation approaches and architectural description languages. |
| 50 | C315- Total Quality Management (GE6757) | C315.1 | Outline the dimensions and barriers regarding with Quality. |
| | | C315.2 | Illustrate the TQM Principles and quality strategies |
| | | C315.3 | Demonstrate Tools utilization for quality improvement and quality concepts |
| | | C315.4 | Illustrate the various quality concepts and techniques used to measure Quality. |
| | | C315.5 | Apply various Quality Systems and auditing on implementation of TQM. |
| 51 | 1e Application Laboratory (IT6611) | C316.1 | Develop mobile applications using GUI and Layouts. |
| | | C316.2 | Develop mobile applications using Event Listener. |
| | | C316.3 | Develop mobile applications using Databases. |

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| | C316- Mobile Development (IT) | C316.4 | Develop mobile applications using RSS Feed, Internal/External Storage, SMS, Multithreading and GPS. |
| | | C316.5 | Analyze and discover own mobile app for simple needs. |
| 52 | C317- Compiler Laboratory (IT6612) | C317.1 | Apply different compiler writing tools to implement the different Phases. |
| | | C317.2 | Analyze the data flow and control flow. |
| | | C317.3 | Construct the intermediate representation. |
| | | C317.4 | Design the back end of a compiler for 8086 assembler. |
| | | C317.5 | Compare various code optimization techniques. |
| 53 | C318-Communication and Soft Skills - Laboratory Based (GE6674) | C318.1 | Ability to express technology enabled communication |
| | | C318.2 | Analyze, distinguish and prepare their own resume and reports |
| | | C318.3 | Take international examination such as IELTS and TOEFL |
| | | C318.4 | Ability to handle time management and organizational skills. |
| | | C318.5 | Utilizing the soft skill in the social and work environment successfully. |
| 54 | C401- Information Management (IT6701) | C401.1 | Outline the various aspects of database design and modeling. |
| | | C401.2 | Describe and implement a complex information system that meets regulatory requirements. |
| | | C401.3 | Explain and manage an organization's key master data entities. |
| | | C401.4 | Understand the various components of Information architecture. |
| | | C401.5 | Learn the concepts of Information Lifecycle management. |
| 55 | C402- Cryptography and Network Security (CS6701) | C402.1 | Compare various Cryptographic Techniques |
| | | C402.2 | Understand Secure applications in various techniques. |
| | | C403.3 | Understand secure coding in the developed applications |
| | | C404.4 | Understandthe secure practice and system security by using firewalls. |
| | | C405.5 | Apply the protocols for E-mail, IP & web security. |
| 56 | C403- Data Ware Housing and Data Mining (IT6702) | C403.1 | Outline data ware concepts and architecture. |
| | | C403.2 | Summarize the various OLAP types |
| | | C403.3 | Explain the data mining techniques. |
| | | C403.4 | Make use of tool for association rule mining and classification. |
| | | C403.5 | Compare the clustering methods. |
| | Cloud CS6703) | C404.1 | Outline the concept of Grid and Cloud Architectures. |
| | | C404.2 | Illustrate the data intensive grid service models and grid computing techniques |

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| 57 | C404- Grid and Cloud Computing (IT6004) | C404.3 | Demonstrate the concept of virtualization in cloud. |
| | | C404.4 | Experiment with the programming model for Hadoop and globus toolkit. |
| | | C404.5 | Interpret the security models in the grid and cloud environment. |
| 58 | C405- Software Testing (IT6004) | C405.1 | Understand the criteria for test cases. |
| | | C405.2 | Learn the design of test cases |
| | | C405.3 | Learn the hierarchy of test management |
| | | C405.4 | Understand the knowledge about test automation techniques |
| | | C405.5 | Understand the test metrics and measurement. |
| 59 | C406- Data Mining Laboratory (IT6711) | C406.1 | Create a Data Warehouse |
| | | C406.2 | Use data mining tools. |
| | | C406.3 | Implement Clustering methods |
| | | C406.4 | Apply of Classification |
| | | C406.5 | Apply data mining techniques and methods to large data sets. |
| 60 | C407- Security Laboratory (IT6712) | C407.1 | Explain the different cipher techniques. |
| | | C407.2 | Implement the algorithms DES, RSA, MD5, and SHA-1. |
| | | C407.3 | Use tools like GnuPG, KF sensor, Net Strumbler. |
| | | C407.4 | Demonstrate how to provide secure data storage, secure data transmission and for creating digital signatures. |
| | | C407.5 | Employ intrusion detection system using tools. |
| 61 | C408- Grid and Cloud Computing Laboratory (IT6713) | C408.1 | Understand to developing web services/Applications in grid framework. |
| | | C408.2 | Develop secured applications using basic security mechanisms. |
| | | C408.3 | Learn to run virtual machines of different configuration. |
| | | C408.4 | Understand the Use of API's of Hadoop to interact with cluster. |
| | | C408.5 | Understand the use of Map and Reduce tasks |
| 62 | C409- Service Oriented Architecture (IT6801) | C409.1 | Understand the basics of XML |
| | | C409.2 | Design the application based on XML |
| | | C409.3 | Understand the key principles behind SOA |
| | | C409.4 | Develop Web services using technology elements |
| | | C409.5 | Construct SOA based application for intra enterprise and inter enterprise application |

| S.NO | COURSE NAME | COURSE OUT COMES | |
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| 63 | C410- Professional Ethics in Engineering (GE6075) | C410.1 | Acquires the basic concepts of Professional ethics and human values & Students also gain the connotations of ethical theories. |
| | | C410.2 | Knows the duties and rights towards the society in an engineering profession |
| | | C410.3 | Would realize the importance and necessity of intellectual property rights. |
| | | C410.4 | Can take all the necessary precautions while conducting the experiments, which may reduce the risk. |
| | | C410.5 | Understands the importance of risk evacuation system in reality and takes the utmost responsibility while handling the risky situations. |
| 64 | C411- Cyber Forensics (CS6004) | C411.1 | Discuss the security issues network layer and transport layer |
| | | C411.2 | Apply security principles in the application layer |
| | | C411.3 | Explain computer forensics |
| | | C411.4 | Use forensics tools |
| | | C411.5 | Analyze and validate forensics data |
| 65 | C412- Software Project Management (MG6088) | C412.1 | Explain the need for Software Project Management and control. |
| | | C412.2 | apply cost benefit evaluation techniques to find the cost of the project and to evaluate the risk of project |
| | | C412.3 | Illustrate activity plan for a project and to estimate the overall duration of the project. |
| | | C412.4 | Demonstrate different models of software process and network planning. |
| | | C412.5 | Identify the factors that influence people's behavior in a project environment and selection of appropriate people for the project and to improve group working. |
| 66 | C413- Project Work (IT6811) | C413.1 | Identify the problem by applying acquired knowledge. |
| | | C413.2 | Analyze and categorize executable project modules after considering risks. |
| | | C413.3 | Choose efficient tools for designing project modules. |
| | | C413.4 | Combine all the modules through effective team work after efficient testing. |
| | | C413.5 | Elaborate the completed task and compile the project report. |