



# **IDHAYA ENGINEERING COLLEGE FOR WOMEN**

CHINNASALEM-606 201, VILLUPURAM DISTRICT, TAMIL NADU, INDIA.

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## **COURSE OUTCOMES FOR B.TECH INFORMATION TECHNOLOGY**



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<b>HS8151 – COMMUNICATIVE ENGLISH</b>	
C101.1	<b>Enable</b> students to frame sentences, enrich vocabulary and develop basic LSRW Skills
C101.2	<b>Relate</b> synthesis of sentences and enhance LSRW skills for general purposes
C101.3	<b>Apply</b> coherence and sequence expressions and substitutes for advanced task
C101.4	<b>Refine</b> tense sense and word enrichment techniques for more complex and demanding social activities
C101.5	<b>Develop</b> usage of language to ensure development in the LSRW Skills
<b>MA 8151 ENGINEERING MATHEMATICS I</b>	
C102.1	Able to <b>understand</b> the various techniques in differentiation
C102.2	Able to <b>solve</b> the maxima, minima of functions of two variables and applications of Lagrange's method
C102.3	To <b>Acquire</b> skills in analyzing and solving the Integral problems
C102.4	Able to <b>solve</b> the problems based on multiple integration
C102.5	To <b>Acquire</b> skills in analyzing and solving the ordinary differential equations.
<b>PH8151/ ENGINEERING PHYSICS</b>	
C103.1	<b>Retrieve</b> the basics of properties of matter and
C103.2	<b>Summarize</b> the concepts of waves, optical devices and analyze their applications in fiber optics.
C103.3	<b>Understand</b> the concepts of thermal properties of materials and assess their applications in expansion joints and heat exchangers
C103.4	<b>Extend</b> the physics concepts of quantum theory and apply in tunneling microscopes
C103.5	<b>Retrieve</b> the basics of crystals, their structures and experimenting the preparation of different growth techniques.
<b>CY8151 - ENGINEERING CHEMISTRY</b>	
C104.1	<b>Understand</b> the concept of hard water, its problems and water treatment techniques.
C104.2	<b>Categorize</b> the concepts of adsorption, isotherms and catalytic reaction
C104.3	<b>Apply</b> the phase rule to the one and two component system and to understand the significance of alloys.
C104.4	<b>Summarize</b> the different types of fuels and its manufacturing process and able to calculate the calorific value of the fuel
C104.5	<b>Apply</b> the principles of generation of energies in batteries, nuclear reactors and solar cells.
<b>GE8151 PROBLEM SOLVING AND PYTHON PROGRAMMING</b>	
C105.1	<b>Explain</b> algorithmic solutions to simple computational problems
C105.2	<b>To Read</b> , write, execute by simple Python programs.
C105.3	<b>To describe</b> simple Python programs for solving problems. Decompose a Python program



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	into functions.
C105.4	<b>To use</b> compound data with Python lists, tuples and dictionaries.
C105.5	<b>To describe</b> read and write data from/to files in Python.
	<b>GE8152 ENGINEERING GRAPHICS</b>
C106.1	<b>To understand</b> the fundamentals and standards of Engineering graphics
C106.2	<b>To perform</b> freehand sketching of basic geometrical constructions and multiple views of objects
C106.3	<b>To understand</b> the concept of orthographic projections of lines and plane surfaces
C106.4	<b>To draw</b> the projections of section of solids and development of surfaces
C106.5	<b>To visualize</b> and to project isometric and perspective sections of simple solids
	<b>GE8161 - PROBLEM SOLVING AND PYTHON PROGRAMMING LABORATORY</b>
C107.1	<b>To understand</b> how to write, test, and debug simple Python programs.
C107.2	<b>To describe</b> Python programs with conditionals and loops.
C107.3	<b>To implement</b> Python programs step-wise by defining functions and calling them.
C107.4	<b>To use</b> Python lists, tuples, dictionaries for representing compound data.
C107.5	<b>To implement</b> read and write data from/to files in Python.
	<b>BS8161 - PHYSICS CHEMISTRY LABORATORY</b>
C108.1	<b>Acquire</b> the skills in the determination hardness of the water by EDTA method
C108.2	<b>Analyze</b> the alkalinity present in water by titrimetric method
C108.3	<b>Determine</b> the molecular weight of a polymer.
C108.4	<b>Deduce</b> the amount substance present by pH metry and Potentiometry method.
C108.5	<b>Calculate</b> the amount of acid and base present in the solution and inthe mixture Conductometric method.
	<b>HS8251 TECHNICAL ENGLISH</b>
C109.1	<b>Enables</b> students to acquire competence in LSRW for basic general and technology-based professional requirements.
C109.2	<b>Develop</b> ability in LSRW to achieve more demanding tasks in technical fields
C109.3	<b>Apply</b> more strategies and skills to enhance LSRW to produce quick, effective and coherent responses in the professional fields
C109.4	<b>Build</b> communication employment-based communication competence by making students self reliant and analytical
C109.5	<b>Foster</b> LSRW ability to respond effectively and competently for job-based demands
	<b>MA8251 ENGINEERING MATHEMATICS II</b>



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C110.1	To <b>understand</b> the concepts in diagonalisation of matrices
C110.2	To <b>understands</b> the concept of vector calculus
C110.3	To <b>understand</b> the uses of analytic functions. and conformal mapping
C110.4	Able to <b>understand</b> the techniques of complex integratin and contour integrals
C110.5	Able to <b>understand</b> the applications of laplace transforms
	<b>PH8252 - PHYSICS FOR INFORMATION SCIENCE</b>
C111.1	<b>Retrieve</b> the electrical properties of solid state materials and explain the theoretical aspects of mobility of electrons
C111.2	<b>Determine</b> the doping properties of semiconductors and determining the carrier concentration of materials
C111.3	<b>Understand</b> the magnetic properties of materials and to analyze their applications in data storage.
C111.4	<b>Understand</b> on the functioning of optical properties for opto electronics.
C111.5	<b>Analyze</b> the concept of electrical properties in bulk material and design novel materials
	<b>BE8255 BASIC ELECTRICAL, ELECTRONICS AND MEASUREMENT ENGINEERING</b>
C112.1	<b>Discuss</b> the essentials of electric circuits and analysis.
C112.2	<b>Discuss</b> the basic operation of electric machines and transformers
C112.3	<b>State</b> the renewable sources and common domestic loads.
C1124	To <b>understand</b> the fundamentals of electronic circuit constructions
C112.5	<b>Describe</b> the measurement and metering for electric circuits.
	<b>IT8201- INFORMATION TECHNOLOGY ESSENTIALS</b>
C113.1	<b>Design</b> and deploy web-sites
C113.2	<b>Design</b> and deploy simple web-applications
C113.3	<b>Create</b> simple database applications
C113.4	<b>Develop</b> information system
C113.5	<b>Describe</b> the basics of networking and mobile communications
	<b>CS8251: PROGRAMMING IN C</b>
C114.1	<b>Develop</b> simple applications in C using basic constructs
C114.2	<b>Design</b> and implement applications using arrays and strings
C114.3	<b>Develop</b> and implement applications in C using functions and pointers
C114.4	<b>Develop</b> applications in C using structures.
C114.5	<b>Design</b> applications using sequential and random access file processing



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<b>GE8261 Engineering Practices Laboratory</b>	
C115.1	To <b>fabricate</b> carpentry components and pipe connections including plumbing works, use welding equipments to join the structures and carry out the basic machining operations
C115.2	<b>Build</b> the models using sheet metal works
C115.3	<b>Illustrate</b> on centrifugal pump, Air conditioner, operations of smithy, foundary and fittings
C115.4	<b>Build</b> basic home electrical works and appliances and measure the electrical quantities
C115.5	<b>Elaborate</b> on the components, gates, soldering practices
<b>CS8261 C PROGRAMMING LABORATORY</b>	
C116.1	<b>Develop</b> C programs for simple applications making use of basic constructs, arrays and strings.
C116.2	<b>Develop</b> C programs involving functions, recursion
C116.3	<b>Develop</b> C programs involving pointers, and structures.
C116.4	<b>Design</b> applications using sequential and random access file processing.
C116.5	<b>Design</b> applications like railway reservation system.
<b>IT8211 INFORMATION TECHNOLOGY ESSENTIALS LABORATORY</b>	
C117.1	<b>Design</b> interactive websites using basic HTML tags, different styles, links and with all Basic control elements
C117.2	<b>Implement</b> client side and server side programs using scripts using PHP.
C117.3	<b>Implement</b> dynamic web sites and handle multimedia components
C117.4	<b>Implement</b> applications with PHP connected to database and Implement the technologies behind computer networks and mobile communication.
C117.5	<b>Implement</b> Personal Information System
<b>MA8351: DISCRETE MATHEMATICS</b>	
C201.1	To <b>understand</b> the logic of a program
C201.2	To <b>identify</b> the Programming structures on many levels.
C201.3	To <b>acquire</b> skills in class of functions which transform a finite set into another finite set.
C201.4	To <b>Understand</b> the concepts of the counting principles.
C201.5	To <b>understand</b> the algebraic structures such as groups, rings and fields.
<b>CS8351 - DIGITAL PRINCIPLES AND SYSTEM DESIGN</b>	
C202.1	To <b>design</b> digital circuits using simplified Boolean functions
C202.2	To <b>analyze</b> and design combinational circuits
C202.3	To <b>analyze</b> and design synchronous and asynchronous sequential circuits
C202.4	To <b>understand</b> Programmable Logic Devices
C202.5	To <b>explain</b> HDL code for combinational and sequential circuits



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<b>CS8391- DATA STRUCTURES</b>	
C203.1	<b>Understand &amp; Implement</b> abstract data types for linear data structures - Lists
C203.2	<b>Understand &amp; Apply</b> the different linear(Stack & Queue) data structures to problem solutions
C203.3	<b>Understand &amp; Apply</b> the different Non-Linear(Tree) data structures to problem solutions
C203.4	<b>Understand &amp; Apply</b> the different Non-Linear(Graph) data structures to problem solutions
C203.5	Critically <b>analyze</b> the various sorting algorithms and Hashing Techniques
<b>CS8392 Object Oriented Programming</b>	
C204.1	<b>Develop</b> Java programs using OOP Principles.
C204.2	<b>Develop</b> Java programs with the concepts inheritance and interfaces.
C204.3	<b>Build</b> Java applicatios using exceptions and I/O streams.
C204.4	<b>Develop</b> java applications with threads and generic classes.
C204.5	<b>Develop</b> interactive Java program using Swings.
<b>EC8394 Analog and Digital Communication</b>	
C205.1	<b>Apply</b> analog and digital communication techniques.
C205.2	<b>Use</b> data and pulse communication techniques.
C205.3	To <b>Compare</b> of various Digital Communication System
C205.4	<b>Analyze</b> Source and Error control coding
C205.5	<b>Utilize</b> multi-user radio communication.
<b>CS8381 – DATA STRUCTURES LABORATORY</b>	
C206.1	<b>Develop</b> and Test C programs to implement the concepts of Linear Data Structures.
C206.2	<b>Use</b> appropriate linear data structures for the given problem.
C206.3	<b>Develop</b> and Test C programs to implement non-linear data structures
C206.4	<b>Develop</b> and Test C programs for implementing sorting and searching algorithms
C206.5	<b>Apply</b> appropriate hash functions that result in a collision free scenario for data storage and retrieval
<b>CS8383 - OBJECT ORIENTED PROGRAMMING LABORATORY</b>	
C207.1	<b>Develop</b> and implement Java programs for simple applications that make use of classes.
C207.2	<b>Develop</b> and implement Java programs for packages and interfaces.
C207.3	<b>Develop</b> and implement Java programs with arraylist.
C207.4	<b>Develop</b> and implement Java programs exception handling and multithreading.
C207.5	<b>Design</b> applications using file processing, generic programming and event handling.



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<b>CS8382 DIGITAL SYSTEMS LABORATORY</b>	
C208.1	<b>Implement</b> simplified combinational circuits using basic logic gates
C208.2	<b>Implement</b> combinational circuits using MSI devices
C208.3	<b>Implement</b> sequential circuits like registers and counters
C208.4	<b>Simulate</b> combinational and sequential circuits using HDL
C208.5	<b>Design</b> and implementation of a simple digital system
<b>HS8381 Interpersonal Skills/Listening &amp; Speaking</b>	
C209.1	<b>Listen</b> and respond appropriately especially in academic contexts
C209.2	<b>Participate</b> in group discussions with special emphasis on stress and intonation
C209.3	<b>Develop</b> lexical accuracy and fluency in articulation
C209.4	<b>Assess</b> conversations and offer Verbal and Non-Verbal feedbacks
C209.5	<b>Plan</b> and devise effective presentations
<b>MA8391- PROBABILITY &amp; STATISTICS</b>	
C210.1	Gain <b>knowledge</b> on Probability and various distributions
C210.2	To <b>Solve</b> the Joint distributions, Covariance, Correlation and Linear regression Problems.
C210.3	To <b>apply</b> various techniques for testing of hypothesis
C210.4	<b>Understand</b> the applications of Design of experiments
C210.5	To <b>prepare</b> and solve the Control charts for measurements and attributes
<b>CS8491 – COMPUTER ARCHITECTURE</b>	
C211.1	<b>Understand</b> the basics structure of computers, operations and instructions.
C211.2	To <b>describe</b> arithmetic and logic unit.
C211.3	<b>Understand</b> pipelined execution and design control unit.
C211.4	<b>Understand</b> parallel processing architectures. I
C211.5	<b>Describe</b> the various memory systems and I/O communication
<b>CS8492- DATABASE MANAGEMENT SYSTEMS</b>	
C212.1	<b>Describe</b> Relational model from ER model to perform database design effectively and optimize queries using normalization criteria.
C212.2	To <b>study</b> SQL and Relational Database design.
C212.3	To <b>understand</b> the internal storage structures using different File and Indexing techniques which will help in physical DB design.



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C212.4	To <b>understand</b> the fundamental concept of transaction processing-concurrency control techniques and recovery procedures.
C212.5	<b>State</b> an introductory knowledge about the storage and Query processing technique.
	<b>CS8451 - DESIGN AND ANALYSIS OF ALGORITHMS</b>
C213.1	<b>Explain</b> algorithms for various computing problems.
C213.2	<b>Analyze</b> the search and sorting complexity of algorithms.
C213.3	<b>Analyze</b> the time and space complexity of algorithms.
C213.4	Critically <b>analyze</b> the different algorithm design techniques for a given problem.
C213.5	<b>Modify</b> existing algorithms to improve efficiency.
	<b>CS8493-OPERATING SYSTEM</b>
C214.1	<b>Explain</b> the basic concepts and functions of operating systems.
C214.2	<b>Analyze</b> Processes ,Threads and Scheduling algorithms.
C214.3	<b>Understand</b> the concept of Deadlocks.
C214.4	<b>Analyze</b> various memory management schemes and understand I/O management and File systems.
C214.5	<b>Understand</b> Linux basic concepts and Mobile OS like iOS and Android.
	<b>GE8291 - ENVIRONMENTAL SCIENCE AND ENGINEERING</b>
C215.1	Able to <b>locate</b> and measure the connectivity between the energy flow in ecosystem and to estimate the value of bio diversity
C215.2	To <b>detect</b> , estimate, measure and judge the different environmental pollution levels.
C215.3	To <b>understand</b> , compare and estimate the resources such as land , water, food and minerals
C215.4	To <b>identify</b> , classify and formulate the solutions for social issues in the environment.
C215.5	Able to <b>investigate</b> , evaluate and explain the cause and effects of population statistics.
	<b>CS8481- DBMS Lab</b>
C216.1	<b>Use</b> typical data definitions and manipulation commands.
C216.2	To <b>design</b> applications to test Nested, Join Queries and views
C216.3	<b>Implement</b> applications that require a Front-end Tool.
C216.4	To critically <b>analyze</b> the use of Tables, Views, Functions and Procedures
C216.5	<b>Design</b> and implement real time applications.
	<b>CS8461 - OPERATING SYSTEMS LABORATORY</b>
C217.1	<b>Compare</b> the performance of various CPU Scheduling Algorithms
C217.2	To <b>implement</b> page replacement algorithms, file organization and allocation techniques
C217.3	<b>Implement</b> Deadlock avoidance and Detection Algorithms





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C217.4	<b>Implement</b> Semaphores and to Create processes and implement IPC
C217.5	<b>Analyze</b> the performance of the various Page Replacement Algorithms and Implement File Organization and File Allocation Strategies
	<b>HS8461 ADVANCED READING AND WRITING</b>
C218.1	<b>Strengthen</b> the reading and writing skills of the students
C218.2	<b>Comprehend</b> and interpret data into coherent paragraphs
C218.3	<b>Evaluate</b> texts critically
C218.4	<b>Draft</b> winning Job applications
C218.5	<b>Write</b> impressive project proposals with critical acumen
	<b>MA8551 ALGEBRA AND NUMBER THEORY</b>
C301.1	<b>Apply</b> the basic notions of groups, rings, fields which will then be used to solve related problems.
C301.2	<b>Explain</b> the fundamental concepts of advanced algebra and their role in modern mathematics and applied contexts.
C301.3	<b>Demonstrate</b> accurate and efficient use of advanced algebraic techniques
C301.4	<b>Demonstrate</b> their mastery by solving non - trivial problems related to the concepts, and by proving simple theorems about the, statements proven by the text.
C301.5	<b>Apply</b> integrated approach to number theory and abstract algebra, and provide a firm basis for further reading and study in the subject.
	<b>CS8591 - COMPUTER NETWORKS</b>
C302.1	<b>Understand</b> the basic layers and its functions in computer networks.
C302.2	<b>Evaluate</b> the performance of a network.
C302.3	<b>Understand</b> the basics of how data flows from one node to another.
C302.4	<b>Analyze</b> and design routing algorithms.
C302.5	<b>Explain</b> the protocols for various functions in the network and Understand the working of various application layer protocols
	<b>EC8691 - MICROPROCESSORS AND MICROCONTROLLERS</b>
C303.1	<b>Understand</b> and execute programs based on 8086 microprocessor.
C303.2	<b>Inspect</b> Memory Interfacing circuits.
C303.3	<b>Explain</b> and analyse interface I/O circuits.
C303.4	To <b>implement</b> 8051 microcontroller based systems.
C303.5	<b>Design</b> and develop Traffic Light control, LED display, LCD display and Alarm Controller.
	<b>IT8501 - WEB TECHNOLOGY</b>



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C304.1	<b>Design</b> simple web pages using markup languages like HTML and XHTML.
C304.2	<b>Create</b> dynamic web pages using DHTML and java script that is easy to navigate and use.
C304.3	<b>Study</b> the Program server side web pages that have to process request from client side web pages.
C304.4	<b>Represent</b> web data using XML and develop web pages using JSP.
C304.5	<b>Understand</b> various web services and how these web services interact.
	<b>CS8494 SOFTWARE ENGINEERING</b>
C305.1	<b>Identify</b> the key activities in managing a software project.
C305.2	<b>Compare</b> different process models.
C305.3	<b>Concepts</b> of requirements engineering and Analysis Modeling.
C305.4	<b>Apply</b> systematic procedure for software design and deployment.
C305.5	<b>Identify</b> the various testing and maintenance and Manage project schedule, estimate project cost and effort required
	<b>OMD553 TELEHEALTH TECHNOLOGY</b>
C306.1	<b>Apply</b> multimedia technologies in telemedicine.
C306.2	<b>Explain</b> Protocols behind encryption techniques for secure transmission of data.
C306.3	<b>Apply</b> telehealth in healthcare.
C306.4	<b>Understand</b> telemedical applications.
C306.5	<b>Understand</b> health education and selfcare.
	<b>EC8681 - MICROPROCESSORS AND MICROCONTROLLERS LABORATORY</b>
C307.1	<b>Explain</b> ALP Programmes for fixed and Floating Point and Arithmetic operations
C307.2	<b>Illustrate</b> Interface different I/Os with processor
C307.3	<b>Generate</b> waveforms using Microprocessors
C307.4	<b>Execute</b> Programs in 8051
C307.5	<b>Explain</b> the difference between simulator and Emulator
	<b>CS8581 - NETWORKS LABORATORY</b>
C308.1	<b>Implement</b> various protocols using TCP and UDP.
C308.2	<b>Implement</b> the performance of different transport layer protocols.
C308.3	<b>Use</b> simulation tools to analyze the performance of various network protocols.
C308.4	<b>Analyze</b> various routing algorithms.
C308.5	<b>Implement</b> error correction codes.
	<b>IT8511 - WEB TECHNOLOGY LABORATORY</b>



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C309.1	<b>Design</b> simple web pages using markup languages like HTML and XHTML.
C309.2	<b>Create</b> dynamic web pages using DHTML and java script that is easy to navigate and use.
C309.3	<b>Represent</b> Program server side web pages that have to process request from client side web pages.
C309.4	<b>Represent</b> web data using XML and develop web pages using JSP.
C309.5	<b>Understand</b> various web services and how these web services interact.
	<b>IT8601 – COMPUTATIONAL INTELLIGENCE</b>
C310.1	<b>Describe</b> a basic exposition to the goals and methods of Computational Intelligence.
C310.2	<b>Study</b> of the design of intelligent computational techniques.
C310.3	<b>Apply</b> the Intelligent techniques for problem solving
C310.4	<b>Improve</b> problem solving skills using the acquired knowledge in the areas of, reasoning, natural language understanding,
C310.5	<b>Acquired</b> knowledge in the computer vision, automatic programming and machine learning.
	<b>CS8592 – OBJECT ORIENTED ANALYSIS AND DESIGN</b>
C311.1	<b>Express</b> software design with UML diagrams
C311.2	<b>Design</b> software applications using OO concepts.
C311.3	<b>Identify</b> various scenarios based on software requirements
C311.4	<b>Transform</b> UML based software design into pattern based design using design patterns
C311.5	<b>Understand</b> the various testing methodologies for OO software
	<b>IT8602 MOBILE COMMUNICATION</b>
C312.1	<b>Explain</b> the basics of mobile telecommunication system
C312.2	<b>Illustrate</b> the generations of telecommunication systems in wireless network
C312.3	<b>Understand</b> the architecture of Wireless LAN technologies
C312.4	<b>Determine</b> the functionality of network layer and Identify a routing protocol for a given Ad hoc networks
C312.5	<b>Explain</b> the functionality of Transport and Application layer
	<b>CS8091 BIG DATA ANALYTICS</b>
C313.1	<b>Illustrate</b> with big data tools and its analysis techniques
C313.2	<b>Analyze</b> data by utilizing clustering and classification algorithms
C313.3	<b>Learn</b> and apply different mining algorithms and recommendation systems for large volumes of data
C313.4	<b>Perform</b> analytics on data streams
C313.5	<b>Learn</b> NoSQL databases and management.



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<b>CS8092 - COMPUTER GRAPHICS AND MULTIMEDIA</b>	
C314.1	<b>Apply</b> two dimensional transformations.
C314.2	<b>Apply</b> three dimensional transformations. Apply Illumination and color models.
C314.3	<b>Apply</b> clipping techniques to graphics.
C314.4	<b>Understood</b> Different types of Multimedia File Format
C314.5	<b>Use</b> Basic 3d Scenes using Blender
<b>CS8662 - MOBILE APPLICATION DEVELOPMENT LABORATORY</b>	
C315.1	<b>Develop</b> mobile applications using GUI and Layouts.
C315.2	<b>Develop</b> mobile applications using Event Listener.
C315.3	<b>Develop</b> mobile applications using Databases.
C315.4	<b>Develop</b> mobile applications using RSS Feed, Internal/External Storage, SMS, Multi-threading and GPS.
C315.5	<b>Analyze</b> and discover own mobile app for simple needs.
<b>CS8582 - OBJECT ORIENTED ANALYSIS AND DESIGN LABORATORY</b>	
C316.1	<b>Perform</b> OO analysis and design for a given problem specification.
C316.2	<b>Identify</b> and map basic software requirements in UML mapping.
C316.3	<b>Improve</b> the software quality using design patterns
C316.4	<b>Explain</b> the rationale behind applying specific design patterns
C316.5	<b>Identify</b> the compliance of the software with the SRS
<b>IT8611 - MINI PROJECT</b>	
C317.1	<b>Identify</b> the problem by applying acquired knowledge.
C317.2	<b>Analyze</b> and categorize executable project modules after considering risks.
C317.3	<b>Choose</b> efficient tools for designing project modules.
C317.4	<b>Combine</b> all the modules through effective team work after efficient testing
C318.5	<b>Elaborate</b> the completed task and compile the project report.
<b>MG8591 - PRINCIPLES OF MANAGEMENT</b>	
C401.1	<b>Able</b> to have clear understanding of managerial functions like planning, organizing, staffing, leading & controlling and have same basic knowledge on international aspect of management
C401.2	<b>Enable</b> the students to study the evolution of Management
C401.3	To <b>study</b> the functions and principles of management
C401.4	To <b>learn</b> the application of the principles in the organization
C401.5	To <b>learn</b> and understand the effective administration



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<b>CS8792 - CRYPTOGRAPHY AND NETWORK SECURITY</b>	
C402.1	Understand the fundamentals of networks security, security architecture, threats and vulnerabilities
C402.2	Apply the different cryptographic operations of symmetric cryptographic algorithms
C402.3	Apply the different cryptographic operations of public key cryptography
C402.4	Apply the various Authentication schemes to simulate different applications
C402.5	Understand various Security practices and System security standards
<b>CS8791 - CLOUD COMPUTING</b>	
C403.1	Articulate the main concepts, key technologies, strengths and limitations of cloud computing
C403.2	Learn the key and enabling technologies that help in the development of cloud
C403.3	Develop the ability to understand and use the architecture of compute and storage cloud, service and delivery models
C403.4	Explain the core issues of cloud computing such as resource management and security
C403.5	Be able to install and use current cloud technologies
C403.6	Evaluate and choose the appropriate technologies, algorithms and approaches for implementation and use of cloud
<b>OEC754 - MEDICAL ELECTRONICS</b>	
C404.1	Know the human body electro-physiological parameters and recording of bio-potentials
C404.2	Comprehend the non-electrical physiological parameters and their measurement - body temperature, blood pressure, pulse, blood cell count, blood flow meter etc.,
C404.3	Interpret the various assist devices used in the hospitals viz.,pacemakers, defibrillators, dialyzers and ventilators
C404.4	Comprehend physical medicine methods eg. shortwave, microwave surgical diathermies & bio-telemetry principles and methods
C404.5	Know about recent trends in medical instrumentation
<b>IT8075 - SOFTWARE PROJECT MANAGEMENT</b>	
C405.1	Understand Project Management principles while developing software
C405.2	Gain extensive knowledge about the basic project management concepts, framework and the process models
C405.3	Obtain adequate knowledge about software process models and software effort estimation techniques
C405.4	Estimate the risks involved in various project activities
C405.5	Define the checkpoints, project reporting structure, project progress and tracking mechanisms using project management principles
C405.6	Learn staff selection process and the issues related to people management
<b>CS8079 - HUMAN COMPUTER INTERACTION</b>	
C406.1	Design effective dialog for HCI



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C406.2	Design effective HCI for individuals and persons with disabilities
C406.3	Assess the importance of user feedback
C406.4	Explain the HCI implications for designing multimedia/ ecommerce/ e-learning Web sites
C406.5	Develop meaningful user interface
<b>IT8711 - FOSS AND CLOUD COMPUTING LABORATORY</b>	
C407.1	Configure various virtualization tools such as Virtual Box, VMware workstation
C407.2	Design and deploy a web application in a PaaS environment
C407.3	Learn how to simulate a cloud environment to implement new schedulers.
C407.4	Install and use a generic cloud environment that can be used as a private cloud
C407.5	Manipulate large data sets in a parallel environment
<b>IT8761 - SECURITY LABORATORY</b>	
C408.1	Develop code for classical Encryption Techniques to solve the problems
C408.2	Build cryptosystems by applying symmetric and public key encryption algorithms
C408.3	Construct code for authentication algorithms
C408.4	Develop a signature scheme using Digital signature standard
C408.5	Demonstrate the network security system using open source tools
<b>IT8811 - PROJECT WORK</b>	
C409.1	Identify the problem by applying acquired knowledge.
C409.2	Analyze and categorize executable project modules after considering risks.
C409.3	Choose efficient tools for designing project modules.
C409.4	Combine all the modules through effective team work after efficient testing
C409.5	Elaborate the completed task and compile the project report.

## ABBREVIATIONS

- C101.1**      **C stands for Course**
- 1 stands for year of study**
- 01 stands for first paper as per the curriculum**
- .1 stands for Outcomes for particular course**

**\*The same format is followed for remaining years and courses**