

Course Name Fundamentals of ICT (C22001) - SEMESTER-I

C22001.a Use computer system and its peripherals.

C22001.b Prepare business document using word processing tool.

C22001.c Interpret data and represent it graphically using spread sheet.

C22001.d Prepare professional presentation.

C22001.e Use different types of browsers.

Course Name Engineering Graphics (C22003) - SEMESTER-I

C22001.a Use drawing codes, conventions and symbols as per IS Sp-46 in engineering drawing.

C22001.b Draw the views of given object using principals of orthographic projections.

C22001.c Draw isometric view of given component or from orthographic projections.

C22001.d Draw free hand sketches of given engineering elements.

C22001.e Use computer aided drafting approach to create engineering drawing.

Course Name Workshop Practice (C22005)- SEMESTER-I

C22005.a Use electrical tools, instruments, devices and equipment for basic level maintenance of computers and peripherals.

C22005.b Identify active and passive electronic components.

C22005.c Undertake basic level maintenance of a PC.

C22005.d Use different kinds of printers and scanners.

C22005.e Identify the layout of wired and wireless LAN environment.

Course Name English(C22101) - SEMESTER-I

C22101.a Formulate grammatically correct sentences.

C22101.b Summarize comprehension passages.

C22101.c Compose dialogues and paragraphs for different situations.

C22101.d Use relevant words as per context.

C22101.e Deliver prepared speeches to express ideas, thoughts and emotions.

Course Name Basic Science (C22102)- SEMESTER-I

C22102.a Estimate errors in measurement of physical quantities.

C22102.b Apply the principles of electricity and magnetism to solve engineering problems.

C22102.c Use the basic principles of heat and optics for related engineering applications.

C22102.d Apply the catalysis process in industry.

C22102.e Use corrosion preventive measures in industry.

C22102.f Use relevant engineering materials in industry.

Course Name Basic Mathematics (C22103)- SEMESTER-I

C22103.a Apply the concept of algebra to solve engineering related problems.

C22103.b Utilize the concept of trigonometry to elementary engineering problems.

C22103.c Solve basic engineering problems under the given condition of straight line.

C22103.d Solve the problems based on measurement of regular closed figure and regular solid.

C22103.e Use basic concept of statistics to solve engineering related problems.

Course Name Business Communication Using Computers (C22009)- SEMESTER-II

C22009.a Communicate effectively by avoiding barriers in various formal and informal situations.

C22009.b Communicate skilfully using non-verbal methods of communication.

C22009.c Give presentations by using audio- visual aids.

C22009.d Write reports using correct guidelines.

C22009.e Compose e-mail and formal business letters.

Course Name Computer Peripheral & Hardware Maintenance (C22013)- SEMESTER-II

C22013.a Identify different types of computer systems.

C22013.b Troubleshoot common motherboard Problems.

C22013.c Select processors required for relevant systems.

C22013.d Partition or format hard disk drive.

C22013.e Troubleshoot peripherals and networks.

C22013.f Test power supplies.

Course Name Web Page Design With HTML (C22014)- SEMESTER-II

C22014.a Use block level formatting tags to present content on web page.

C22014.b Use text level formatting tags to present content on web page.

C22014.c Apply hyper linking on web page.

C22014.d Organize content using table and frames.

C22014.e Apply presentation schemes on content using CSS.

C22014.f Publish websites on internet or intranet.

Course Name Elements of Electrical Engineering (C22215)- SEMESTER-II

C22215.a Use principles of magnetic circuits.

C22215.b Use single phase AC supply for electrical and electronics equipment.

C22215.c Use three phase AC supply for Industrial equipment and machines.

C22215.d Connect transformers and DC motors for specific requirements.

C22215.e Use FHP motors for diversified applications.

C22215.f Use relevant protective devices/switchgear for different requirements.

Course Name Applied Mathematics (C22224)- SEMESTER-II

C22224.a Calculate equation of Tangent, normal, maxima and minima, and radius of curvature by differentiation.

C22224.b Solve the given problems of integration using suitable method.

C22224.c Apply the concept of integration to find area and volume.

C22224.d Solve differential equation of first order and first degree using suitable method.

C22224.e Apply numerical method to solve computer related problems.

Course Name Basic Electronics (C22225)- SEMESTER-II

C22225.a Identify electronic components in electronic circuits.

C22225.b Use diodes in different applications.

C22225.c Interpret the working of junction transistor in the electronic circuits.

C22225.d Interpret the working of unipolar devices in the electronic circuits.

C22225.e Use sensors and transducers.

Course Name Programming in C (C22226)- SEMESTER-II

C22226.a Develop flowchart and algorithm to solve problems logically.

C22226.b Write simple C programs using arithmetic expressions.

C22226.c Develop C programs using control structure.

C22226.d Develop C programs using arrays and structures.

C22226.e Develop/use functions in C programs for modular programming approach.

C22226.f Develop C programs using pointers

Course Name Object Oriented Programming (C22316)- SEMESTER-III

C22316.a Develop C++ programs to solve problems using Procedure

C22316.b Develop C++ programs using classes and objects

C22316.c Implement inheritance in C++ program.

C22316.d Use Polymorphism in C++ program.

C22316.e Develop C++ programs to perform file operations.

Course Name Data Structure using "C" (C22317)- SEMESTER-III

C22317.a Perform basic operations on arrays

C22317.b Apply different searching and sorting techniques.

C22317.c Implement basic operations on stack and queue using array representation.

C22317.d Implement basic operations on linked list.

C22317.e Implement program to create and traverse tree to solve problems.

Course Name Computer Graphics (C22318)- SEMESTER-III

C22318.a Manipulate visual and geometric information of images.

C22318.b Implement standard algorithms to draw various graphics objects using C programs.

C22318.c Develop programs for 2D and 3D transformations.

C22318.d Use projections to visualize objects on view plane.

C22318.e Implement various clipping algorithms.

C22318.f Develop programs to create curves using algorithms.

Course Name Database Management System (C22319)- SEMESTER-III

C22319.a Design Normalized database on given data.

C22319.b Create and Manage Database using SQL Command

C22319.c Write PL/SQL code for given database

C22319.d Apply triggers on database also create procedure and function according to condition.

C22319.e Apply security and confidentiality on given database.

Course Name Digital Techniques (C22320)- SEMESTER-III

C22320.a Use number system and codes for interpreting working of digital system.

C22320.b Use Boolean expressions to realize logic circuits.

C22320.c Build simple combinational circuits.

C22320.d Build simple sequential circuits.

C22320.e Test data converters and PLDs in digital electronics systems.

Course Name JAVA Programming (C22412)- SEMESTER-IV

C22412.a Develop programs using Object Oriented Methodology in Java.

C22412.b Apply the concept of inheritance for code reusability.

C22412.c Develop programs using multithreading.

C22412.d Implement Exception Handling.

C22412.e Develop programs using Graphics and Applet.

C22412.f Develop programs for handling I/O and file streams.

Course Name Software Engineering (C22413)- SEMESTER-IV

C22413.a Select suitable Software Process model for software development.

C22413.b Prepare software requirement specifications.

C22413.c Use software modeling to create data designs.

C22413.d Estimate size and cost of software product.

C22413.e Apply project management and quality assurance principles in software

development.

Course Name Data communication and Computer Network (C22414)- SEMESTER-IV

C22414.1 Analyze the functioning of data communication and computer network.

C22414.2 Select relevant transmission media and switching techniques as per need.

C22414.3 Analyze the transmission errors with respect to IEEE standards.

C22414.4 Configure various networking devices.

C22414.5 Configure different TCP/IP services.

Course Name Microprocessor (C22415)- SEMESTER-IV

C22415.1 Analyze the functional block diagram of 8086.

C22415.2 Write assembly language program for given problem

C22415.3 Use instructions in different addressing mode

C22415.4 Develop an assembly language program using assembler.

C22415.5 Develop assembly language programs using procedures, macros and modular

programming approach.

Course Name GUI Application Development using VB.Net (C22034)- SEMESTER-IV

C22034.1 Use Visual Studio IDE to design application.

C22034.2 Develop GUI Application using Form Controls and its events.

C22034.3 Apply Object Oriented concepts in GUI Application.

C22034.4 Use Data access controls to store data in Database and retrieve it.

C22034.5 Use Data Binding in GUI Application.

Course Name Environmental Studies (C22447)- SEMESTER-V

C22447.a Develop Public awareness about environment

C22447.b Select alternative energy resources for Engineering Practice

C22447.c Conserve Ecosystem and Biodiversity

C22447.d Apply techniques to reduce Environmental Pollution

C22447.e Manage social issues and Environmental Ethics as lifelong learning

Course Name Operating System (C22516)- SEMESTER-V

C22516.a Install operating system and configure it.

C22516.b Use operating system tools to perform various functions.

C22516.c Execute process commands for performing process management operations.

C22516.d Apply scheduling algorithms to calculate turnaround time and average waiting time.

C22516.e Calculate efficiency of different memory management techniques.

C22516.f Apply file management techniques.

Course Name Advanced Java Programming (C22517)- SEMESTER-V

C22517.a Develop programs using GUI Framework (AWT and Swing)

C22517.b Handle events of AWT and Swings components.

C22517.c Develop programs to handle events in Java Programming.

C22517.d Develop Java programs using networking concepts

C22517.e Develop programs using database.

C22517.f Develop programs using Servlets.

Course Name Software Testing (C22518)- SEMESTER-V

C22518.a Apply various software testing methods.

C22518.b Prepare test cases for different types and levels of testing.

C22518.c Prepare test plan for an application.

C22518.d Identify bugs to create defect report of given application

C22518.e Test software for performance measures using automated testing tools.

Course Name Advanced Computer Network (C22520)- SEMESTER-V

C22520.a Implement Network Layer Protocols

C22520.b Configure IPv6 Network.

C22520.c Choose routing protocol in the given network situation

C22520.d Implement different Transport Layer Protocols.

C22520.e Configure various Application Layer Protocols.

Course Name Capstone Project (C22050)- SEMESTER-V

C22050.a Write the problem/task specification in existing systems related to the occupation.

C22050.b Select, collect and use required information/knowledge to solve the problem/complete the task.

C22050.c Logically choose relevant possible solution(s).

C22050.d Consider the ethical issues related to the project (if there are any).

C22050.e Assess the impact of the project on society (if there is any).

Course Name Management (C22509)- SEMESTER-VI

C22509.a Use basic management principles to execute daily activities.

C22509.b Use principles of planning and organizing for accomplishment of tasks.

C22509.c Use principles of directing and controlling for implementing the plans.

C22509.d Apply principles of safety management in all activities.

C22509.e Understand various provisions of industrial acts.

Course Name Programming with “Python”(C22616)- SEMESTER-VI

C22616.a Display message on screen using Python script on IDE.

C22616.b Develop python program to demonstrate use of Operators.

C22616.c Perform operations on data structures in Python.

C22616.d Develop functions for given problem.

C22616.e Design classes for given problem.

C22616.f Handle exceptions.

Course Name Mobile Application Development(C22617)- SEMESTER-VI

C22617.a Interpret features of Android operating system.

C22617.b Configure Android environment and development tools.

C22617.c Develop rich user Interfaces by using layouts and controls.

C22617.d Use User Interface components for android application development.

C22617.e Create Android application using database.

C22618.f Publish Android applications.

Course Name Emerging Trends in Computer and Information Technology(C22618)- SEMESTER-VI

C22618.a Describe Artificial Intelligence, Machine learning and deep learning.

C22618.b Interpret lot concepts.

C22618.c Compare Models of Digital Forensic Investigation.

C22618.d Describe Evidence Handling procedures.

C22618.e Describe Ethical Hacking process

C22618.f Detect Network, Operating System and applications vulnerabilities.

Course Name Network and Information Security(C22620)- SEMESTER-VI

C22620.a Identify risks related to Computer security and Information hazard in various situations.

C22620.b Apply user identification and authentication methods.

C22620.c Apply cryptographic algorithms and protocols to maintain Computer Security.

C22620.d Apply measures to prevent attacks on network using firewall.

C22620.e Maintain secured networks and describe Information Security Compliance standards.

Course Name Entrepreneurship Development(C22032)- SEMESTER-VI

C22032.a Identify your entrepreneurial traits.

C22032.b Identify the business opportunities that suit you.

C22032.c Use the support systems to zero down to your business idea.

C22032.d Develop comprehensive business plans.

C22032.e Prepare plans to manage the enterprise effectively.

Course Name Capstone Project -Execution & Report Writing(C22060)- SEMESTER-VI

C22060.a Implement the planned activity individually and/or as team.

C22060.b Select, collect and use required information/knowledge to solve the identified problem.

C22060.c Take appropriate decisions based on collected and analyzed information.

C22060.d Ensure quality in product.

C22060.e Incorporate energy and environment conservation principles.

C22060.f Consider the ethical issues related to the project (if there are any).

C22060.g Assess the impact of the project on society (if there is any).

C22060.h Communicate effectively and confidently as a member and leader of team.

C22060.i Prepare project report after performing due plagiarism check using appropriate tools.