



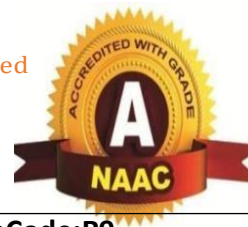
TEEGALAKRISHNAREDDYENGINEERINGCOLLEGE

(UGC-Autonomous)

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Medbowli, Meerpet, Balapur (M), Hyderabad, Telangana - 500097

Mob: 8498085218. Email: info@tkrec.ac.in, www.tkrec.ac.in



Indian in Character International in Excellence

College Code: R9

Department of Information Technology

AY: 2020-2021

COURSE NAME: Mathematics-I

COURSE CODE: 20MA1BS01

Course Outcomes:	
1	Write the matrix form of a set of linear equations and to analyse the solution of the system of equations.
2	Reduce the Quadratic form to Canonical form.
3	Describe the nature of sequence and series.
4	Apply the mean value theorems.
5	Calculate the extreme values of functions of two variables with/without constraints.

COURSE NAME: Engineering Chemistry

COURSE CODE: 20CH1BS02

Course Outcomes:	
1	Gain the knowledge of atomic, molecular and electronic changes at different level and its effect on conductivity
2	Assess the quality of water for industrial and domestic application
3	Extrapolate the knowledge of corrosion and electrochemical cells
4	Identify the reaction mechanisms in the synthesis of different molecules in different conditions
5	Gain the basic required skills to get clear concepts on spectroscopy and application to medical and other fields

COURSE NAME: Basic Electrical Engineering

COURSE CODE: 20EE1ES01

Course Outcomes:	
1	Verify the basic electrical circuits through different experiments.
2	Evaluate the performance calculations of Electrical Machines and Transformers through various testing methods.
3	Analyse the transient responses of R, L and C circuits for different input conditions.
4	To determine the performance of different types of DC, AC machines and Transformers.
5	To measure the electrical parameters for different types of DC and AC circuits using conventional and theorems approach.

COURSE NAME: Engineering Workshop

COURSE CODE: 20ME1ES05

Course Outcomes:	
1	Demonstrate various machines, tools and their operations.



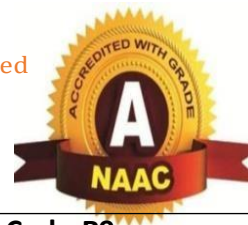
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2	Apply different workshop trades like fitting, carpentry, foundry and welding.
3	Practice workshop trades like Tinsmithy, Blacksmithy.
4	Identify suitable tools for different trades of engineering processes including drilling, material removing, measuring, chiselling.
5	Apply basic electrical engineering knowledge for house wiring practice.

COURSE NAME: English

COURSE CODE: 20EN1HS01

Course Outcomes:	
1	Use English Language effectively in spoken and written communication.
2	Comprehend the given texts and respond appropriately.
3	Communicate confidently in various contexts and different cultures.
4	Demonstrate basic proficiency in English including reading and listening comprehension, writing and speaking skills.
5	Improve language proficiency to meet their academic and professional needs.

COURSE NAME: Engineering Chemistry Lab

COURSE CODE: 20CH1BS03

Course Outcomes:	
1	Develop experimental skill to design new experiments in engineering
2	Determination of parameters like hardness and chloride content in water
3	Estimation of rate constant of a reaction from concentration-time relationships.
4	Determination of physical properties like adsorption and viscosity
5	Calculation of Rf values of some organic molecules by TLC technique

COURSE NAME: English Language and Communication Skills Lab

COURSE CODE: 20EN1HS02

Course Outcomes:	
1	Employ the nuances of English language through audio-visual experience and group activities.
2	Articulate a neutral accent of English for intelligibility by overcoming mother tongue influence.
3	Develop the skill of using appropriate language in various speaking contexts.
4	Take part in oral presentations using formal language.
5	Improve speaking skills with clarity and confidence which in turn enhance their interpersonal skills.

COURSE NAME: Basic Electrical Engineering Lab

COURSE CODE: 20EE1ES03

Course Outcomes:	
1	Verify the basic Electrical circuits through different experiments.



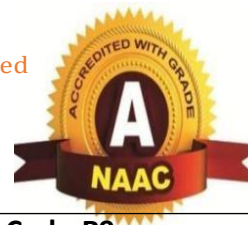
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2	Evaluate the performance calculations of Electrical Machines and Transformers through various testing methods.
3	Analyse the transient responses of R, L and C circuits for different input conditions.
4	To determine the performance of different types of DC, AC machines and Transformers.
5	To measure the electrical parameters for different types of DC and AC circuits using conventional and theorem approach.

COURSE NAME: Mathematics – II

COURSE CODE: 20MA2BS04

Course Outcomes:	
1	Determine different types of ordinary differential equation of first order.
2	Apply the concept of differential equation to real world problems.
3	Apply the concept of multiple integrals to find areas, volumes.
4	Evaluate the centre of mass and gravity for cubes, sphere and rectangular parallelepiped.
5	Calculate the line, surface and volume integrals and converting them from one to another.

COURSE NAME: Applied Physics

COURSE CODE: 20AP2BS05

Course Outcomes:	
1	The student would be able to learn the fundamental concepts on Quantum behaviour of matter in its microstate
2	The knowledge of fundamental of Semiconductor physics, Optoelectronics, Lasers and fibre-optics enable the students to apply to various systems like communications, solar cell, photocells and so on
3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications.
4	The course also help the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials.
5	The course help the students to face problems and calculations in multidisciplinary areas.

COURSE NAME: Programming for Problem Solving

COURSE CODE: 20CS2ES04

Course Outcomes:	
1	Build the algorithm for the given unsolved problems
2	Apply the concepts of Arrays, Pointers, Strings and structures to find the solution for given problem
3	Apply the various pre-processor commands in a given different real time situations



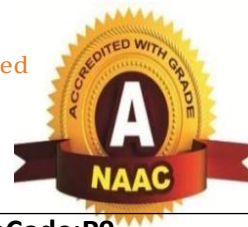
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4	Dissect a problem into subfunctions to develop modular reusable code
5	Demonstrate various searching and sorting techniques along with the complexity analysis

COURSE NAME: Engineering Graphics

COURSE CODE: 20ME2ES02

Course Outcomes:	
1	Apply the principles of Engineering Graphic to create Engineering Drawings of various geometric constructions, conic sections, curves and scales as per BIS standards.
2	Construct orthographic projections for points, lines and planes in different quadrants and Auxiliary views.
3	Draw the sectional views and true shape of sections of solids, by applying principles of projections.
4	Draw the development of surfaces and intersection of solids in real time situations.
5	Develop isometric and orthographic views of the objects.

COURSE NAME: Applied Physics Lab

COURSE CODE: 20AP2BS06

Course Outcomes:	
1	Able to study the (V-I/P-I) characteristics of LED, LASER and Solar cell.
2	Able to understand the energy gap of semiconductor diode.
3	Correlate the theory of Hall effect with experiment by determining the Hall coefficient.
4	Examine the Bending losses for different Optical fibre cables.
5	Able to understand various concepts - Resonance, Time constant and Magnetic field using LCR, RC, Stewart and Gees circuits.

COURSE NAME: Programming for Problem Solving Lab

COURSE CODE: 20CS2ES06

Course Outcomes:	
1	Formulate The Algorithms for Simple Problems
2	Translate the given algorithm to C program.
3	Correct the logical errors found during program execution
4	Make use of pointers in different type to modularize the code with functions.
5	Apply the appropriate sorting techniques for the given list of elements.



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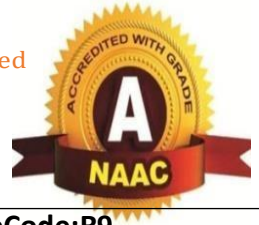
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COURSE NAME: Environmental Studies

COURSE CODE: 20MC2ES07

Course Outcomes:



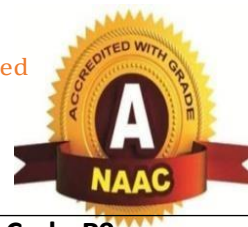
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1	The students able to know basic concept of ecological perspective and the value of the environment.
2	The students able to understand the significance of various natural resources and its management.
3	The students able to demonstrate a comprehensive understanding of the world's biodiversity and the importance of its conservation
4	The students able to identify different types of pollution and their control measures, discover effective methods of waste management and come out with best possible solutions.
5	The students able to raise awareness about environmental laws and sustainable development.



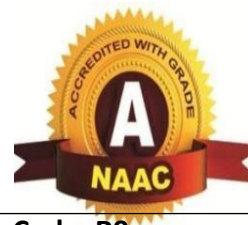
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Department of Information Technology

AY:2021-2022

COURSE NAME: Computer Oriented Statistical Methods

COURSE CODE: 20MA3BS08

Course Outcomes:	
1	Make use of concepts of probability and distributions to given case studies.
2	Calculate the Mean, Variance and covariance of given discrete random variable.
3	Apply the concept of Uniform Distributions to find out continuous distribution values.
4	Estimate the of test of hypothesis to take decision for profit or loss in a given problem.
5	Describe stochastic principles to simplify processes that satisfy Markov Property.

COURSE NAME: Computer Organization

COURSE CODE: 20IT3PC01

Course Outcomes:	
1	Demonstrate the functional organization of digital computer system.
2	Classify different addressing modes for fetching machine instructions.
3	Apply different data representation formats and perform arithmetic operations.
4	Tell the design of input/output organization and memory organization of computer.
5	Demonstrate the concepts of parallel processing, pipelining and inter process communication.

COURSE NAME: Object Oriented Programming Using C++

COURSE CODE: 20CS3PC02

Course Outcomes:	
1	Identify the object-oriented programming approach with respect to C++.
2	Apply the concepts of classes for data abstraction for the given set of programs.
3	Build the learned knowledge of polymorphism for the given set of problems.
4	Construct the programs by using Input/output streams.
5	Discover the exceptions handling process in object-oriented programming.



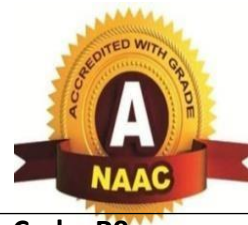
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COURSE NAME: Data Structures

COURSE CODE: 20CS3PC03

Course Outcomes:	
1	Choose appropriate data structures to represent data items in real world problems with linear data structures.
2	Apply dictionaries and hash tables to overcome problems of sequential data structures.
3	Develop the programs using trees for non-linear data structures.
4	Measure the computational efficiency of the principal algorithms for sorting and searching.
5	Implement the graph traversal methods in non-linear data structures.

COURSE NAME: Analog And Digital Electronics

COURSE CODE: 20CS3ES08

Course Outcomes:	
1	Identify the characteristics of various components and its utilization.
2	Compile the Construction, Operation and Characteristics of BJT, FET.
3	Make use of Boolean algebra Postulates to minimize combinational functions
4	Design and analyze combinational and sequential circuits
5	Categorize the logic families and realization of logic gates.

COURSE NAME: IT Workshop Lab

COURSE CODE: 20CS3PC04

Course Outcomes:	
1	Gain the knowledge of computer hardware.
2	Install the system software in the specified hardware.
3	Build the computer by assemble different parts and make sure of troubleshoots.
4	Make use of the Web browsers, email and news groups.
5	Craft professional word documents; excel spread sheet and power point presentations.

COURSE NAME: Data Structures Lab

COURSE CODE: 20CS3PC05

Course Outcomes:	
1	Design an algorithm along with the complexity for a given problem.
2	Able to implement the stack, queues using static and dynamic data structures.
3	Develop the programs to perform different operations on linked list.
4	Make use of different tree traversal techniques for non-linear data structures.
5	Develop programs for searching and sorting techniques by different methods.

COURSE NAME: Object Oriented Programming Using C++ Lab

COURSE CODE: 20CS3PC06



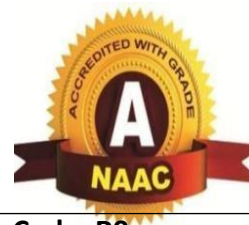
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Course Outcomes:

1	Ability to develop programming solutions for a range of problems using object-oriented programming techniques.
2	Apply the concepts of classes for data abstraction for the given set of programs.
3	Build the learned knowledge of polymorphism for the given set of problems.
4	Construct the programs by using Input/output streams.
5	Demonstrate the exceptions handling process in object-oriented programming.

COURSE NAME: Professional And Engineering and Ethics

COURSE CODE: 20MC3HS01

Course Outcomes:

1	To gain the knowledge on different codes of ethics, such as personal & professional, accountability, controllability, governability, life skills and consequentialism.
2	To perceive moral values in different fields in different ways.
3	To follow value-based education system by learning different techniques.
4	To assess workplace responsibilities by following different case studies.
5	To realize the work place responsibilities, honesty, integrity, and promise-keeping & trustworthiness, loyalty, fairness.

COURSE NAME: Quantitative Aptitude

COURSE CODE: 20MC3BS02

Course Outcomes:

1	To Understand and Practice Simplifications.
2	To Understand and Practice the Problems on Ages.
3	To Understand and Practice the Quadratic Equations.
4	To Understand and Practice arrangement and selection in their daily life.
5	To Understand and Practice commercial mathematics.

COURSE NAME: Discrete Mathematics

COURSE CODE: 20MA4PC07

Course Outcomes:

1	Construct precise mathematical proofs.
2	Predict logic and set theory to formulate precise statements.
3	Apply the concept of group theory in given Algebraic System.
4	Calculate linear recurrence relations using advanced counting techniques.
5	Explain graph theory in solving computing problems.

COURSE NAME: Business Economics and Financial Analysis

COURSE CODE: 20MS4HS03

Course Outcomes:

1	Identify the various forms of business and its impact on economic variables.
2	To realize the demand fluctuations and factors influencing the demand.



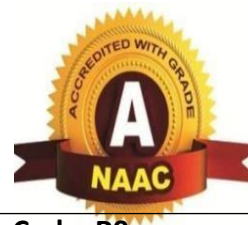
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3	To analyse different market structures, pricing strategies and forms of business organization.
4	To study the firms, financial position and the financial statements of a company.
5	To evaluate different types of financial ratios for knowing liquidity and profitability positions of business concern.

COURSE NAME: Operating Systems

COURSE CODE: 20CS4PC09

Course Outcomes:	
1	Demonstrate the fundamental components of a computer operating system.
2	Identify appropriate scheduling algorithm for process management.
3	Solve the situations occurred by deadlock to maintain appropriate process synchronization.
4	Make use of page replacement algorithm for effective memory management.
5	Apply the various system calls to enable the operating system services.

COURSE NAME: Database Management Systems

COURSE CODE: 20CS4PC10

Course Outcomes:	
1	Build the appropriate ER Model for the given problem.
2	Illustrate the concepts of Relational Model, Algebra and Calculus.
3	Apply the concepts of Normalization for the consistent database.
4	Write the proper SQL queries to access the database.
5	Apply the concurrency control protocol to maintain the ACID properties while designing the database.
6	Apply the proper indexing techniques for accessing the data.

COURSE NAME: Java Programming

COURSE CODE: 20CS4PC08

Course Outcomes:	
1	Apply the basic concepts of OOPs including data hiding to develop Java Applications.
2	Utilize the concepts of Packages and Stream based IO to build java API.
3	Implement the concepts of Exception handling and Multithreading.
4	Develop the applications using java collection framework.
5	Design GUI Applications using AWT Swing and Event Handling.

COURSE NAME: Operating Systems Lab

COURSE CODE: 20CS4PC11

Course Outcomes:	
1	Implement programs based on operating system concept of scheduling.
2	Develop a program based on operating system concept of deadlock management.



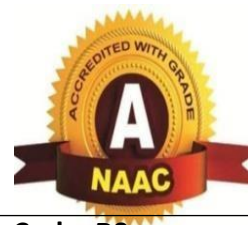
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3	Simulate the concept to implement programs based on operating system concept of file management.
4	Apply the concept of memory management for implementing a program.
5	Implement C programs using UNIX system calls.

COURSE NAME: Database Management Systems Lab

COURSE CODE: 20CS4PC13

Course Outcomes:	
1	Design a database schema for given problem data.
2	Build a GUI application.
3	Apply the normalization techniques for development of application software to realistic problems.
4	Formulate queries using SQL DML/DDL/DCL commands.
5	Implement triggers to raise as per real time data and also Implement concurrency control mechanisms.

COURSE NAME: Java Programming Lab

COURSE CODE: 20CS4PC12

Course Outcomes:	
1	Write programs for given real world problems using java collection frame work.
2	Build the programs using abstract classes to solve the specified problems.
3	Make use the concept of multithreading to allow parallel processing in the given program.
4	Create GUI programs using Java swing controls for the given example program.
5	Create web pages using Applets for given example problem.

COURSE NAME: Gender Sensitization Lab

COURSE CODE: 20MC4HS03

Course Outcomes:	
1	Students will have developed a better understanding of important issues related to gender in contemporary India.
2	Students will be sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature and film.
3	Students will attain a finer grasp of how gender discrimination works in our society and how to counter it. Students will acquire insight into the gendered division of labour and its relation to politics and economics.
4	Men and women students and professionals will be better equipped to work and live together as equals. Students will develop a sense of appreciation of women in all walks of life.



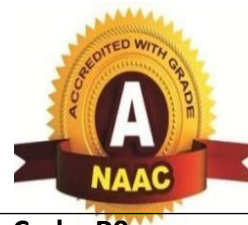
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5	Through providing accounts of studies and movements as well as the new laws that provide protection and relief to women, the textbook will empower students to understand and respond to gender violence.
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COURSE NAME: Quantitative Logical and Reasoning

COURSE CODE: 20MC4BS03

Course Outcomes:	
1	Students will have developed a better understanding of important issues related to gender in contemporary India.
2	Students will be sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature and film.
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COURSENAME:FormalLanguagesandAutomataTheory

COURSECODE:20CS5PC14

CourseOutcomes:	
1	Makeuseoftheconceptofautomataandtorecognizetheappropriatelanguages.
2	Model finitestate machinefor thegiven regular expressionand languages.
3	Construct context free grammars for any given formal languages.
4	Construct Turing machine for the given grammar.
5	Distinguish between decidability and undecidability.

COURSENAME:SoftwareEngineering

COURSECODE:20CS5PC15

CourseOutcomes:	
1	Makeuseofthebasicsoftwareengineeringmethodsandprocessmodels.
2	Identify the different requirements, requirement engineering process and system models.
3	Analyse the software architectural styles, conceptual model of UML diagrams for software developing lifecycle.
4	Choose different testing strategies and product metrics to verify the software quality.
5	Apply the various approaches in risk management and quality management for the software quality assurance

COURSENAME:DesignandAnalysisofAlgorithms

COURSECODE:20CS5PC16

CourseOutcomes:	
1	Makeuseofdivideandconquer methods for developing algorithms.
2	Apply the concept of backtracking to solve the optimization problems.
3	Solve the optimization problems using dynamic programming methodology.
4	Solve the optimization problem by using Greedy method.
5	Solve the optimization problem by using branch and bound method and NP-Hard and NP-Complete for the given example problems.



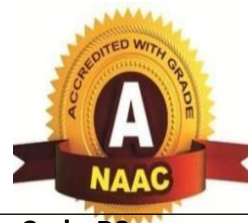
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COURSENAME: Artificial Intelligence

COURSECODE: 20IT5PE11

Course Outcomes:	
1	Ability to formulate an efficient problem space for a problem expressed in natural language.
2	Select a search algorithm for a problem and estimate its time and space complexities.
3	Possess the skill for representing knowledge using the appropriate technique for a given problem.
4	Possess the ability to apply AI techniques to solve problems of game playing, and machine learning.
5	Ability to design Expert system.

COURSENAME: Python Programming

COURSECODE: 20IT5PE21

Course Outcomes:	
1	Apply Python syntax, semantics and be proficient in the use of Python functions.
2	Implement File operations, Exception handling and modules in using Python.
3	Use the Regular Expressions and create, run and manipulate Multithreaded Python programs.
4	Illustrate the concepts of GUI, Web and Network programming in Python.
5	Inspect exemplary applications related to Databases in Python.

COURSENAME: Python Programming Lab

COURSECODE: 20IT5PE26

Course Outcomes:	
1	Implements simple Python programs
2	Use control structures to write Python programs.
3	Develop Python programs by defining functions.
4	Use Python Lists, Tuples, Dictionaries for representing compound data.
5	Implement File operations in Python.

COURSENAME: Design and Analysis of Algorithms Lab

COURSECODE: 20CS5PC17

Course Outcomes:	
1	Write C programs using Divide & Conquer strategy (sorting algorithms)
2	Implement C program to solve the given problems using Backtracking (N-Queen's, sum of subset)
3	Develop C program using Greedy approach for job sequencing with deadlines, single source shortest path problems)
4	Implement C program to generate minimum cost spanning trees using Prim's & Kruskal's algorithm.



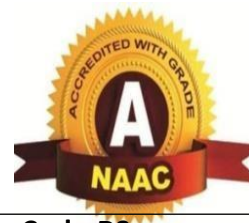
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5	Design C program to implement 0/1 Knapsack & OBST using dynamic programming.
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COURSE NAME: Advanced Communication Skills Lab

COURSE CODE: 20EN5HS04

Course Outcomes:	
1	Develop LSRW skills and soft skills.
2	Demonstrate the nuances of language through group activities and oral presentations.
3	Build written communication skills to meet the needs of their academics and career endeavours.
4	Take part in interviews with confidence thereby enhancing their employability skills.
5	Choose appropriate language in their social and professional communication.

COURSE NAME: Intellectual Property Rights

COURSE CODE: 20MC5HS05

Course Outcomes:	
1	The course is designed to provide comprehensive knowledge to the students regarding Indian position of the Patent Law and importance of IPR
2	Trademarks and designs with respect to products prevent entry into the market and ensure that consumers can rely on the quality and safety of genuine products
3	To help the student to learn and understand the reason for pursuing the course and help to identify what he will be able to do at the end of the course.
4	Trade secrets are secret practices and processes that give a company a competitive advantage over its competitors.
5	The primary function of intellectual property rights (IPRs) is to protect and stimulate the development and distribution of new products and the provision of new services based on the creation and exploitation of inventions, trademarks, designs, creative content or other intangible assets.

COURSE NAME: Personality and Soft Skills Development

COURSE CODE: 20MC5HS06

Course Outcomes:	
1	Students will possess the personality development techniques and communication skills.
2	Students will possess knowledge about leadership.
3	Students will be able to acquire the skills to manage stress and conflict.
4	Students will be able to acquire Problem Solving & Critical Thinking.
5	Students will be able to acquire different resume preparation & Essay Writing Techniques.



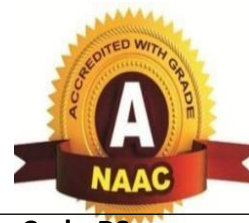
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COURSE NAME: Introduction to Embedded Systems

COURSE CODE: IT601PC

Course Outcomes:	
1	Compute the difference between the general computing system and the embedded system.
2	Choose the core and firmware of the embedded system.
3	Analyze the programming environment and IDE's used to develop embedded system languages.
4	Evaluate embedded system in RTOS.
5	Categorize real-time embedded systems using the concepts of RTOS.

COURSE NAME: Computer Networks

COURSE CODE: 20CS6PC18

Course Outcomes:	
1	Demonstrate the concepts of Data communication procedures and various models of Networking.
2	Summarize the features of various protocols used in Data Link Layer.
3	Identify appropriate routing algorithm for broadcasting in Network Layer.
4	Demonstrate the services and features of TCP/UDP protocols in Transport Layer.
5	Summarize the services and features of Application Layer with respect to World Wide Web.

COURSE NAME: Compiler Design

COURSE CODE: 20CS6PC19

Course Outcomes:	
1	Use Lex and Yacc tools for developing a scanner and a parser.
2	Make use of LL and LR parser to develop the Parse tree.
3	Generate intermediate code for procedures.
4	Identify appropriate method for code generation.
5	Apply proper techniques for code optimization.

COURSE NAME: Internet of Things

COURSE CODE: 20IT6PC02

Course Outcomes:	
1	To interpret the knowledge on areas to be used and protocols of communication in IoT.
2	To compare and contrast software and hardware things in different networks.
3	To extend the knowledge on python and its libraries used in IoT.
4	To apply the skill to develop the small-scale things.
5	To illustrate different sensor technologies for sensing real-world identities and identify the applications of IoT in Industry.



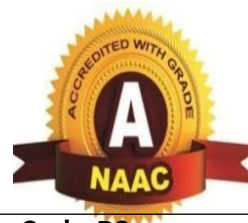
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COURSENAME: Web Technologies

COURSECODE: 20CS6PC21

Course Outcomes:	
1	Apply the concepts of PHP in creating web pages and connecting to database (MySQL)
2	Apply the concepts of XML for structuring the web pages.
3	Make use of Servlets to create dynamic web pages in client-server architecture.
4	Make use of JSP to develop interactive web pages.
5	Apply the techniques of JavaScript in client-side scripting.

COURSENAME: Machine Learning

COURSECODE: 20IT6PE31

Course Outcomes:	
1	Summarize the concepts of computational intelligence like machine learning.
2	Apply machine learning techniques to address the real-time problems in different areas.
3	Infer the Neural Networks and its usage in machine learning application.
4	Application & implementation of Decision trees.
5	Gain knowledge on Bayesian Networks, Reinforcement Algorithms & analytical learning.

COURSENAME: Principles of Electronic Communications

COURSECODE: 20EC60E11

Course Outcomes:	
1	Use the concepts of modulation in calculating various parameters.
2	Apply different modulation and demodulation techniques in suitable application.
3	Describe operation of telecommunication systems in different area networks.
4	Recognize the use of satellite communications.
5	Analyze different technologies in cellular and mobile communications.

COURSENAME: Computer Networks and Web Technologies Lab

COURSECODE: 20CS6PC22

Course Outcomes:	
1	Implement data link layer framing methods
2	Analyze error detection and error correction codes.
3	Implement and analyze routing and congestion issues in network design.
4	Implement Encoding and Decoding techniques used in presentation layer
5	To be able to work with different network tools

COURSENAME: Internet of Things Lab

COURSECODE: 20IT6PC02

Course Outcomes:	
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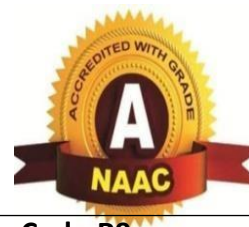
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1	Experiment with distance sensors and LED by attaching to Raspberry Pi.
2	Experiment with distance sensors, temperature sensor and LED by attaching to Arduino.
3	Experiment with distance sensors, temperature sensor and LED by attaching to NodeMCU.
4	Make use of python programming language to access the GPIO pins.
5	Analyse the DHT sensor data by attaching to Raspberry Pi.

COURSE NAME: Machine Learning Lab

COURSE CODE: 20IT6PE36

Course Outcomes:	
1	Memorize the basics of Python programming.
2	Implement modern notions in data analysis-oriented computing;
3	Analyzing datasets using python programming.
4	Be capable of confidently applying common Machine Learning algorithms in practice and implementing their own;
5	Be capable of performing experiments in Machine Learning using real-world data

COURSE NAME: Constitution of India

COURSE CODE: 20MC6HS05

Course Outcomes:	
1	Explain the background of the present constitution of India and features.
2	Utilize the fundamental rights and duties.
3	Understand the working of the union executive, parliament and judiciary.
4	Understand the working of the state executive, legislature and judiciary.
5	Utilize the special provisions and statutory institutions.

COURSE NAME: Information Security

COURSE CODE: IT701PC

Course Outcomes:	
1	Demonstrate the knowledge of cryptography, network security concepts and applications.
2	Ability to apply security principles in system design.
3	Understand key management issues and algorithms.
4	Understand security issues in Wireless LAN and web.
5	Understand cybersecurity and need of cyber-Laws.

COURSE NAME: Data Mining

COURSE CODE: CS702PC

Course Outcomes:	
1	Ability to understand the types of the data to be mined and present a general classification of tasks and primitives to integrate a data mining system.



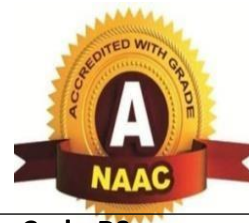
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2	Apply pre-processing methods for any given raw data.
3	Extract interesting patterns from large amount of data.
4	Discover the role played by data mining in various fields.
5	Choose and employ suitable data mining algorithms to build analytical applications.

COURSE NAME: Cloud Computing

COURSE CODE: CS714PE

Course Outcomes:	
1	Understand the concepts of computing paradigm.
2	Make use of the virtualization and cloud computing concepts.
3	Examine the cloud computing architecture layer management.
4	Compare the various service delivery models.
5	Determine the various cloud service providers.

COURSE NAME: Distributed Databases

COURSE CODE: IT724PE

Course Outcomes:	
1	Summarize the theoretical and practical aspects of distributed databases systems
2	Illustrate various aspects of query processing, query decomposition and distributed query optimization
3	Identify the different types of transactions and the distributed concurrency control mechanisms for efficient data transactions
4	Interpret the concepts of Distributed DBMS and Parallel Database Systems
5	Determine the various design aspects of an object-oriented databases system

COURSE NAME: Principles of Entrepreneurship

COURSE CODE: MT701OE

Course Outcomes:	
1	Understand the concepts of entrepreneurship.
2	Make use of the financing and managing the new venture concepts.
3	Examine the Industrial Financial Support.
4	Compare the various Production and marketing functions
5	Determine the various acts and their applications

COURSE NAME: Information Security Lab

COURSE CODE: IT703PC

Course Outcomes:	
1	Develop a Java interface for Encryption and decryption algorithms. encryption and decryption algorithms i.e., AES, MD5 and RSA algorithms
2	Understand the concepts of public key encryption theory
3	Understand various applications of cryptography and security



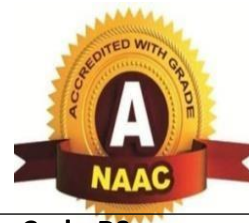
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	issues practically.
4	Explore the knowledge of key exchange protocols.

COURSE NAME: Industry Oriented Mini Project/Summer Internship **COURSE CODE:** IT704PC

Course Outcomes:	
1	Analyse the problem formulation and solution of the selected project.
2	Develop solutions for problems using modern tools for sustainable development.
3	Demonstrate ethical and professional sustainability while working in a team and communicate effectively for the benefit of the society.
4	Understand the engineering, finance and management principles.
5	Develop a software application or solution to a complex engineering problem using modern tools

COURSE NAME: Seminar

COURSE CODE: IT705PC

Course Outcomes:	
1	Identify recent technical topics from interested domains.
2	Analyse the applicability of modern software tools and technology.
3	Develop Presentation and Communications skills.
4	Develop Technical report preparation skills.

COURSE NAME: Project Stage-I

COURSE CODE: IT706PC

Course Outcomes:	
1	Analyse the problem formulation and solution of the selected project.
2	Develop solutions for problems using modern tools for sustainable development.
3	Demonstrate ethical and professional sustainability while working in a team and communicate effectively for the benefit of the society.
4	Understand the engineering, finance and management principles.

COURSE NAME: Organizational Behaviour

COURSE CODE: SM801MS

Course Outcomes:	
1	Apply the key factors to estimate the behaviour of individuals and groups in organizations.
2	Assess the potential effects of organizational level factors (such as structure, culture and change) on organizational behaviour.
3	Analyse organizational behavioural issues in the context of organizational behaviour theories, models and concepts.
4	Evaluate the different aspects related to Decision Making and Controlling Process
5	Describe the different theories related to Individual behaviour in the Organization.



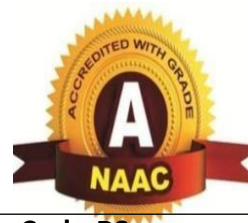
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COURSE NAME: Human Computer Interaction

COURSE CODE: CS814PE

Course Outcomes:	
1	To apply HCI and principles to interaction design.
2	Illustrate the disabled by designing non-traditional ways of interacting.
3	Apply the cognitive psychology in the design of devices for interaction.
4	Apply conventional and non-traditional user interface Paradigms.
5	Describe how testing is applied in computer interaction.

COURSE NAME: Total Quality Management

COURSE CODE: MT802OE

Course Outcomes:	
1	To realise the significance of the quality of product and quality of service
2	By applying several tools and techniques to improve total quality to accelerate the business
3	The total cost as an investment in the prevention of defects and assure zero defect to meet customer needs
4	To understand different techniques to reduce the cost to increase the profits by maintaining systematic accounts
5	It is to standardise the quality to compete in international levels.

COURSE NAME: Project Stage-II

COURSE CODE: IT802PC

Course Outcomes:	
1	Analyse the problem formulation and solution of the selected project.
2	Develop solutions for problems using modern tools for sustainable development.
3	Demonstrate ethical and professional sustainability while working in a team and communicate effectively for the benefit of the society.
4	Understand the engineering, finance and management principles.