



PVPIT Bavdhan Pune

Institute PO'S



- Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems
- Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- Ethics: Apply ethical principle and commit professional ethics and responsibilities and norms of the engineering practice.
- Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply the set one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.
- Computer network

Departmental Subject Wise PO'S & CO'S

Computer Engineering Department

Second Year

Semester III

PO'S

PO2	Problem analysis	Identify, formulate, review research literature and analyze complex Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and Engineering sciences.
PO3	Design / Development of Solutions	Design solutions for complex Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and Environmental considerations.
PO4	Conduct Investigations of Complex Problems	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
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PO12	Life-long Learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Subject : Discrete Mathematics (210241)

CO1: Formulate problems precisely, solve the problems, apply formal proof techniques, and explain the reasoning clearly.

CO2: Apply appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations including those in real-life contexts.

CO3: Design and analyze real world engineering problems by applying set theory, propositional logic and to construct proofs using mathematical induction.

CO4: Specify, manipulate and apply equivalence relations; construct and use functions and apply these concepts to solve new problems.

CO5: Calculate numbers of possible outcomes using permutations and combinations; to model and analyze computational processes using combinatorics.

CO6: Model and solve computing problem using tree and graph and solve problems using appropriate algorithms.

CO7: Analyze the properties of binary operations, apply abstract algebra in coding theory and evaluate the algebraic structures.

Subject : Fundamentals of Data Structures (210242)

CO1: Design the algorithms to solve the programming problems, identify appropriate algorithmic strategy for specific application, and analyze the time and space complexity.

CO2: Discriminate the usage of various structures, Design/Program/Implement the appropriate data structures; use them in implementations of abstract data types and Identity the appropriate data structure in approaching the problem solution.

CO3: Demonstrate use of sequential data structures- Array and Linked lists to store and process data.

CO4: Understand the computational efficiency of the principal algorithms for searching and sorting and choose the most efficient one for the application.

CO5: Compare and contrast different implementations of data structures (dynamic and static).

CO6: Understand, Implement and apply principles of data structures-stack and queue to solve computational problems.

Subject : Object Oriented Programming(210243)

CO1: Apply constructs- sequence, selection and iteration; classes and objects, inheritance, use of predefined classes from libraries while developing software.

CO2: Design object-oriented solutions for small systems involving multiple objects.

CO3: Use virtual and pure virtual function and complex programming situations.

CO4: Apply object-oriented software principles in problem solving.

CO5: Analyze the strengths of object-oriented programming.

CO6: Develop the application using object oriented programming language(C++).

Subject : Computer Graphics(210244)

CO1: Identify the basic terminologies of Computer Graphics and interpret the mathematical foundation of the concepts of computer graphics.

CO2: Apply mathematics to develop Computer programs for elementary graphic operations.

CO3: Illustrate the concepts of windowing and clipping and apply various algorithms to fill and clip polygons.

CO4: Understand and apply the core concepts of computer graphics, including transformation in two and three dimensions, viewing and projection.

CO5: Understand the concepts of color models, lighting, shading models and hidden surface elimination.

CO6: Create effective programs using concepts of curves, fractals, animation and gaming.

Subject : Digital Electronics and Logic Design (210245)

CO1: Simplify Boolean Expressions using K Map. CO2: Design and implement combinational circuits. CO3: Design and implement sequential circuits.

CO4: Develop simple real-world application using ASM and PLD.

CO5: Differentiate and Choose appropriate logic families IC packages as per the given design specifications.

CO6: Explain organization and architecture of computer system.

Subject: Data Structures Laboratory (210246)

CO1: Use algorithms on various linear data structure using sequential organization to solve real life problems.

CO2: Analyze problems to apply suitable searching and sorting algorithm to various applications.

CO3: Analyze problems to use variants of linked list and solve various real-life problems.

CO4: Designing and implement data structures and algorithms for solving different kinds of problems.

Subject: OOP and Computer Graphics Laboratory(210247)

CO1: Understand and apply the concepts like inheritance, polymorphism, exception handling and generic structures for implementing reusable programming codes.

CO2: Analyze the concept of file and apply it while storing and retrieving the data from secondary storages.

CO3: Analyze and apply computer graphics algorithms for line-circle drawing, scan conversion and filling with the help of object-oriented programming concepts.

CO4: Understand the concept of windowing and clipping and apply various algorithms to fill and clip polygons.

CO5: Apply logic to implement, curves, fractals, animation and gaming programs.

Subject: Digital Electronics Laboratory (210248)

CO1: Understand the working of digital electronic circuits.

CO2: Apply the knowledge to appropriate IC as per the design specifications.

CO3: Design and implement Sequential and Combinational digital circuits as per the specifications.

Semester IV

Subject: Engineering Mathematics III(207003)

CO1: Solve Linear differential equations, essential in modelling and design of computer-based systems.

CO2: Apply concept of Fourier transform and Z-transform and its applications to continuous and discrete systems and image processing.

CO3: Apply Statistical methods like correlation and regression analysis and probability theory for data analysis and predictions in machine learning.

CO4: Solve Algebraic and Transcendental equations and System of linear equations using numerical techniques.

CO5: Obtain Interpolating polynomials, numerical differentiation and integration, numerical solutions of ordinary differential equations used in modern scientific computing.

Subject: Data Structures and Algorithms(210252)

CO1: Identify and articulate the complexity goals and benefits of a good hashing scheme for real- world applications.

CO2: Apply non-linear data structures for solving problems of various domain.

CO3: Design and specify the operations of a nonlinear-based abstract data type and implement them in a high-level programming language.

CO4: Analyze the algorithmic solutions for resource requirements and optimization

CO5: Use efficient indexing methods and multiway search techniques to store and maintain data.

CO6: Use appropriate modern tools to understand and analyze the functionalities confined to the secondary storage.

Subject: Software Engineering (210253)

CO1: Analyze software requirements and formulate design solution for a software.

CO2: Design applicable solutions in one or more application domains using software engineering approaches that integrate ethical, social, legal and economic concerns.

CO3: Apply new software models, techniques and technologies to bring out innovative and novelistic solutions for the growth of the society in all aspects and evolving into their continuous professional development.

CO4: Model and design User interface and component-level.

CO5: Identify and handle risk management and software configuration management.

CO6: Utilize knowledge of software testing approaches, approaches to verification and validation.

CO7: Construct software of high quality – software that is reliable, and that is reasonably easy to understand, modify and maintain efficient, reliable, robust and cost-effective software solutions.

Subject: Microprocessor (210254)

CO1: Exhibit skill of assembly language programming for the application. CO2: Classify Processor architectures.

CO3: Illustrate advanced features of 80386 Microprocessor.

CO4: Compare and contrast different processor modes.

CO5: Use interrupts mechanism in applications

CO6: Differentiate between Microprocessors and Microcontrollers.

CO7: Identify and analyze the tools and techniques used to design, implement, and debug microprocessor-based systems.

Subject: Principles of Programming Languages(210255)

CO1: Make use of basic principles of programming languages.

CO2: Develop a program with Data representation and Computations.

CO3: Develop programs using Object Oriented Programming language : Java. CO4: Develop application using inheritance, encapsulation, and polymorphism. CO5: Demonstrate Multithreading for robust application development.

CO6: Develop a simple program using basic concepts of Functional and Logical programming paradigm.

Subject: Data Structures and Algorithms Laboratory (210256)

CO1: Understand the ADT/libraries, hash tables and dictionary to design algorithms for a specific problem.

CO2: Choose most appropriate data structures and apply algorithms for graphical solutions of the problems.

CO3: Apply and analyze non linear data structures to solve real world complex problems.

CO4: Apply and analyze algorithm design techniques for indexing, sorting, multi-way searching, file organization and compression.

CO5: Analyze the efficiency of most appropriate data structure for creating efficient solutions for engineering design situations.

Subject: Microprocessor Laboratory (210257)

CO1. Understand and apply various addressing modes and instruction set to implement assembly language programs

CO2. Apply logic to implement code conversion

CO3. Analyze and apply logic to demonstrate processor mode of operation

Subject : Project Based Learning II (210258)

CO1: Identify the real life problem from societal need point of view

CO2: Choose and compare alternative approaches to select most feasible one

CO3: Analyze and synthesize the identified problem from technological perspective

CO4: Design the reliable and scalable solution to meet challenges

CO5: Evaluate the solution based on the criteria specified

CO6: Inculcate long life learning attitude towards the societal problems

Subject: Code of Conduct (210259)

CO1: Understand the basic perception of profession, professional ethics, various moral and social issues, industrial standards, code of ethics and role of professional ethics in engineering field.

CO2: Aware of professional rights and responsibilities of an engineer, responsibilities of an engineer for safety and risk benefit analysis.

CO3: Understand the impact of the professional Engineering solutions in societal and Environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

CO4: Acquire knowledge about various roles of engineers in variety of global issues and able to apply ethical principles to resolve situations that arise in their professional lives.

Subject: Audit Course 3 (210251)

AC3-III: Environmental Studies

CO1: Comprehend the importance of ecosystem and biodiversity

CO2: Correlate the human population growth and its trend to the environmental degradation and develop the awareness about his/her role towards environmental protection and prevention

CO3: Identify different types of environmental pollution and control measures

CO4: Correlate the exploitation and utilization of conventional and non-conventional resources

AC3-IV: Smart Cities

CO1: Understand the dynamic behaviour of the urban system by going beyond the physical appearance and by focusing on representations, properties and impact factors

CO2: Explore the city as the most complex human-made organism with a metabolism that can be modelled in terms of stocks and flows

CO3: Knowledge about data-informed approaches for the development of the future city, based on crowd sourcing and sensing

CO4: Knowledge about the latest research results in for the development and management of future cities

CO5: Understand how citizens can benefit from data-informed design to develop smart and responsive cities.

Third Year

PO'S

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Subject: 310241: Database Management Systems

CO1: Analyze and design Database Management System using ER model

CO2: Implement database queries using database languages

CO3: Normalize the database design using normal forms

CO4: Apply Transaction Management concepts in real-time situations

CO5: Use NoSQL databases for processing unstructured data

CO6: Differentiate between Complex Data Types and analyze the use of appropriate data types.

Subject: Theory of Computation (310242)

CO1: Understand formal language, translation logic, essentials of translation, alphabets, languagerepresentation and apply it to design Finite Automata and its variants

CO2: Construct regular expression to present regular language and understand pumping lemma for RE

CO3: Design Context Free Grammars and learn to simplify the grammar

CO4: Construct Pushdown Automaton model for the Context Free Language

CO5: Design Turing Machine for the different requirements outlined by theoretical computerscience

CO6: Understand different classes of problems, classify and analyze them and study concepts of NP completeness.

Subject: Systems Programming and Operating System (310243)

CO1: Analyze and synthesize basic System Software and its functionality.

CO2: Identify suitable data structures and Design & Implement various System Software

CO3: Compare different loading schemes and analyze the performance of linker and loader

CO4: Implement and Analyze the performance of process scheduling algorithms

CO5: Identify the mechanism to deal with deadlock and concurrency issues

CO6: Demonstrate memory organization and memory management policies

Subject: Computer Networks and Security (310244)

CO1: Summarize fundamental concepts of Computer Networks, architectures, protocols and technologies

CO2: Illustrate the working and functions of data link layer

CO3: Analyze the working of different routing protocols and mechanisms

CO4: Implement client-server applications using sockets

CO5: Illustrate role of application layer with its protocols, client-server architectures

CO6: Comprehend the basics of Network Security.

Subject: Software Project Management (310245(D))

CO1: Comprehend Project Management Concepts

CO2: Use various tools of Software Project Management

CO3: Schedule various activities in software projects

CO4: Track a project and manage changes

CO5: Apply Agile Project Management

CO6: Analyse staffing process for team building and decision making in Software Projects and Management

Subject: Database Management Systems Laboratory (310246)

CO1: Design E-R Model for given requirements and convert the same into database tables

CO2: Design schema in appropriate normal form considering actual requirements

CO3: Implement SQL queries for given requirements , using different SQL concepts

CO4: Implement PL/SQL Code block for given requirements

CO5: Implement NoSQL queries using MongoDB

CO6: Design and develop application considering actual requirements and using database concepts.

Subject: Computer Networks and Security Laboratory (310247)

CO1: Analyze the requirements of network types, topology and transmission media

CO2: Demonstrate error control, flow control techniques and protocols and analyze them

CO3: Demonstrate the subnet formation with IP allocation mechanism and apply various routing algorithms

CO4: Develop Client-Server architectures and prototypes

CO5: Implement web applications and services using application layer protocols

CO6: Use network security services and mechanisms.

Subject: 310248: Laboratory Practice I (310248)

Systems Programming and Operating System

CO1: Implement language translators

CO2: Use tools like LEX and YACC

CO3: Implement internals and functionalities of Operating System

Software Project Management

CO4: Apply Software Project Management tools

CO5: Implement software project planning and scheduling

CO6: Analyse staffing in software project

Subject : Seminar and Technical Communication (310249)

CO1: Analyze a latest topic of professional interest

CO2: Enhance technical writing skills

CO3: Identify an engineering problem, analyze it and propose a work plan to solve it

CO4: Communicate with professional technical presentation skills

Semester VI

Subject: Data Science and Big Data Analytics (310251)

CO1: Analyze needs and challenges for Data Science Big Data Analytics

CO2: Apply statistics for Big Data Analytics

CO3: Apply the lifecycle of Big Data analytics to real world problems

CO4: Implement Big Data Analytics using Python programming

CO5: Implement data visualization using visualization tools in Python programming

CO6: Design and implement Big Databases using the Hadoop ecosystem

Subject: Web Technology (310252)

CO1: Implement and analyze behavior of web pages using HTML and CSS

CO2: Apply the client side technologies for web development

CO3: Analyze the concepts of Servlet and JSP

CO4: Analyze the Web services and frameworks

CO5: Apply the server side technologies for web development

CO6: Create the effective web applications for business functionalities using latest web development platforms

Subject: Artificial Intelligence (310253)

CO1: Identify and apply suitable Intelligent agents for various AI applications

CO2: Build smart system using different informed search / uninformed search or heuristic approaches

CO3: Identify knowledge associated and represent it by ontological engineering to plan a strategy to solve given problem

CO4: Apply the suitable algorithms to solve AI problems

CO5: Implement ideas underlying modern logical inference systems

CO6: Represent complex problems with expressive yet carefully constrained language of representation.

Subject: Cloud Computing (Elective II) (310254(C))

CO1: Understand the different Cloud Computing environment

CO2: Use appropriate data storage technique on Cloud, based on Cloud application

CO3: Analyze virtualization technology and install virtualization software

CO4: Develop and deploy applications on Cloud

CO5: Apply security in cloud applications

CO6: Use advance techniques in Cloud Computing.

Subject: Internship (310255)

CO1: To demonstrate professional competence through industry internship.

CO2: To apply knowledge gained through internships to complete academic activities in a professional manner.

CO3: To choose appropriate technology and tools to solve given problem.

CO4: To demonstrate abilities of a responsible professional and use ethical practices in day to day life.

CO5: Creating network and social circle, and developing relationships with industry people.

CO6: To analyze various career opportunities and decide carrier goals.

Subject: Data Science and Big Data Analytics Laboratory (310256)

CO1: Apply principles of Data Science for the analysis of real time problems

CO2: Implement data representation using statistical methods

CO3: Implement and evaluate data analytics algorithms

CO4: Perform text preprocessing

CO5: Implement data visualization techniques

CO6: Use cutting edge tools and technologies to analyze Big Data

Subject: Web Technology Laboratory (310257)

CO1: Understand the importance of website planning and website design issues

CO2: Apply the client side and server side technologies for web application development

CO3: Analyze the web technology languages, frameworks and services

CO4: Create three tier web based applications.

Subject: Laboratory Practice II (310258)

Artificial Intelligence

CO1: Design system using different informed search / uninformed search or heuristic approaches

CO2: Apply basic principles of AI in solutions that require problem solving, inference, perception, knowledge representation, and learning

CO3: Design and develop an expert system

Cloud Computing

CO4: Use tools and techniques in the area of Cloud Computing

CO5: Use the knowledge of Cloud Computing for problem solving

CO6: Apply the concepts Cloud Computing to design and develop applications.

Subject: Audit Course 6 (310259)

AC6-III Leadership and Personality Development

CO1: Express effectively through communication and improve listening skills

CO3: Develop effective team leadership abilities.

CO4: Explore self-motivation and practicing creative/new age thinking.

CO5: Operate effectively in heterogeneous teams through the knowledge of team work, people skills and leadership qualities.

Final Year
PO'S
Semester VII

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Subject: Design and Analysis of Algorithms (410241)

CO1: Formulate the problem

CO2: Analyze the asymptotic performance of algorithms

CO3: Decide and apply algorithmic strategies to solve given problem

CO4: Find optimal solution by applying various methods

CO5: Analyze and Apply Scheduling and Sorting Algorithms.

CO6: Solve problems for multi-core or distributed or concurrent environments

Subject: Machine Learning (410242)

CO1: Identify the needs and challenges of machine learning for real time applications.

CO2: Apply various data pre-processing techniques to simplify and speed up machine learning algorithms.

CO3: Select and apply appropriately supervised machine learning algorithms for real time applications.

CO4: Implement variants of multi-class classifier and measure its performance.

CO5 :Compare and contrast different clustering algorithms.

CO6: Design a neural network for solving engineering problems.

Subject: Blockchain Technology (410243)

CO1: Interpret the fundamentals and basic concepts in Blockchain CO2: Compare the working of different blockchain platforms CO3: Use Crypto wallet for cryptocurrency based transactions

CO4: Analyze the importance of blockchain in finding the solution to the real-world problems.

CO5: Illustrate the Ethereum public block chain platform

CO6: Identify relative application where block chain technology can be effectively used and implemented.

Subject: Object oriented Modeling and Design (410244(D))

CO1: Describe the concepts of object-oriented and basic class modelling.

CO2: Draw class diagrams, sequence diagrams and interaction diagrams to solve problems.

CO3: Choose and apply a befitting design pattern for the given problem

CO4: To Analyze applications, architectural Styles & software control strategies

CO5: To develop Class design Models & choose Legacy Systems.

CO6: To Understand Design Patterns.

Subject: Software Testing and Quality Assurance (410245)

CO1: Describe fundamental concepts in software testing such as manual testing, automation testing and software quality assurance.

CO2: Design and Develop project test plan, design test cases, test data, and conduct test operations.

CO3: Apply recent automation tool for various software testing for testing software.

CO4: Apply different approaches of quality management, assurance, and quality standard to software system.

CO5: Apply and analyze effectiveness Software Quality Tools.

CO6: Apply tools necessary for efficient testing framework.

Subject: Laboratory Practice III (410246)

CO1: Apply preprocessing techniques on datasets.

CO2: Implement and evaluate linear regression and random forest regression models. CO3: Apply and evaluate classification and clustering techniques.

CO4: Analyze performance of an algorithm.

CO5: Implement an algorithm that follows one of the following algorithm design strategies: divide and conquer, greedy, dynamic programming, backtracking, branch and bound.

CO6: Interpret the basic concepts in Blockchain technology and its applications

Subject: Laboratory Practice IV (410247)

CO1: Apply android application development for solving real life problems

CO2: Design and develop system using various multimedia components.

CO3: Identify various vulnerabilities and demonstrate using various tools.

CO4: Apply information retrieval tools for natural language processing

CO5: Develop an application using open source GPU programming languages

CO6: Apply software testing tools to perform automated testing

Subject : Project Work Stage I (410248)

On completion of the course, student will be able to–

- Solve real life problems by applying knowledge.
- Analyze alternative approaches, apply and use most appropriate one for feasible solution.
- Write precise reports and technical documents in a nutshell.
- Participate effectively in multi-disciplinary and heterogeneous teams exhibiting team work
- Inter-personal relationships, conflict management and leadership quality.

Subject:410249: Audit Course 7

AC7 – II: Entrepreneurship Development

CO1: Understand the legalities in product development

CO2: Undertake the process of IPR, Trademarks, Copyright and patenting CO3: Understand and apply functional plans

CO4: Manage Entrepreneurial Finance

CO5: Inculcate managerial skill as an entrepreneur.

Semester VIII

CO'S

Subject :High Performance Computing (410250)

CO1: Understand various Parallel Paradigm

CO2: Design and Develop an efficient parallel algorithm to solve given problem CO3: Illustrate data communication operations on various parallel architecture CO4: Analyze and measure performance of modern parallel computing systems CO5: Apply CUDA architecture for parallel programming.

CO6: Analyze the performance of HPC applications.

Subject: Deep Learning (410251)

CO1: Understand the basics of Deep Learning and apply the tools to implement deep learning applications

CO2: Evaluate the performance of deep learning models (e.g., with respect to the bias-variance trade- off, overfitting and underfitting, estimation of test error).

CO3: To apply the technique of Convolution (CNN) and Recurrent Neural Network (RNN) for implementing Deep Learning models

CO4: To implement and apply deep generative models.

CO5: Construct and apply on-policy reinforcement learning algorithms

CO6: To Understand Reinforcement Learning Process.

Natural Language Processing (410252(A))

Subject: Software Defined Networks 410252(C)

CO1: Interpret the need of Software Defined networking solutions.

CO2: Analyze different methodologies for sustainable Software Defined Networking solutions.

CO3: Select best practices for design, deploy and troubleshoot of next generation networks.

CO4: Develop programmability of network elements.

CO5: Demonstrate virtualization and SDN Controllers using Open Flow protocol

CO6: Design and develop various applications of SDN.

Subject: Business Intelligence (410253(C))

CO1: Differentiate the concepts of Decision Support System & Business Intelligence

CO2: Use Data Warehouse & Business Architecture to design a BI system.

CO3: Build graphical reports

CO4: Apply different data preprocessing techniques on dataset

CO5: Implement machine learning algorithms as per business needs

CO6: Identify role of BI in marketing, logistics, and finance and telecommunication sector.

Subject: Laboratory Practice V (410255)

CO1: Analyze and measure performance of sequential and parallel algorithms.

CO2: Design and Implement solutions for multicore/Distributed/parallel environment.

CO3: Identify and apply the suitable algorithms to solve AI/ML problems.

CO4: Apply the technique of Deep Neural network for implementing Linear regression and classification.

CO5: Apply the technique of Convolution (CNN) for implementing Deep Learning models.

CO6: Design and develop Recurrent Neural Network (RNN) for prediction.

Subject: Laboratory Practice VI (410256)

CO1: Apply basic principles of elective subjects to problem solving and modeling.

CO2: Use tools and techniques in the area of software development to build mini projects

CO3: Design and develop applications on subjects of their choice.

CO4: Generate and manage deployment, administration & security.

Subject: Project Work Stage II (410256)

CO1: Show evidence of independent investigation

CO2: Critically analyze the results and their interpretation.

CO3: Report and present the original results in an orderly way and placing the open questions in the right perspective.

CO4: Link techniques and results from literature as well as actual research and future research lines with the research.

CO5: Appreciate practical implications and constraints of the specialist subject

Subject: Audit Course8 (410257)

AC8–III: Social Media And Analytics

CO1: Develop a far deeper understanding of the changing digital land scape.

CO2: Identify some of the latest digital marketing trends and skill sets needed for today's marketer.

CO3: Successful planning, prediction, and management of digital marketing campaigns

CO4: Assess user interfaces using different usability engineering techniques.

CO5: Implement smart management of different digital assets for marketing needs.

CO6: Assess digital marketing as a long term career opportunity.