



COURSE OUTCOMES

(R 2017)

Course code C101 Course Name: HS 8151 Communicative English

C101.1	Read articles of a general kind in magazines and newspapers.
C101.2	Participate effectively in informal conversations; introduce themselves and their friends and express opinions in English.
C101.3	Introduce themselves and their friends and express opinions in English.
C101.4	Comprehend conversations and short talks delivered in English
C101.5	Write short essays of a general kind and personal letters and emails in English.

Course code C102 Course Name : MA 8151 Engineering Mathematics

C102.1	Use both the limit definition and rules of differentiation to differentiate functions.
C102.2	Apply differentiation to solve maxima and minima problems.
C102.3	Evaluate integrals both by using Riemann sums and by using the Fundamental Theorem of Calculus.
C102.4	Evaluate integrals using techniques of integration, such as substitution, partial fractions and integration by parts.
C102.5	Apply various techniques in solving differential equations.

Course code C103 Course name: PH8151 Engineering Physics

C103.1	Gain knowledge on the basics of properties of matter and its applications.
C103.2	Acquire knowledge on the concepts of waves and optical devices and their applications in fibre optics
C103.3	Apply the concepts of thermal properties of materials and their applications in expansion joints and heat exchangers.
C103.4	Get knowledge on advanced physics concepts of quantum theory and its applications in tunneling microscopes
C103.5	Understand the basics of crystals, their structures and different crystal growth techniques

Course code C104 Course Name: CY8151 Engineering Chemistry

C104.1	To make the students conversant with boiler feed water requirements, related problems and water treatment techniques.
C104.2	To develop an understanding of the basic concepts of phase rule and its applications to single and two component systems and appreciate the
C104.3	Preparation, properties and applications of engineering materials.
C104.4	Types of fuels, calorific value calculations, manufacture of solid, liquid and gaseous fuels.
C104.5	Principles and generation of energy in batteries, nuclear reactors, solar cells, wind mills and fuel cells.

Course code C105 Course Name: GE 8151 Problem Solving and Python Programming

C105.1	To know the basics of algorithmic problem solving
C105.2	To read and write simple Python programs.
C105.3	To develop Python programs with conditionals, loops, functions and call them
C105.4	To use Python data structures -- lists, tuples, dictionaries
C105.5	To do input/output with files in Python.

Course code C106 Course Name: GE8152 Engineering Graphics

C106.1	To develop in students, graphic skills for communication of concepts, ideas and design of engineering products.
C106.2	To develop in students, graphical
C106.3	To develop in students, for design of engineering products.
C106.4	To develop in students in engineering drawing.
C106.5	To expose them to existing national standards related to technical drawings.

Course code C107 Course Name: GE 8161 Problem Solving and Python Programming Laboratory

C107.1	To write, test, and debug simple Python programs.
C107.2	To implement Python programs with conditionals and loops.
C107.3	Use functions for structuring Python programs.
C107.4	Represent compound data using Python lists, tuples, dictionaries.
C107.5	Read and write data from/to files in Python.

Course code C108 Course Name: BS8161 Physics and Chemistry Laboratory

C108.1	To introduce different experiments to test basic understanding of physics concepts applied in optics
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C108.2	To introduce different experiments to test basic understanding of physics concepts applied in thermal physics
C108.3	To introduce different experiments to test basic understanding of physics concepts applied in properties of matter and liquids.
C108.4	To make the student to acquire practical skills in the determination of water quality parameters through volumetric and instrumental analysis
C108.5	To acquaint the students with the determination of molecular weight of a polymer by viscometry.

Course code C109 Course Name: HS8251 Technical English

C109.1	Read technical texts
C109.2	Write area- specific texts effortlessly.
C109.3	Listen lectures in their area of specialization.
C109.4	Comprehend talks in their area of specialisation
C109.5	Speak appropriately and effectively in varied formal and informal contexts

Course code C110 Course Name: MA8251 Engineering Mathematics - II

C110.1	Eigen values and eigenvectors, Diagonalization of a matrix, Symmetric matrices, Positive definite matrices and similar matrices.
C110.2	Gradient, divergence and curl of a vector point function and related identities.
C110.3	Evaluation of line, surface and volume integrals using Gauss, Stokes and Green's theorems and their verification
C110.4	Apply functions, conformal mapping and complex integration.
C110.5	Laplace transform and inverse transform of simple functions, properties, various related theorems and application to differential equations w

Course code C111 Course Name: PH 8253 Physics for Electronics Engineering

C111.1	Gain knowledge on classical and quantum electron theories, and energy band structures.
C111.2	Acquire knowledge on basics of semiconductor physics and its applications in various devices.
C111.3	Get knowledge on magnetic and dielectric properties of materials.
C111.4	Understanding on the functioning of optical materials for optoelectronics.
C111.5	understand the basics of quantum structures and their applications in spintronics and carbon electronics.

Course code C112 Course Name: BM8251 Engineering Mechanics for Biomedical Engineers

C112.1	Use scalar and vector analytical techniques for analysing forces in statically determinate structures
C112.2	Apply fundamental concepts of kinematics and kinetics of particles to the analysis of simple, practical problems
C112.3	Apply fundamental principles of mechanics.
C112.4	Learn basics of fluid mechanics and relate it to bio-fluids.
C112.5	Understand the action of friction and motion.

Course code C113 Course Name: BM8201 Fundamentals of Bio Chemistry

C113.1	List the fundamental of biochemistry, acid, base and pH relation in blood and biomolecules.
C113.2	Relate the importance and classification of Carbohydrates and its metabolic activities in absorption of energy in body and its disorder.
C113.3	Examine the importance and classification of Lipids and its metabolic activities in absorption of energy in body and its disorder.
C113.4	Estimate the Basic units of DNA and RNA and its function in human body with its disorders and protein and its metabolic activity.
C113.5	Infer the explanation for enzyme, enzymatic reaction and its type with its functions in metabolism as catalyst.

Course code C114 Course Name: EC 8251 Circuit Analysis

C114.1	Develop the capacity to analyze electrical circuits, apply the circuit theorems in real time
C114.2	Design and understand and evaluate the AC and DC circuits.
C114.3	To study the transient and steady state response of the circuits subjected to step and sinusoidal excitations.
C114.4	Develop different methods of circuit analysis using Network theorems, duality and topology.
C114.5	To study the two port networks and properties

Course code C115 Course Name: GE 8261 Engineering Practices Laboratory

C115.1	Fabricate carpentry components and pipe connections including plumbing works and Use welding equipments to join the structures.
C115.2	Carry out the basic machining operations
C115.3	Make the models using sheet metal works, illustrate on centrifugal pump, Air conditioner, operations of smithy, foundry and fittings
C115.4	Carry out basic home electrical works and appliances
C115.5	Measure the electrical quantities, Elaborate on the components, gates, soldering practices.

Course code C116 Course Name: BM 8211 Bio Chemistry Laboratory

C116.1	Understand the Biochemistry laboratory functional components
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C116.2	Understand the basics principle of preparation of buffers
C116.3	Have a sound knowledge of qualitative test of different biomolecules
C116.4	Understand the basics knowledge of Biochemical parameter and their interpretation in Blood sample
C116.5	Have a sound knowledge of separation technology of proteins and aminoacids

Course code C201 Course Name:MA 8352 Linear Algebra and Partial Differential Equations

C201.1	Explain the fundamental concepts of advanced algebra and their role in modern mathematics and applied contexts.
C201.2	Demonstrate accurate and efficient use of advanced algebraic techniques.
C201.3	Demonstrate their mastery by solving non - trivial problems related to the concepts and by proving simple theorems about the statements pr
C201.4	Able to solve various types of partial differential equations
C201.5	Able to solve engineering problems using Fourier series

Course code C202 Course Name: EC8352 Signals and system

C202.1	To understand the basic properties of signal & systems
C202.2	To know the methods of characterization of continuous LTI systems in time domain
C202.3	To analyze continuous time signals and system in the Fourier and Laplace domain
C202.4	To know the methods of characterization of discrete LTI systems in time domain
C202.5	To analyze discrete time signals and system in the Fourier and Z transform domain

Course code C203 Course Name:BM8351 Anatomy and Human Physiology

C203.1	Students would be able to explain basic structure and functions of cell
C203.2	Students would be learnt about anatomy and physiology of various systems of human body
C203.3	Students would be able to explain interconnect of various systems
C203.4	Develope clearly knowledge about the endocrinology and nervous system of human
C203.5	Outline about the digestiva and renal systems of human

Course code C204 Course Name:BM8301 Sensors and Measurements

C204.1	Inspect various electrical parameters with accuracy, precision, resolution
C204.2	Label appropriate passive or active transducers for measurement of physical phenomenon.
C204.3	Evaluate and select appropriate light sensors for measurement of physical phenomenon.
C204.4	Apply AC and DC bridges for relevant parameter measurement
C204.5	Illustrate Multimeter, CRO and different types of recorders for appropriate measurement.

Course code C205 Course Name:EC 8353 Electron Devices and Circuits

C205.1	Explain the structure and working operation of basic electronic devices.
C205.2	Able to identify and differentiate both active and passive elements
C205.3	Analyze the characteristics of different electronic devices such as diodes and transistors
C205.4	Choose and adapt the required components to construct an amplifier circuit.
C205.5	Employ the acquired knowledge in design and analysis of oscillators

Course code C206 Course Name:BM8302 Pathology and Microbiology

C206.1	Student can perform practical experiments on tissue processing, cryoprocessing, staining,Processes etc.
C206.2	Identification of disease condition by processing tissue
C206.3	Importance of straining technique
C206.4	Understanding the functioning of equipments used in microbial study
C206.5	Study of biological fluids and its importance

Course code C207 Course Name:BM8311 Pathology and Microbiology Laboratory

C207.1	Analyze structural and functional aspects of living organisms.
C207.2	Explain the function of microscope
C207.3	Discuss the importance of public health.
C207.4	Describe methods involved in treating the pathological diseases.
C207.5	Importance of immunology and technology use in treatment

Course code C208 Course Name:BM8312 Devices and Circuits Laboratory

C208.1	Analyze the characteristics of diodes (PN and Zener Diodes) and its applications (Clipper, Clamper & FWR)
C208.2	Analyze the characteristics of Transistors (BJT & FET)
C208.3	Analyze the characteristics of Thyristors (SCR)
C208.4	Design RL and RC circuits.

C208.5	Verify Thevinin & Norton theorem KVL & KCL, Super Position Theorems, Maximum Power Transfer Theorem & Reciprocity theorem
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Course code C209 Course Name: BM 8313 Human Physiology Laboratory

C209.1	Identification and enumeration of blood cells
C209.2	Enumeration of haematological parameters
C209.3	Analysis of special sensory organs test
C209.4	Experiment identification of blood groups and collection of blood
C209.5	Make use of Microscopic study of blood cells

Course code C210 Course Name: MA 8391 Probability and Statistics

C210.1	Understand the fundamental knowledge of the concepts of probability and have knowledge of standard distributions which can describe real
C210.2	Understand the basic concepts of one and two dimensional random variables and apply in engineering applications.
C210.3	Apply the concept of testing of hypothesis for small and large samples in real life problems.
C210.4	Apply the basic concepts of classifications of design of experiments in the field of agriculture and statistical quality control.
C210.5	Have the notion of sampling distributions and statistical techniques used in engineering and management problems.

Course code C211 Course Name: BM 8401 Medical Physics

C211.1	Explain about non-ionizing radiation, interaction with tissue and its effects.
C211.2	Define and compare intensities of sensory stimuli.
C211.3	Summarizes how ionizing radiation interacts with the human body, how to quantify it and its levels seen in the environment and healthcare.
C211.4	Explain the fundamentals of radioactivity and radioactive isotopes.
C211.5	Illustrates the methods of detecting and recording the ionizing radiation and its interaction with matter.

Course code C212 Course Name:EE8452 Basics of Electrical Engineering

C212.1	Design simple electrical circuits and understand through nodal, mesh analysis about constructing series and parallel configuration of circuits v
C212.2	Get knowledge on electrical machines and on its efficient operating principle.
C212.3	Understand metering principles, safety measures while working with electrical circuits.
C212.4	Analyse existing power distribution and hence apply technology in electrical applications
C212.5	intrepret the operation of fractional-kW motors and their applications.

Course code C213 Course Name: EC8453 Linear Integrated Circuits

C213.1	Design linear and non linear applications of OP – AMPS
C213.2	Design applications using analog multiplier and PLL
C213.3	Design ADC and DAC using OP – AMPS
C213.4	Generate waveforms using OP – AMP Circuits
C213.5	Analyze special function lcs

Course code C214 Course Name:EC8393 Fundamentals of Data Structures In C

C214.1	Implement linear and non-linear data structure operations using C
C214.2	Suggest appropriate linear / non-linear data structure for any given data set.
C214.3	Apply hashing concepts for a given problem
C214.4	Modify or suggest new data structure for an application
C214.5	Appropriately choose the sorting algorithm for an application

Course code C215 Course Name: EC8392 Digital Electronics

C215.1	To present the Digital fundamentals, Boolean algebra and its applications in digital systems
C215.2	To familiarize with the design of various combinational digital circuits using logic gates
C215.3	To introduce the analysis and design procedures for synchronous and asynchronous sequential circuits
C215.4	To explain the various semiconductor memories and related technology
C215.5	To introduce the electronic circuits involved in the making of logic gates

Course code C216 Course Name: EC8393 Fundamentals of Data Structures In C Laboratory

C216.1	Write basic and advanced programs in C
C216.2	Implement functions and recursive functions in C
C216.3	Implement data structures using C
C216.4	Choose appropriate sorting algorithm for an application and implement it in a modularized way
C216.5	Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data and graphs, trees and heaps

Course code C217 Course Name: BM8411 Integrated Circuits Laboratory

C217.1	Design oscillators and amplifiers using operational amplifiers
C217.2	Design filter using op amps and performs experiment on frequency response
C217.3	Analyze the working of PLL and use PLL as frequency multiplier
C217.4	Design DC power supply using ICs
C217.5	Acquire knowledge in using spice

Course code C301 Course Name: EC8394 Analog and Digital Communication

C301.1	Apply analog communication techniques.
C301.2	Apply digital communication techniques.
C301.3	Use data and pulse communication techniques.
C301.4	Describe the source and Error control coding of information.
C301.5	Utilize multi-user radio communication.

Course code C302 Course Name: BM 8501 Bio Control systems

C302.1	Understand the need for mathematical modeling of various systems, representation of systems in block diagrams and signal flow graphs and
C302.2	Analyze the time response of various systems and discuss the concept of system stability
C302.3	Analyze the frequency response characteristics of various systems using different charts
C302.4	Understand the concept of modeling basic physiological systems
C302.5	Comprehend the application aspects of time and frequency response analysis in physiological control systems.

Course code C303 Course Name: BM8502 Biomedical Instrumentation

C303.1	Differentiate different bio potentials and its propagations.
C303.2	Illustrate different electrode placement for various physiological recordings
C303.3	Design bio amplifier for various physiological recordings
C303.4	Explain various technique for non-electrical physiological measurements
C303.5	Demonstrate different biochemical measurement techniques.

Course code C304 Course Name: EC8553 Discrete -Time Signal Processing

C304.1	Apply DFT for analysis of digital signal and systems.
C304.2	Design IIR and FIR filters.
C304.3	Analyze the effects of finite word length on filters
C304.4	Design multirate filters.
C304.5	Explain the concepts of digital signal processor and its applications.

Course code C305 Course Name: BM8072 Biomaterials

C305.1	Analyze different types of Biomaterials and its classification and apply the concept of nanotechnology towards biomaterials use.
C305.2	Identify significant gap required to overcome challenges and further development in metallic and ceramic materials
C305.3	Identify significant gap required to overcome challenges and further development in polymeric materials
C305.4	Create combinations of materials that could be used as a tissue replacement implant.
C305.5	Understand the testing standards applied for biomaterials.

Course code C306 Course name: OBT 4531 Fundamentals of Nutrition

C306.1	Overview of nutrition, nutrients and dietary plan, energy calculation.
C306.2	Understanding the functions of digestion and absorption of nutrients.
C306.3	Understanding the principle, characteristics of carbohydrate and its absorption in blood.
C306.4	Understanding the principle, characteristics of proteins and fats and its absorption in blood.
C306.5	understanding the metabolism of nutrition and its analysis.

Course code C307 Course Name: EC 8562 Digital Signal Processing Laboratory

C307.1	Carryout basic signal processing operations
C307.2	Demonstrate their abilities towards MATLAB based implementation of various DSP systems
C307.3	Analyze the architecture of a DSP Processor
C307.4	Design and Implement the FIR and IIR Filters in DSP Processor for performing filtering operation over real-time signals
C307.5	Design a DSP system for various applications of DSP

Course code C308 Course Name: BM8511 Biomedical Instrumentation Laboratory

C308.1	Design preamplifiers and amplifiers for various bio signal recordings.
C308.2	Measure various non-electrical parameters using suitable sensors/transducers

C308.3	Application of mux and demux in biosignal processing
C308.4	Design and analyze the characteristics of Isolation amplifier
C308.5	Design PCB layout for any bio amplifier.

Course code C309 Course Name: H58381 Interpersonal Skills/Listening & Speaking

C309.1	Listen and respond appropriately.
C309.2	Participate in group discussions
C309.3	Make effective presentations
C309.4	Participate confidently and appropriately in conversations both formal and informal
C309.5	work environment based communication skill development.

Course code C310 Course Name: EC8691 Microprocessors and Microcontrollers

C310.1	Design and implement programs on 8086 microprocessor.
C310.2	Design I/O circuits.
C310.3	Design Memory Interfacing circuits.
C310.4	Study the architecture of 8051 microcontroller.
C310.5	Design and implement 8051 microcontroller based systems.

Course code C311 Course Name: BM8601 Diagnostic and Therapeutic Equipment - I

C311.1	Describe the functioning and recording setup of all cardiac equipments
C311.2	Describe the functioning and recording setup of all Neurologic equipments
C311.3	Explain the recording of EMG parameters
C311.4	Explain the recording of respiratory parameters
C311.5	Describe the measurement techniques of sensory responses

Course code C312 Course Name: BM8651 Biomechanics

C312.1	Explain about the principles of mechanics
C312.2	Define and discuss the mechanics of physiological systems.
C312.3	Summarizes the mechanics of joints.
C312.4	Explain the mathematical models used in the analysis of biomechanical systems
C312.5	Illustrates the methods of detecting and recording the ionizing radiation and its interaction with matter

Course code C313 Course Name: GE8291 Environmental Science and Engineering

C313.1	To introduce the nature and facts about environment, inter-relationship between organisms and biodiversity.
C313.2	To create a awareness about causes of various environmental pollutions and its control measures.
C313.3	To realise the importance of natural resources and to give warning about over-utilization of resources.
C313.4	To find and implement scientific, technological, economic and political solutions to environmental problems.
C313.5	To educate on impacts of population growth and explosion.

Course code C314 Course Name: MD 8091 Hospital Management

C314.1	Explain the principles of Hospital administration
C314.2	Identify the importance of Human resource management
C314.3	List various marketing research techniques
C314.4	Identify Information management systems and its uses
C314.5	Understand safety procedures followed in hospitals

Course code C315 Course Name: MD8071 Tele Health Technology

C315.1	To learn the fundamentals of Tele health.
C315.2	Apply multimedia technologies in telemedicine.
C315.3	Understand and Apply the Ethical and legal aspects of telemedicine.
C315.4	Understanding the design and architecture of PACS .
C315.5	Apply telehealth in healthcare

Course code C316 Course Name: EC 8681 Microprocessors and Microcontrollers Lab

C316.1	Write ALP Programmes for fixed and Floating Point and Arithmetic.
C316.2	Interface different I/Os with processor.
C316.3	Generate waveforms using Microprocessors.
C316.4	Execute Programs in 8051.
C316.5	Explain the difference between simulator and Emulator.

Course code C317 Course Name: BM8611 Diagnostic and Therapeutic Equipment Laboratory

C317.1	Measure different bioelectrical signals using various methods
C317.2	Assess different non-electrical parameters using various methodologies
C317.3	Illustrate various diagnostic and therapeutic techniques
C317.4	Examine the electrical safety measurements
C317.5	Analyze the different bio signals using suitable tools.

Course code C318 Course Name: BM8612 Mini Project

C318.1	Formulate a real world problem, identify the requirement and develop the design solutions.
C318.2	Express the technical ideas, strategies and methodologies.
C318.3	Utilize the new tools, algorithms, techniques that contribute to obtain the solution of the project.
C318.4	Test and validate through conformance of the developed prototype and analysis the cost effectiveness.
C318.5	Prepare report and present the oral demonstrations

Course code C401 Course Name: BM8701 Diagnostic and Therapeutic Equipment - II

C401.1	Discuss the various equipment used in ICU and applications of telemetry.
C401.2	Explain the types of diathermy and its applications.
C401.3	Express the basics of ultrasound and its application in medicine
C401.4	Discuss the various extracorporeal and special diagnostic devices used in hospitals
C401.5	Outline the importance of patient safety against electrical hazard

Course code C402 Course Name: EC8093 Digital Image Processing

C402.1	Know and understand the basics and fundamentals of digital image processing, such as digitization, sampling, quantization, and 2D-transform
C402.2	Operate on images using the techniques of smoothing, sharpening and enhancement.
C402.3	Understand the restoration concepts and filtering techniques.
C402.4	Learn the basics of segmentation and features extraction.
C402.5	Learn the basics of compression and recognition methods

Course code C403 Course Name: BM8702 Radiological Equipments

C403.1	Describe the working principle of X ray machine and its application.
C403.2	Illustrate the principle computed tomography.
C403.3	Interpret the technique used for visualizing various sections of the body using magnetic resonance imaging
C403.4	Demonstrate the applications of radio nuclide imaging.
C403.5	Outline the methods of radiation safety.

Course code C404 Course Name: BM8703 Rehabilitation Engineering

C404.1	Gain adequate knowledge about the needs of rehabilitations and its future development
C404.2	Have an in depth idea about Engineering Concepts in Sensory & Motor rehabilitation.
C404.3	Apply the different types of Therapeutic Exercise Technique to benefit the society
C404.4	Design and apply different types Hearing aids, visual aids and their application in biomedical field and hence the benefit of the society.
C404.5	Gain in-depth knowledge about different types of models of Hand and arm replacement.

Course code C405 Course Name: GE8071 Disaster Management

C405.1	Differentiate the types of disasters, causes and their impact on environment and society.
C405.2	Assess vulnerability and various methods of risk reduction measures as well as mitigation.
C405.3	Understand the inter-relationship between disasters and development.

C405.4	Evaluate the hazard and vulnerability profile of India, Scenarios in the Indian context, Disaster damage assessment and management.
C405.5	Apply the knowledge in understanding various prone zones in India.

Course code C406 Course Name: Introduction of Cell Biology

C406.1	Understanding the fundamentals of structural importances of cell.
C406.2	Outline the study about the cell organelles and its functional importances.
C406.3	Interpret the cell division model and understand the developmental state of cell growth.
C406.4	Understand the basic units, architectural hierarchy and organisational functions of macromolecules.
C406.5	Categorize about the Enzymes actions in the human body.

Course code C407 Course Name: EC8762 Digital Image Processing Laboratory

C407.1	Perform enhancing operations on the image using spatial filters and frequency domain filters.
C407.2	Use transforms and analyse the characteristics of the image.
C407.3	Perform segmentation operations in the images.
C407.4	Estimate the efficiency of the compression technique on the images.
C407.5	Apply image processing technique to solve real health care problems.

Course code C408 Course Name: MD8751 Hospital Training

C408.1	Advocate a patient-centred approach in healthcare
C408.2	Communicate with other health professionals in a respectful and responsible manner
C408.3	Recognize the importance of inter-professional collaboration in healthcare.
C408.4	Propose a patient-centred inter-professional health improvement plan based upon the patient's perceived needs
C408.5	Use the knowledge of one's own role and those of other professions to address the healthcare needs of populations and patients served.

Course code C409 Course Name: BM8077 Hospital Waste Management

C409.1	Analyse various hazards, accidents and its control
C409.2	Design waste disposal procedures for different biowastes
C409.3	Categorise different biowastes based on its properties
C409.4	Design different safety facility in hospitals
C409.5	Propose various regulations and safety norms

Course code C410 Course Name: GE8073 Fundamentals of Nano Science

C410.1	understanding the fundamentals of the physics, chemistry and biology involved in nano science and the basic classifications of nano materials
C410.2	Gaining the knowledge related to the preparation methods of nanomaterials.
C410.3	Interpret the basic molecular difference of nano materials and its properties.
C410.4	Demonstrate the different characteristic testing methodologies for nano material analysis.
C410.5	Application of nanomaterials in different fields and its advantages

Course code C411 Course Name: BM8811 Project Work

C411.1	On Completion of the project work students will be in a position to take up any challenging problem.
C411.2	Relate the theoretical studies with experimental work.
C411.3	Gain Knowledge on real time problem related to project work.
C411.4	Knowledge on design calculation based on design specification.
C411.5	Explore the communication skill by project presentation.