



CHRIST

COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi and Affiliated to Pondicherry University)

Pitchaveeranpet, Moolakulam, Pondicherry - 605010.

(A Unit of Sam Paul Educational Trust)

DEPARTMENT OF CIVIL ENGINEERING

SUBJECTWISE COURSE OUTCOMES (2018– 2023)

I-SEMESTER

T101- MATHEMATICS-I		Yr/Sem:I/I
CO1	Apply knowledge of mathematics to solve functions of several variables.	
CO2	Identify, formulate and solve engineering problems like multiple integrals and their usage.	
CO3	To solve differential equations that model physical processes using effective Mathematical tools	
CO4	Able to find equation of straight line of shortest distance ,equation of plane , angle Between straight lines.	
CO5	Gain the knowledge to solve first order differential equation arising in engineering.	

T102 -PHYSICS		Yr/Sem:I/I
CO1	Apply knowledge of science and engineering to understand physics and its significant Contribution in the advancement of technology and invention of new products that dramatically transform modern day society.	
CO2	Identify different areas of physics which have direct relevance and applications to Different engineering disciplines.	
CO3	Apply fundamental knowledge to understand applications of ultrasonics , optics and some optical devices, lasers and fiber optics, nuclear energy sources and wave mechanics.	
CO4	Understand the basic operating principles of laser ,its applications , opticalfiber , and Its types, transmission characteristics, applications of optical fibers.	

T103- CHEMISTRY		Yr/Sem:I/I
CO1	Apply knowledge of science and engineering to understand the importance of Chemistry in engineering domain.	
CO2	Identify different electrochemical cells and their usage for industrial process.	
CO3	Apply fundamental knowledge of chemistry and build an interface of theoretical Concepts with industrial applications/engineering applications.	
CO4	Guide the students to gain the knowledge about the cooling curves, phase diagrams, Alloys and their practical importance.	
CO5	Strengthen the fundamentals of chemistry and then build an interface of theoretical Concepts with their industrial/engineering applications.	

T104–BASIC ELECTRICAL AND ELECTRONICS ENGINEERING		Yr/Sem:I/I
CO1	Will learn the fundamentals of rotational and stationary machine operation, single-phase and three-phase power measurement, magnetic and electrical circuits, and these topics.	
CO2	Will learn the fundamentals of measuring devices, communication systems, and Network models.	
CO3	Knowledge about non-conventional energy systems will be available to students.	
CO4	The varieties of metal joining will be known by the students.	
CO5	Students will learn about numerous engines, energies, and joints as well as Construction and building components offered with diverse principles.	

T105–ENGINEERING THERMODYNAMICS		Yr/Sem:I/I
CO1	Apply knowledge of mathematics, science and engineering to understand the basics of thermodynamics.	
CO2	Understand the importance of laws of thermodynamics applied to energy systems.	
CO3	Understanding refrigeration, heatpump and their physical mechanism.	
CO4	Understand the laws of motion for rigid bodies.	
CO5	Understand the effects of forces acting on the bodies in practical situation.	

T106–COMPUTER PROGRAMMING		Yr/Sem:I/I
CO1	Know concepts in problem solving.	
CO2	To do programming in C language.	
CO3	To write diversified solutions using the C language.	
CO4	To know about structures, pointers and its manipulation.	
CO5	To know about the evaluation of computers, components and its applications. Basic Knowledge on the internet, information technology, word processing and worksheets.	

P101- COMPUTER PROGRAMMING LABORATORY		Yr/Sem:I/I
CO1	Students can work with command line interface OS's, like MS-DOS.	
CO2	Students can solve most of the real time problems with C program.	
CO3	Students can interact with computer using C program, through various input and Output functions.	
CO4	Students can make a use of various keywords, constants, variables, datatypes, operators, type conversion in C program.	
CO5	Students will have knowledge about arrays, functions, structures and pointers in C program.	

P102– ENGINEERING GRAPHICS		Yr/Sem:I/I
CO1	Perform free hand sketching of basic geometrical constructions and multipleviews of objects.	
CO2	Project orthographic projections of lines and plane surfaces.	
CO3	Draw projections and solids and development of surfaces.	
CO4	Visualize and to project isometric and perspective sections of simple solids.	
CO5	Students will be able to draw orthographic projections and isometric projections.	

P103-BASIC ELECTRICAL AND ELECTRONICS LABORATORY		Yr/Sem:I/I
CO1	Know about basic electrical tools, applications and precautions	
CO2	Perform different types of wiring used in domestic and industrial applications.	
CO3	Measurements of voltage and phase using CRO, basic operation and applications of Device such as PN junction diode and transistors.	
CO4	Understand the function and applications of basic logic gates and flipflops.	
CO5	Gain knowledge in domestic wiring and application of electronics device in the field of electrical engineering.	

II-SEMESTER

T107 – MATHEMATICS-II		Yr/Sem:I/II
CO1	Apply knowledge of mathematics to solve matrix algebra technique for practical Applications and Curl, divergence and integration of vectors in vector calculus.	
CO2	Identify, formulate and solve engineering problems like Laplace transform and to Solve differential and integral equations.	
CO3	Apply formulae and analyze problems of Fourier transform techniques.	
CO4	Determine the Fourier transform, Fourier cosine and sine transform of elementary functions, properties of transforms and its application in engineering.	
CO5	Acquire knowledge of matrix algebra technique, vector calculus, Laplace and Fourier Transform.	

T108–MATERIAL SCIENCE		Yr/Sem:I/II
CO1	Apply core concepts in material science to solve engineering problems.	
CO2	Knowledge able of contemporary issues relevant to material science and engineering	
CO3	Understand about the ferrites and its application to magnetic materials.	
CO4	Select materials for design and construction.	
CO5	Understand the importance and properties of materials.	

T109–ENVIRONMENTAL SCIENCE		Yr/Sem:I/II
CO1	Apply fundamental knowledge to understand about the environment.	
CO2	Identify environmental pollution through science.	
CO3	Apply basic knowledge to solve various environmental issues and problems.	
CO4	Ability to consider issues of environment and sustainable development in his personal And professional undertakings.	
CO5	Provides a comprehensive knowledge in environmental science, environmental issues And the management from an interdisciplinary perspective.	

T110-BASIC CIVIL AND MECHANICAL ENGINEERING		Yr/Sem:I/II
CO1	Understand the building classification as per National building code.	
CO2	Get the idea about construction procedure for various components of the building.	
CO3	Students understand the principles of surveying, construction procedure for roads, Bridges and dams.	
CO4	Student will be able know about the working of Internal and external combustion systems	

CO5	Student will be able know about Non-Conventional Energy Systems
CO6	Student will be able to know about manufacturing process.

T111- ENGINEERING MECHANICS		Yr/Sem:I/II
CO1	Understand the basic laws of mechanics and resolution of forces using different methods.	
CO2	Learn and apply the knowledge on analysis of forces acting on the trusses and Effect of friction force on bodies.	
CO3	Learn about the centroid and moment of inertia for plane and solid figures.	
CO4	Understand the three laws of motion, principles of dynamics for particles.	
CO5	The student will able to analyse the laws of motion for rigid bodies.	

T112-COMMUNICATIVE ENGLISH		Yr/Sem:I/II
CO1	Learnt about the definition of communication, importance, concept. Sender, Ideation, the levels in communication, channels, oral and written way of communication, body language and nonverbal communication, Accuracy, Brevity and Clarity, different barriers for Communication, techniques in making effective communication, listening importance and types of listening.	
CO2	Students learnt about the types of letters, report writing, notices and memo and Also developed their skill in writing.	
CO3	Understands the comprehension, identifies the difference between Skimming and scanning, guess the meaning of the words, Identify to make notes.	
CO4	Students learnt the writing skills, how to write a paragraph in a proper manner, Four modes of writing and how to make bibliographical entries.	
CO5	Students were able to develop their spoken skills by making them to involve in Many activities related to it.	

P 104 –PHYSICS LAB		Yr/Sem:I/II
CO1	Able to understand how to find the thickness of the specimen and also to find the Radius of curvature of glass using the phenomenon of interference of light	
CO2	Able to understand the specific rotator power of an optical active solution using the Principle of polarization.	
CO3	To understand about the thermal conductivity of bad conductor and rubber tube.	
CO4	Ability to understand about the optical properties like dispersive power, Resolving power by applying the knowledge of optics	
CO5	To acquire knowledge about the magnetometer due to current coil and jolly method of Determining the pressure coefficient to fair at constant volume.	
CO6	Ability to understand the basic knowledge of inference, polarization, Magnetic materials, thermal conductivity that correlates the theory and practical.	

P 105 – CHEMISTRYLAB		Yr/Sem:I/II
CO1	Students will become well acquainted to test amount of hardness present in sample of Water for their engineering needs.	
CO2	Students will be efficient in estimating acidity/alkalinity in given samples.	
CO3	Students will have knowledge about estimating amount of dissolved oxygen in water.	
CO4	Students will become well acquainted to estimate copper in brass.	
CO5	Students will have knowledge about determination of viscosity of sucrose using Ostwald's viscometer.	
CO6	To develop an understanding of basic titration setup and methodologies for Determining strength, hardness and alkalinity of various unknown solutions.	

P 106 –WORKSHOPPRACTICE		Yr/Sem:I/II
CO1	Understand and comply with workshop safety regulations.	
CO2	Student will be able to make various joints in the given object with the available work material.	
CO3	Student will be able to know how much a joint will take for the assessment of time.	
CO4	Students can able to Identify the hand tools and instruments.	
CO5	Students can able to gain knowledge about various operations carried out in sheet metal.	
CO6	Students can able to gain skills about various tools used in welding to make simple joints.	

P107– NSS/NCC		Yr/Sem:I/II
CO1	To create awareness in social and environmental issues.	
CO2	To participate in relief and rehabilitation work during natural calamities.	
CO3	To develop some proposals for local slum area development and waste disposal.	
CO4	To create team works among students and produce efficient results.	
CO5	To operate scientific instruments or advanced software.	

III-SEMESTER

MAT31 –MATHEMATICS–III		Yr/Sem: II/III
CO1	Identify complex variable function, Apply CR equations for testing of analyticity of The complex function.	
CO2	Construct conformal mappings between regions. Solve problems on bilinear Transformation and find the Taylor's and Laurent's series.	
CO3	Analyze the complex functions with reference to their analyticity, integration using Cauchy's integral theorem and Cauchy's Residue theorem.	
CO4	Express any periodic function as Fourier series, Fourier sine and Cosine series.	
CO5	Finding Fourier series for numerical values of any function. Interpret and use the basic concepts of analytic function, Taylor and Laurent series, singularities, residues, conformal mapping, Fourier series an harmonic analysis.	

CET32- GEO SCIENCE ENGINEERING		Yr/Sem:II/III
CO1	To familiarize the students to interior of the earth, plate tectonics, geomorphological processes and their significance in civil Engineering.	
CO2	To provide an insight on minerals, rocks and their geological characteristics to understand their effects and significance in various areas of civil Engineering.	
CO3	Facilitate the students to understand various defects associate with geological formations and to emphasize their significance in the selection of site for various structures.	

CET33– BUILDING TECHNOLOGY		Yr/Sem:II/III
CO1	To understand the building material, characterization and its application	
CO2	To acquire knowledge on conventional and unique technology of construction in building	

CET34– MECHANICS OF SOLIDS - I		Yr/Sem:II/III
CO1	To develop an understanding of the relationship between external loads applied to a deformable body and the internal stress, strain and deformation induced in the body.	
CO2	To show proficiency in mathematics and basic sciences required to solve structural engineering and mechanics problem.	
CO3	To develop analytical and graphical problem solving skills.	

CET35– MECHANICS OF FLUIDS		Yr/Sem:II/III
CO1	To make the student to understand the basic properties of fluids and principles of mechanics of fluids.	
CO2	To apply the above principle for solving typical elementary field problems	

CET36– SURVEYING - I		Yr/Sem: II/III
CO1	Understand the basic concepts of surveying and able to solve problems associated with linear measurements and error correction.	
CO2	Gain the basics of compass surveying and able to understand the system of coordinates and angular measurement for the purpose of traversing.	
CO3	Learn various methods of taking levels and reducing levels	

CE P31– SURVEYING LABORATORY - I		Yr/Sem:II/III
CO1	To train the students handling instruments used for surveying.	
CO2	To make the students to understand various problems in linear and angular measurement associated with field application	

CE P32 – MATERIALS TESTING LABORATORY - I		Yr/Sem:II/III
CO1	To understand the preparation of a specimen for the desired strength of materials in relating to the analysis and design of various structural elements	

CE P33– BUILDING PLANNING AND DRAWING		Yr/Sem:II/III
CO1	To understand the Functional Planning and architectural design of buildings	
CO2	To develop skills in manual and Autocad drafting of building plans, elevation and sections	

IV-SEMESTER

MAT41 –MATHEMATICS–IV		Yr/Sem: II/IV
CO1	Formulate and solve partial differential equation.	
CO2	Derive and obtain the solution of wave equation and boundary value problems.	
CO3	Derive and obtain the solution of heat equation and boundary value problems.	
CO4	Apply least square method to fit various curves for the given data investigate the validity of hypothesis by Z-distribution techniques.	
CO5	Calculation of analysis of variance and explain the use of the Chi-squared test and its calculation.	

CE T42- CONCRETE TECHNOLOGY		Yr/Sem:II/IV
CO1	Should be able to understand the Engineering properties of materials, Cement, Aggregates, Admixtures	
CO2	Understand the hydration mechanism of Cement & properties of fresh and Hardened concrete	
CO3	To design concrete mixes.	

CE T43 – ENVIRONMENTAL ENGINEERING- I		Yr/Sem:II/IV
CO1	To study the water supply demand and distribution	
CO2	To understand the quality of water from various sources	
CO3	To carryout functional design of water treatment units	

CE T44–MECHANICS OF SOLIDS-II		Yr/Sem:II/IV
CO1	Calculate & understand the concept of determination of deflection of beams & trusses	
CO2	Calculate the stresses due to unsymmetrical loading	
CO3	The student is to realize the three-dimensional nature of stress and strain and the relationships between strain and displacement.	
CO4	To understand the concept of various theories of failure	

CE T45– HYDRAULICS AND HYDRAULIC MACHINERY		Yr/Sem: II/IV
CO1	To have a thorough understanding of open channel flow.	

CO2	To understand the basic principles in the working and application of typical pumps and turbines.
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CE T46 – SURVEYING - II		Yr/Sem: II/IV
CO1	Solve sight specific problems such as determination of elevation by trigonometric and tacheometric means of surveying .	
CO2	Understand the concepts of setting out curves in the field by both angular and linear method of surveying.	
CO3	Learn the working principles of electronic distance measuring instrument and handling of total station.	
CO4	Understand the concepts of geographical information systems and the utilization of global positioning systems which will be very much useful for students project works which involves measurements	

CEP41– SURVEYING LABORATORY - II		Yr/Sem:II/IV
CO1	To train the students in handling angular measuring instruments used for surveying.	
CO2	To make the students in determining the elevation of an objective by various means of surveying associated with vertical and horizontal control	

CEP42– FLUID MECHANICS AND MACHINES LAB		Yr/Sem:II/IV
CO1	To determine the various parameters used in Fluid mechanics and Fluid Machinery.	

CEP43– GEO SCIENCEENGINEERING LAB		Yr/Sem: II/IV
CO1	To familiarize the various types of minerals and rocks, their geological characteristics to understand their behavior/performance.	
CO2	To impart hands on training in determination of properties of rocks.	
CO3	To provide the knowledge on interpretation of data to arrive the solution.	

SP P44–PHYSICALEDUCATION		Yr/Sem: II/IV
CO1	Understanding the opportunities of students’ physical, cognitive, social and emotional development.	
CO2	Understanding of individual and group motivation and behavior.	
CO3	To create team work among students and produce efficient results.	
CO4	The students were taught to operate advanced playing kits.	
CO5	To motivate the students to prepare the professional and scientific reports.	

V-SEMESTER

CE T51- DESIGN OF RCC STRUCTURES		Yr/Sem: III/V
CO1	To understand design principles of reinforced concrete	
CO2	To gain knowledge in the Limit state method of design of basic structural elements	

CE T52- STRUCTURAL ANALYSIS - I		Yr/Sem:III/V
CO1	To develop an understanding of the static and kinematic indeterminacy of structures	
CO2	To familiarize the students with various force and displacement methods of analysis	
CO3	To analyse indeterminate structures with indirect/secondary stresses	

CE T53- GEOTECHNICAL ENGINEERING - I		Yr/Sem:III/V
CO1	Provide the description of soil and to characterise soil as per IS Code.	
CO2	To develop an understanding of the soil hydraulics, principles of stress distribution due to self-weight and applied loading conditions and its application to compressibility of soil.	
CO3	Familiarize the students an understanding of strength of soils.	

CE T54 – ENVIRONMENTAL ENGINEERING II		Yr/Sem: III/V
CO1	To study the important aspects of sanitation	
CO2	To understand the sewerage system and functional design of sewage treatment units.	
CO3	3.To learn about the safe disposal of waste water	

CE T55- TRANSPORTATION ENGINEERING - I		Yr/Sem:III/V
CO1	The student should have understood the various aspects of Highway Engineering including material characterization, pavement design and management	

CE P51 - GEOTECHNICAL ENGINEERING LABORATORY		Yr/Sem:III/V
CO1	To provide the hands on training in determination of Index and Engineering and index properties of soils.	
CO2	To familiarize the students to do the experiments as per the guidelines of BIS.	
CO3	To provide the knowledge on interpretation experimental results to solve foundation problems.	

CE P52– ENVIRONMENTAL ENGINEERING LAB		Yr/Sem: III/V
CO1	To learn and practice on the various testing methods for water quality, waste water quality and other environmental parameters.	
CO2	To correlate theoretical and practical and measures for visual understanding and practice	

CE P53– MATERIAL TESTING LABORATORY-II		Yr/Sem:III/V
CO1	This course provides an understanding of the basic properties of construction materials, and presents laboratory standards and testing requirements for these materials.	
CO2	To familiarize the students to do the experiments as per the guidelines of BIS.	
CO3	To provide the knowledge on mix proportioning of concrete as per the guidelines of BIS.	
CO4	1. To obtain practical knowledge about fresh and hardened properties of concrete	
CO5	2. Develop skills for analyzing experimental data and working in teams.	
CO6	Develop skills for analyzing experimental data and working in teams.	

HS P54 – GENERALPROFICIENCY– I		Yr/Sem: III/V
CO1	To understand and practice the art of communication	
CO2	Able to practice and showcase softskills.	
CO3	To understand the importance of writing.	
CO4	To practice speaking skill.	
CO5	To practice verbal, nonverbal and numerical aptitude.	

VI-SEMESTER

CE T61- STRUCTURAL ANALYSIS - II		Yr/Sem:III/VI
CO1	To develop an understanding of the rolling loads and influence lines in determinate and indeterminate beams	
CO2	To familiarize the students with analysis of arches and cables	
CO3	To introduce the concept of plastic analysis of structures	

CE T62 – GEOTECHNICAL ENGINEERING - II		Yr/Sem:III/VI
CO1	Provide the students with a basic understanding of the essential steps involved in a geotechnical site investigation.	
CO2	Introduce to the students, the principal types of foundations and the factors governing the choice of the most suitable type of foundation for a given solution. procedures used for : a) bearing capacity estimation, b) Pile carrying capacity.	
CO3	To familiarize the concepts of earth pressure, design Earth Retaining structures and to determine stability of slopes.	

CE T63 – TRANSPORTATION ENGINEERING- II		Yr/Sem:III/VI
CO1	Provide the students with a basic understanding of the railway and airport engineering.	
CO2	Introduce to the students, the role of a Civil Engineer in the above modes of transport.	

CE E05 – CONSTRUCTION METHODS AND EQUIPMENT		Yr/Sem:III/VI
CO1	To introduce various construction equipments, selection and apply scientific principles for effectively utilizing them	
CO2	To make aware of the various techniques and practices on construction of various civil engineering structures.	
CO3	To study and understand the latest construction techniques applied to engineering Construction	

CE E19 – AIR AND NOISE POLLUTION		Yr/Sem:III/VI
CO1	To have a basic knowledge on the air pollution on environment	
CO2	To understand the interaction of air pollutants on the meteorological parameters	
CO3	To study about the control measures of air pollutants from various sources	

CE P61– TRANSPORTATION ENGINEERING LAB		Yr/Sem:III/VI
CO1	To develop an understanding of the highway material.	
CO2	Familiarize the students with various test procedures	

CE P62 – ESTIMATION COSTING AND VALUATION LAB		Yr/Sem:III/VI
CO1	To study the types of estimation	
CO2	To study the analysis of rates and types of specification	
CO3	To study the method of valuation	

CE P63 – COMPUTER AIDED DESIGN LAB		Yr/Sem:III/VI
CO1	To gain basic knowledge in modelling of structures.	
CO2	To familiarize and give hands on training to students using woksheets and databases	

CE SC7– SURVEY CAMP		Yr/Sem:III/VI
CO1	Be able to apply the Knowledge gained during the Surveying courses I & II	
CO2	Able to take decisions to tackle the site specific problems	

HS P64 – GENERALPROFICIENCY– II		Yr/Sem:III/VI
CO1	To develop the students' critical thinking and analytical skills	
CO2	To help the students to equip themselves with the necessary skill sets.	
CO3	To improve the students' problem solving skills	
CO4	To help the students to prepare for interviews and face them with confidence	
CO5	To make the students industry-ready and employable	
CO6	To enable the students to be more participative in Group Discussions and other activities	

VII-SEMESTER

CE T71- DESIGN OF STEEL STRUCTURES		Yr/Sem:IV/VII
CO1	To understand the principles of design philosophy	
CO2	To understand the provisions in Codes and learn follow Codal practices	

CET72- HYDROLOGY AND WATER RESOURCES ENGINEERING		Yr/Sem:IV/VII
CO1	To understand the various physical processes in the hydrologic cycle and the methods of estimation thereof.	

CE E20 – FAILURE ASSESSMENT AND REHABILITATION OF STRUCTURES		Yr/Sem:IV/VII
CO1	To understand the deterioration process of materials	
CO2	To know about repair materials	
CO3	To assess the condition of the structure	

CE E10 – SITE INVESTIGATION METHODS AND PRACTICES		Yr/Sem:IV/VII
CO1	To introduce the various stages of site investigation.	
CO2	To familiarize the students to various provisions in IS codes, methods of investigation, interpretation of data and final recommendations for various construction works.	

CEP71- DESIGN AND DRAWING (RCC & STEEL)		Yr/Sem:IV/VII
CO1	To prepare working drawings for steel and concrete structures.	
CO2	Preparation of layout of the structure with detailed design details.	
CO3	Preparation of working drawings with all dimensions required for execution / fabrication of structures.	

CE CV7 – COMPREHENSIVE VIVA VOCE		Yr/Sem:IV/VII
CO1	To verify the overall knowledge that the student has gained during the course.	

CEPW7 – PROJECT PHASE - I		Yr/Sem:IV/VII
CO2	Students study the reference papers from various domain and select domain of their wish.	

VIII-SEMESTER

CE T81- CONSTRUCTION MANAGEMENT		Yr/Sem:IV/VIII
CO1	To understand construction management importance	
CO2	To become aware on organization, planning, scheduling and analysis	
CO3	To study the M.I.S and labour, safety and related regulation	

CE E06 – GEOTECHNICAL PROCESSES AND APPLICATION		Yr/Sem:IV/VIII
CO1	To provide the students the basic understanding of various ground improvement techniques	
CO2	To introduces the students the concept of physical, chemical modification of soil using various techniques	

CE E29 – DISASTER MITIGATION AND MANAGEMENT		Yr/Sem:IV/VIII
CO1	To provide students an exposure to disasters, their significance and types.	
CO2	To ensure that students begin to understand the relationship between vulnerability, disasters, disaster prevention and risk reduction	
CO3	To gain a preliminary understanding of approaches of Disaster Risk Reduction (DRR)	
CO4	To enhance awareness of institutional processes in the country and	
CO5	To develop rudimentary ability to respond to their surroundings with potential disaster response in areas where they live,with due sensitivity	

CE P81 – PROFESSIONAL ETHICAL PRACTICE		Yr/Sem:IV/VII
CO1	To create an awareness of ethical concerns and conflicts and to Enhance familiarity with codes of conduct	
CO2	To Increase the ability to recognize and resolve ethical dilemmas	

CE IV8 – INDUSTRIAL TRAINING/INTERNSHIP		Yr/Sem:IV/VIII
CO1	During the course of study from 3rd to 7th semester each student is expected to undertake a minimum of six industrial visits (or) undertake a minimum of four weeks of industry/field training..	

CE PW8 – PROJECT WORK –PHASE- II		Yr/Sem:IV/VIII
CO1	The students will be encouraged to handle the field problem independently .	
CO2	Review was conducted.	
CO3	Demonstration of project and performance analysis is Done.	
C04	Project report has been submitted.	