SEM-III

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **S.E. (Third Semester)** Course Name: **Applied Mathematics-III**

The students will be able to;

Course Code	Course Outcome Statements
CE-C301.1	Gain basic knowledge of Laplace Transform & demonstrate an ability to identify , formulate and solve engineering problems
CE-C301.2	Understand methods in the theory of analytic functions of several complex variables, and applications of these to approximation and mapping problems.
CE-C301.3	Identify & classify zeros, singular points, residues & their applications. Also participate & succeed in competitive exams.
CE-C301.4	Calculate both real and complex forms of the Fourier series for standard periodic waveforms and convert from real form Fourier series to complex form and vice-versa
CE-C301.5	Become familiar with Partial Differential equations & demonstrate an ability to identify, formulate & solve Civil engineering problems.
CE-C301.6	Acquire problem-solving skills in a broad range of significant mathematics.

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Department of Civil Engineering

Class/Sem: **S.E. (Third Semester)** Course Name: **Surveying-I**

The students will be able to;

Course Code	Course Outcome Statements
CE-C302.1	Understand the use of various surveying methods and their applications on field.
CE-C302.2	Take linear and angular measurement in different conditions.
CE-C302.3	Handle various advanced instruments required for surveying.
CE-C302.4	Record the various measurements in the field book during practical and projects.
CE-C302.5	Find the areas of irregular figures.
CE-C302.6	Prepare the plans and sections required for civil engineering projects.

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Department of Civil Engineering

Class/Sem: **S.E. (Third Semester)** Course Name: **Strength of Materials**

The students will be able to;

Course Code	Course Outcome Statements
CE-C303.1	Analyze the flexural members for its structural behaviour under the effect of flexure (bending), shear and torsion either independently or in combinations thereof.
CE-C303.2	Interpret the concepts of shear force, bending moment, axial force for statically determinate beams and compound beams having internal hinges:, and subsequently, its application to draw shear force, bending moment and axial force diagrams.
CE-C303.3	Evaluate the deformation behaviour of axially loaded columns considering wind load (chimneys, dams etc.) and behaviour of direct and bending stresses with various safety conditions.
CE-C303.4	Study the behaviour of the structural member under the action of axial load, bending and twisting moment
CE-C303.5	Synthesize the deformation behaviour of axially loaded columns having different end conditions and further, evaluate the strength of such columns.
CE-C303.6	Understand and determined engineering properties for metals and non-metals.

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Department of Civil Engineering

Class/Sem: **S.E. (Third Semester)** Course Name: **Building Mat. and Cont.**

The students will be able to;

Course Code	Course Outcome Statements
CE-C304.1	Understand the importance and role of each component in building with symbols.
CE-C304.2	Learn to apply basic fundamentals of construction for Structure.
CE-C304.3	Learn how to select construction materials under different site conditions by understanding the basic properties of materials.
CE-C304.4	Identify the properties of building materials.
CE-C304.5	Manufacturing process of basic construction materials.
CE-C304.6	Acquainted with the masonry construction and finishes and will be aware of building services, acoustics, DPC, etc.

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Department of Civil Engineering

Class/Sem: **S.E. (Third Semester)** Course Name: **Engineering Geology**

The students will be able to;

Course Code	Course Outcome Statements
CE-C305.1	Internal structure of earth and seismology evidences. Importance of geology useful to civil engineering.
CE-C305.2	Geological structure, surface and subsurface strata, sources and zones of ground water
CE-C305.3	Application of geological investigation in construction of dams , tunnel and seismic method
CE-C305.4	Analysis properties of rocks and minerals.
CE-C305.5	Synthesis methods of surface and subsurface investigation
CE-C305.6	Evaluation of the preventive measures for landslide and earthquake prone areas.

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Department of Civil Engineering

Class/Sem: **S.E. (Third Semester)** Course Name: **Fluid Mechanics – I**

The students will be able to;

Course Code	Course Outcome Statements
CE-C306.1	The basic properties of fluids, basics definitions & concept of ideal fluid flow.
CE-C306.2	Study the various pressure measuring devices.
CE-C306.3	Study of pressure on the surface in the contact of fluids and its applications.
CE-C306.4	Understand the concepts of buoyancy and flotation and its applications.
CE-C306.5	Apply Bernoulli's principle and calculate the coefficient of discharge through venturimeter, orificemeter, nozzlemeter.
CE-C306.6	Measure velocity and rate of flow using various devices.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **S.E. (Third Semester)** Course Name: **Database and Inf. & Ret. System**

The students will be able to;

Course Code	Course Outcome Statements
CE-C307.1	Understand the needs of database management system and information retrieval system (DBMS and IR)
CE-C307.2	To conceptualize and analyse different data models and schemas in DBMS
CE-C307.3	Understand needs of database processing and learn techniques for controlling the consequences of concurrent data access
CE-C307.4	Apply and design graphical user interface techniques for retrieve the information from the database
CE-C307.5	Apply and synthesis the complex queries of SQL on DBMS
CE-C307.6	Understand the functional decencies and design the database using different data models (ER Model, Relational Model)

SEM-IV

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **S.E. (Fourth Semester)** Course Name: **Applied Mathematics-IV**

The students will be able to;

Course Code	Course Outcome Statements
CE-C401.1	Find the characteristic equation, eigenvalues and corresponding eigenvectors of a given matrix and are able to solve problems on functions of matrices.
CE-C401.2	Become familiar with the Green's, Stoke's and Gauss-divergence theorem to give a physical interpretation of the vector field & its applications.
CE-C401.3	Understand the importance of nonlinear optimization and are able to optimise (max / min) problems of Non Linear Programming.
CE-C401.4	Gain basic knowledge of probability distributions & demonstrate an ability to identify, formulate & solve problems
CE-C401.5	Sampling Theory student will choose the appropriate test and determine whether a given hypothesis is accepted or not.
CE-C401.6	Understand application of statistical concepts and linear algebra for solving different engineering problems.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **S.E. (Fourth Semester)** Course Name: **Surveying – II**

The students will be able to;

Course Code	Course Outcome Statements
CE-C402.1	Determine the distance in the field using Tacheometry and other modern survey instruments.
CE-C402.2	Draw contour plans,'L'-section, 'C'-section after ground survey.
CE-C402.3	Handle and use modern surveying instruments.
CE-C402.4	Setting out civil engineering works such as culverts, tunnels, bridges, curves etc.
CE-C402.5	Upgrade the knowledge of GIS, GPS and Remote sensing techniques.
CE-C402.6	Set the different types of road curves.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **S.E. (Fourth Semester)** Course Name: **Structural Analysis – I**

The students will be able to;

Course Code	Course Outcome Statements
CE-C403.1	Analyze statically determinate portal frame, skew frame with and without internal hinge and to find out the internal forces such as axial force, shear force, bending moment, twisting moments, etc.
CE-C403.2	Apply basic concepts, principles and methods to evaluate slope and deflection of beams and frames.
CE-C403.3	Analyse eccentrically loaded column buckling behaviour of the axially and transversely loaded beam-columns
CE-C403.4	Obtain the response of the beams and trusses under rolling loads and subsequently, to obtain the absolute maximum bending moment.
CE-C403.5	Analyze the structures such as arches and suspension bridges and three hinged stiffening girder
CE-C403.6	Understand the concept of unsymmetrical bending and shear centre and its application in solving the problems of structural mechanics.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **S.E. (Fourth Semester)** Course Name: **Building Design and Dwg. – I**

The students will be able to;

Course Code	Course Outcome Statements
CE-C404.1	Interpret the concept, aspects, principles of planning; and designing of building structures.
CE-C404.2	Understand the various extant building bye-laws framed by the various authorities, development and control rules satisfying orientation and zoning
CE-C404.3	Apply functional requirements for different types of building structures.
CE-C404.4	Analyze the provisions made in the relevant Indian Specifications pertaining to the practice for architectural drawings.
CE-C404.5	Define the various components of different types of civil engineering structures and drawings along with allied contents there.
CE-C404.6	Compare various types of drawings for the building structures planned and designed satisfying the functional and market requirements.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **S.E. (Fourth Semester)** Course Name: **Concrete Technology**

The students will be able to;

Course Code	Course Outcome Statements
CE-C405.1	Identify the properties of ingredients of concrete.
CE-C405.2	Know the properties of wet concrete hardened concrete, high strength Concrete and high performance concrete.
CE-C405.3	Learn how to design the concrete mix for various grades.
CE-C405.4	Acquainted with the various types of special concrete.
CE-C405.5	Perform various tests on concrete.
CE-C405.6	Made acquainted with the situation of executing concreting in extreme weathers and under water.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **S.E. (Fourth Semester)** Course Name: **Fluid Mechanics – II**

The students will be able to;

Course Code	Course Outcome Statements
CE-C406.1	Study the different major and minor losses in pipe flow and how to treat them.
CE-C406.	Study the Power transmitted through nozzle, condition for maximum power transmitted.
CE-C406.	Understand the concept of water hammer.
CE-C406.	Solve pipe network problems by Hardy cross method.
CE-C406.	Study of compressible flow and their applications; and solve the problems based on compressible fluid flow.
CE-C406.	Study the concept of laminar and turbulent flow and their applications; and further, solve the problems based on laminar and turbulent flows.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: SE/V Course Name: Structural Analysis – II

The students will be able to:

Course Code	Course Outcome Statements
CE-C501.1	Identify the stable & Unstable structures and to evaluate the degree of static and kinematic indeterminacy.
CE-C501.2	Understand and analyze deflection of statically determinate structures using various loading and support conditions.
CE-C501.3	Analyze indeterminate structures by using Force Method.
CE-C501.4	Analyze indeterminate structures by using displacement Method.
CE-C501.5	Understand the behaviour of various statically indeterminate structures including two hinged arches.
CE-C501.6	Analyse single and multiple span beams under collapse loading to find plastic moment carrying capacity.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: SE/V Course Name: Geotechnical Engg.– I

The students will be able to:

Course Code	Course Outcome Statements
CE-C502.1	Understand the engineering properties of soils, and also the experimental method used to obtain soil properties.
CE-C502.2	Interpret the index properties and characteristics of soil and Use standards methods to classify soils.
CE-C502.3	Apply the concept of permeability, effective stress and determine stress distribution within a soil mass.
CE-C502.4	Formulate compaction characteristic sand consolidation properties of soils apply those properties to settlement problems.
CE-C502.5	Evaluate the 'shear strength' of soils under drained and undrained conditions using laboratory shear tests
CE-C502.6	Prepare the soil boring data for foundation design.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: SE/V Course Name: Building Design and Drawing – II

The students will be able to:

Course Code	Course Outcome Statements
CE-C503.1	Understand the Planning concepts, rules, regulations, various bye-laws of local Administration/authorities with reference to all types of public buildings.
CE-C503.2	Understand the application of bye-laws in Planning, Designing Drawing of all types of public buildings.
CE-C503.3	Understand all the concepts involved in drawing the different Perspective drawings for public buildings, workshops.
CE-C503.4	Prepare various types of drawings for the public building structures planned designed, satisfying the functional market requirements.
CE-C503.5	Study the provisions made in the relevant Indian Specifications pertaining to the practice for public buildings, the society needs for over all development.
CE-C503.6	Apply the practice for public buildings, in the society needs for over all development.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: SE/V Course Name: Applied Hydraulics – I

The students will be able to:

Course Code	Course Outcome Statements
CE-C504.1	Gain knowledge of devices based on the principles of fluid statics & fluid kinematics.
CE-C504.2	Understand the design of turbines, pumps.
CE-C504.3	Apply mathematical technique used in research work for design for conducting model tests.
CE-C504.4	Analyse the dynamic behaviour of the fluid flow using Newton's second law of motion.
CE-C504.5	Study the idea and concepts of hydraulic machines like centrifugal pumps, reciprocating pumps and turbines.
CE-C504.6	Evaluate the dimensional analysis model laws & the principle of momentum to fluid flow problems.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: SE/V Course Name: Transportation Engg. – I

The students will be able to:

Course Code	Course Outcome Statements
CE-C505.1	Identify the various elements pertaining to air transportation, water transportation, railway transportation
CE-C505.2	Understand the various components of railway track, materials used and functions of component parts
CE-C505.3	Study about geometric design of curves, points, crossing, signalling, interlocking, maintenance etc
CE-C505.4	Explain the various imaginary surfaces of an airport, geometric standards, runway taxiway lighting.
CE-C505.5	Gain the knowledge of various parking system, holding apron, hangars drainage system.
CE-C505.6	Prepare illustration of various modes of water transportation, types of breakwater, harbours and port facilities equipment, jetties, wharves, piers, dolphins, fenders buoyancy etc.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: SE/V Course Name: Business and Communication Ethics

The students will be able to:

Course Code	Course Outcome Statements
CE-C506.1	Understand the communication progress and its effective application.
CE-C506.2	Synthesize and apply the project management skills.
CE-C506.3	Apply appropriate analytical concept to various audience..
CE-C506.4	Understand and learn various roles in group and organisation.
CE-C506.5	Understand professional, social & ethical responsibilities.
CE-C506.6	Communicate effectively in both oral and written format.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: TE/VI Course Name: Geotechnical Engg. – II

The students will be able to:

Course Code	Course Outcome Statements
CE-C601.1	Understand the concepts of the stability of slopes and study the various methods of evaluating the stability of slopes
CE-C601.2	Apply the principle of shear strength and settlement analysis for foundation system.
CE-C601.3	Design of shallow and deep foundations in view of safety and economy.
CE-C601.4	Use earth pressure theories and load bearing capacity concept for analysis and design of earth retaining structures.
CE-C601.5	Analyze load carrying capacity of conduits and open cuts.
CE-C601.6	Understand the concepts of reinforced soil and its application in the field.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: TE/VI Course Name: Design and Drawing of Steel Structures

The students will be able to:

Course Code	Course Outcome Statements
CE-C602.1	Understand the design of tension member by limit state method
CE-C602.2	Understand the design of compression member by limit state method
CE-C602.3	Understand the design of laterally supported beam by limit state method
CE-C602.4	Understand the design of laterally un-supported beam by limit state method.
CE-C602.5	Understand the design of truss.
CE-C602.6	Independently design steel structures using relevant IS codes.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: TE/VI Course Name: Applied Hydraulics – II

The students will be able to:

Course Code	Course Outcome Statements
CE-C603.1	Gain the knowledge of design and measurement of flow velocity in open channel.
CE-C603.2	Understand the impact of engineering solutions for boundary layer theory in the context of submerged bodies.
CE-C603.3	Study the specific energy & it's applications
CE-C603.4	Analyse the Kennedys and Lacey's silt theory to design irrigation channels
CE-C603.5	Develop the understanding of the flow phenomena e.g. hydraulic jump, backwater waves, critical depth, etc using experiments.
CE-C603.6	Evaluate the design parameters in open channel

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: TE/VI Course Name: Transportation Engg. – II

The students will be able to:

Course Code	Course Outcome Statements
CE-C604.1	Gain knowledge of basic concepts of Highway engineering and to study the geometric design of highway.
CE-C604.2	Learn about the different materials used in highway construction and their tests.
CE-C604.3	Analyse the different types of pavements – flexible and rigid pavements, and to learn its design.
CE-C604.4	Evaluate the condition of existing pavements, causes of failure and study the methods of maintenance and strengthening of pavements
CE-C604.5	Understand the traffic engineering and control system, traffic surveys, road signals and marking etc
CE-C604.6	Study the basic concepts of bridge engineering

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: TE/VI Course Name: Environmental Engg – I

The students will be able to:

Course Code	Course Outcome Statements
CE-C605.1	Inculcate the students with sound theoretical knowledge in water supply engineering.
CE-C605.2	Prepare students who can accomplish planning, design & construction of water systems & related infrastructural facilities.
CE-C605.3	Understand the handling and management of MSW and Hazardous generated in the society
CE-C605.4	Give a practical orientation to so that they can give practical solutions to environmental problems in our society.
CE-C605.5	Impart creative thinking, innovation in their mission as engineers.
CE-C605.6	Inculcate the students with good research consultancy skills.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: TE/VI Course Name: Theory of Reinforced Prestressed Concrete

The students will be able to:

Course Code	Course Outcome Statements
CE-C606.1	Apply the knowledge of mechanics, strength of material for structural design.
CE-C606.2	Design various structural components using working stress method.
CE-C606.3	Implement the knowledge of theory of elasticity.
CE-C606.4	Analyse and design the safe and economical structures.
CE-C606.5	Understand the concept and theory behind prestress concrete.
CE-C606.6	Demonstrate the knowledge of prestresing to design prestress structural members using various IS code clauses.

SEM-VII

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **B.E. (Seventh Semester)** Course Name: **LSM for RCC**

The students will be able to;

Course Code	Course Outcome Statements
CE-C701.1	Understand the concept and design aspects of ULM and LSM through working stress method.
CE-C701.2	Apply the various clauses specified in IS: 456-2000 for designing structural members with the safety and economy.
CE-C701.3	Interpret effectiveness of the LSM to the considerable extent along with the application of ULM in the limited extent.
CE-C701.4	Analyse and design of various structural members.
CE-C701.5	Implement apply ULM and LSM theories for structural design.
CE-C701.6	Discuss difference between various design philosophies and their applications.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **B.E. (Seventh Semester)** Course Name: **QSEV**

The students will be able to;

Course Code	Course Outcome Statements
CE-C702.1	Learn the importance, purpose and types of estimation; and carry out approximate estimation for projects by different methods.
CE-C702.2	Prepare detailed estimation of buildings by taking measurements from drawings, preparing measurement sheet and abstract sheet, bar bending schedule for steel reinforcement and mass haul diagram for earthwork calculation.
CE-C702.3	Draft specifications for different items of work and to identify sequence of work
CE-C702.4	Perform rate analysis for works, familiarising with District Schedule of Rates and market rates of construction materials and labour.
CE-C702.5	Understand tendering process and to prepare tender documents and contract.
CE-C702.6	Gain knowledge of valuation process, depreciation, rent calculation and to assess the value of a property Gain knowledge of valuation process, depreciation, rent calculation and to assess the value of a property.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **B.E. (Seventh Semester)** Course Name: **Irrigation Engineering**

The students will be able to;

Course Code	Course Outcome Statements
CE-C703.1	Calculate the demand of water required for agricultural land.
CE-C703.2	Understand basic requirements of irrigation and how can they be managed.
CE-C703.3	Apply their knowledge on ground water, well hydraulics to estimate the safe yield and ground water potential.
CE-C703.4	Perform analysis and design of various Irrigation systems including hydraulic structures.
CE-C703.5	Carry out design of water resources projects independently.
CE-C703.6	To classify different irrigation systems.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **B.E. (Seventh Semester)** Course Name: **Environmental Eng – II**

The students will be able to;

Course Code	Course Outcome Statements
CE-C704.1	Understand the sewerage system and should be able to estimate and formulate quantities of sewerage system
CE-C704.2	Conduct quality control tests on samples obtained from sewer water, soil, nearby rivers and groundwater.
CE-C704.3	Understand how processes are configured in treatment systems.
CE-C704.4	Do proper planning, design & construction of sewerage systems & related infrastructural facilities.
CE-C704.5	Understand the problems related to Air and Noise Pollution.
CE-C704.6	Give a practical orientation to so that they can give best solutions to environmental problems in our society.

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Department of Civil Engineering

Class/Sem: **B.E. (Seventh Semester)** Course Name: **Elective – I-(SWM)**

The students will be able to;

Course Code	Course Outcome Statements
CE-C705.1	Understand the necessity of municipal, hazardous and biomedical waste management with regulatory requirements.
CE-C705.2	Understand the components of solid waste management systems to minimize negative effects on environment also to understand the significance of waste minimization, reuse and recycling.
CE-C705.3	Plan and design the collection system economically without affecting the routine of public.
CE-C705.4	Apply the various methods of safe disposal of solid waste efficiently.
CE-C705.5	Apply various physical, chemical and biological processing techniques to handle the solid waste.
CE-C705.6	Contribute practical solutions to problems related to solid waste of the society as a member and leader in a team.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **B.E. (Seventh Semester)** Course Name: **Project – Part I**

The students will be able to;

Course Code	Course Outcome Statements
CE-C706.1	Identify the conceptual problems in the industry by applying the knowledge of mathematics, science and engineering fundamentals
CE-C706.2	Formulate the problems using research-based knowledge and research methodologies including analysis and interpretation of data, and synthesis of the information
CE-C706.3	Investigate the complex engineering problems by using the knowledge of mathematics, science and different software
CE-C706.4	Apply the knowledge of engineering and management principles for attempting the solution of the real life problems using mathematical or analytical model
CE-C706.5	Apply the knowledge of engineering and management principles for attempting the solution of the real life problems using experimental model
CE-C706.6	Compile a report based on conceptual problems factors, factor levels, academic literature, problem formulation & problem statement

SEM-VIII

Mahatma Education Society's

Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **B.E. (Eighth Semester)** Course Name: **DDRCS**

The students will be able to;

Course Code	Course Outcome Statements
CE-C801.1	Understand the complete analysis and design of residential and industrial buildings using relevant IS codes.
CE-C801.2	Work independently or as a member of the team, design the structures using structural analysis and design knowledge for safety, serviceability and economy.
CE-C801.3	Design different types of water tank, retaining wall by limit state method.
CE-C801.4	Interpret the complete analysis and design of different types of retaining walls.
CE-C801.5	Configure the students well versed with concepts of civil engineering techniques and ability to use it in practice.
CE-C801.6	Design safe and sustainable structures.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **B.E. (Eighth Semester)** Course Name: **Construction Engineering**

The students will be able to;

Course Code	Course Outcome Statements
CE-C802.1	Different types of standard / special equipment used in the construction industry and selects the appropriate equipment.
CE-C802.2	Determine the optimal use of the equipment, owning, operating and maintenance and repair costs of the equipment.
CE-C802.3	Decide judiciously whether the equipment should be purchased or hired, repaired or sold.
CE-C802.4	Select the alignment for tunnels, various as in hard rock, sequence of operations to be followed along with the various tunneling machines.
CE-C802.5	Decide the ground improvement and soil stabilization methods such as sand drains and stone column, use of geo-synthetics and chemicals based on suitability of the site conditions.
CE-C802.6	Suggest mass concreting, vacuum concreting and modern srip forms techniques.

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Department of Civil Engineering

Class/Sem: **B.E. (Eighth Semester)** Course Name: **Construction Management**

The students will be able to;

Course Code	Course Outcome Statements
CE-C803.1	Understand management functions like Planning, scheduling and executing for the construction projects.
CE-C803.2	Prepare the project networks to workout best possible time for completing the project through scheduling techniques such as CPM and PERT
CE-C803.3	Exercise the time-cost relationship in practice through resource management and allocation.
CE-C803.4	Control the quality as well as implement the safety and health aspects during execution of execution of civil engineering works.
CE-C803.5	Effectively utilise the available resources for the economical completion of the construction project.
CE-C803.6	Understand and apply the knowledge of various acts, laws and legislations applicable to Indian construction labour.

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Department of Civil Engineering

Class/Sem: **B.E. (Eighth Semester)** Course Name: **Elective – II (Rep. and reh)**

The students will be able to;

Course Code	Course Outcome Statements
CE-C804.1	Understand the complete analysis and design of residential and industrial buildings using relevant IS codes.
CE-C804.2	Independently or as a member of the team design the structures using structural analysis and design knowledge for safety, serviceability and economy.
CE-C804.3	Design different types of water tank, retaining wall by limit state method.
CE-C804.4	Understand the complete analysis and design of different types of retaining walls.
CE-C804.5	Develop the students well versed with concepts of civil engineering techniques and ability to use it in practice.
CE-C804.6	Design safe and sustainable structures.

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Pillai HOC College of Engineering and Technology, Rasayani

Department of Civil Engineering

Class/Sem: **B.E. (Eighth Semester)** Course Name: **Project – Part II**

The students will be able to;

Course Code	Course Outcome Statements
CE-C805.1	Identify the conceptual problems in the industry by applying the knowledge of mathematics, science and engineering fundamentals
CE-C805.2	Formulate the problems using research-based knowledge and research methodologies including analysis and interpretation of data, and synthesis of the information
CE-C805.3	Investigate the complex engineering problems by using the knowledge of mathematics, science and different software
CE-C805.4	Apply the knowledge of engineering and management principles for solving the real life problems using mathematical model
CE-C805.5	Compile the report based on conceptual problems factors, factor levels, academic literature, problem formulation, problem statement, factor analysis and conclusion & suggestion
CE-C805.6	Present the project contents details in brief using MS-office Power point