

**BHARATHIYAR INSTITUTE OF ENGINEERING FOR WOMEN
DEVIYAKURICHI, THALAIVASAL TK, SALEM DT-636112
DEPARTMENT OF CIVIL
REGULATION 2013**

PROGRAM OUTCOMES(POs)

Engineering Graduates will be able to:

PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

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.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: 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.

PO7: Environment and sustainability: Understand the impact of the professional engineering solutions in society and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

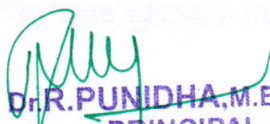
PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: 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.

PO11: Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader of a team, to manage projects and in multidisciplinary environments.

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.



**Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).**

PROGRAM SPECIFIC OUTCOMES (PSOs)

The student will be-

PSO1:Able to apply the engineering fundamentals to analyze and design the various structural components.

PSO2:Able to cater to the changing industrial needs and capable of developing green concepts for different applications.



Dr.R.PUNIDHA.M.E.,Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL(TK), SALEM (DT).

CE6301-ENGINEERING GEOLOGY

COURSE OUTCOMES

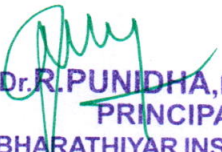
C203.1	Address the importance of geological knowledge such as earth, earthquake, weathering action of various geological agencies.
C203.2	Apply knowledge about minerals and its properties in the civil engineering application.
C203.3	Apply the knowledge about occurrence and engineering properties of various rocks in the construction which is more suitable.
C203.4	To know the concept of geological structure and their bearing capacity on engineering construction.
C203.5	Apply the knowledge of geological consideration in projects such as dams, tunnels, bridges, roads, airport and harbor.
C203.6	Students can address the types of geological rocks and stones used for a foundation which is adaptable and other related aspects.

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME OUTCOME (PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C203.1	3	3	3	2	2	-	2	2	1	1	1	-
C203.2	3	3	3	2	2	-	2	2	1	1	1	-
C203.3	3	3	3	2	2	-	2	2	1	1	1	-
C203.4	3	3	3	2	2	-	2	2	1	1	1	-
C203.5	3	3	3	2	2	-	2	2	1	1	1	-
C203.6	3	3	3	2	2	-	2	2	1	1	1	-
C203	3	3	3	2	2	-	2	2	1	1	1	-

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C203.1	2	-
C203.2	2	-
C203.3	2	-
C203.4	2	-
C203.5	2	-
C203.6	2	-
C203	2	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6302-MECHANICS OF SOLIDS

COURSE OUTCOME: Upon completion of the course, the students will be able to

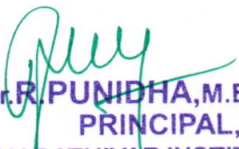
C204.1	Know the concepts of stress strain and deformation of solids.
C204.2	Analyze the complex two dimensional stresses analytically and graphically.
C204.3	Determines shear force and bending moment in beams and understand concept of theory of simple bending.
C204.4	Calculate the deflection of beams by different methods and selection of method for determining slope or deflection.
C204.5	Apply basic equation of torsion in design of circular shafts and helical springs.
C204.6	Analyze the pin jointed plane and space trusses.

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C204.1	3	3	3	3	-	2	-	-	2	2	1	1
C204.2	3	3	3	3	-	2	-	-	2	2	1	1
C204.3	3	3	3	3	-	2	-	-	2	2	1	1
C204.4	3	3	3	3	-	2	-	-	2	2	1	1
C204.5	3	3	3	3	-	2	-	-	2	2	1	1
C204.6	3	3	3	3	-	2	-	-	2	2	1	1
C204	3	3	3	3	-	2	-	-	2	2	1	1

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME SPECIFIC OUTCOME(PSO)

CO	PSO1	PSO2
C204.1	3	-
C204.2	3	-
C204.3	3	-
C204.4	3	-
C204.5	3	-
C204.6	3	-
C204	3	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112.
THALAIYAR (TK), SALEM (DT).

CE6303-FLUID MECHANICS

COURSE OUTCOME: The students will be able to

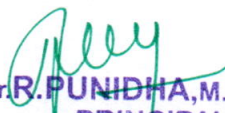
C205.1	Apply their knowledge of Engineering mechanics in addressing problems of Fluid Statics.
C205.2	Apply the concept of motion and forces causing motion in Fluid kinematics & Dynamics
C205.3	Apply and analyze the concept of Dimensional Analysis in real life situations.
C205.4	Apply the model analysis study to various machines and structures.
C205.5	Analyze the flow through pipe using the Concept of Darcy Weisbach equation and Hagen Poiseuille equation.
C205.6	Apply the concept of boundary layer to practical situations

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C205.1	3	3	3	2	-	-	2	2	2	1	1	-
C205.2	3	3	3	2	-	-	2	2	2	1	1	-
C205.3	3	3	3	2	-	-	2	2	2	1	1	-
C205.4	3	3	3	2	-	-	2	2	2	1	1	-
C205.5	3	3	3	2	-	-	2	2	2	1	1	-
C205.6	3	3	3	2	-	-	2	2	2	1	1	-
C205	3	3	3	2	-	-	2	2	2	1	1	-

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C205.1	2	1
C205.2	2	1
C205.3	2	1
C205.4	2	1
C205.5	2	1
C205.6	2	1
C205	2	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIVAKURICH - 636 112
THALAIYAL (TK), SALEM

CE6304 –SURVEYING I

COURSE OUTCOME:The students completing the course will have


C206.1	Gain knowledge on fundamental surveying instruments and usages
C206.2	Know the usage of compass and plane table instruments
C206.3	Apply the basic concepts in leveling instruments
C206.4	Able to do the contouring and earthwork calculations
C206.5	Apply the temporary and permanent adjustment of theodolite
C206.6	Gain the knowledge on various surveying applications

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C206.1	3	3	3	3	-	2	2	2	-	1	1	1
C206.2	3	3	3	3	-	2	2	2	-	1	1	1
C206.3	3	3	3	3	-	2	2	2	-	1	1	1
C206.4	3	3	3	3	-	2	2	2	-	1	1	1
C206.5	3	3	3	3	-	2	2	2	-	1	1	1
C206.6	3	3	3	3	-	2	2	2	-	1	1	1
C206	3	3	3	3	-	2	2	2	-	1	1	1

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME SPECIFIC OUTCOME(PSO)

CO	PSO1	PSO2
C206.1	2	-
C206.2	2	-
C206.3	2	-
C206.4	2	-
C206.5	2	-
C206.6	2	-
C206	2	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIVAKURICH - 636 112,
THALAIYASAL (TK), SALEM (DT).

CE6311 SURVEY PRACTICAL I

COURSE OUTCOME:The students will be able to

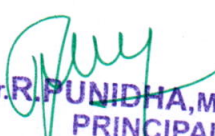
C207.1	Measure linear measurements using chain
C207.2	Obtain angular measurements using compass surveying
C207.3	Determine the reduced levels of earth surface using various leveling methods
C207.4	Determine the horizontal and vertical distances and angle using Theodolite.
C207.5	Determine tachometric constants using Theodolite.
C207.6	Determine distances and difference in elevation using Total Station

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME OUTCOME (PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C207.1	3	3	3	3	-	2	2	2	2	1	-	1
C207.2	3	3	3	3	-	2	2	2	2	1	-	1
C207.3	3	3	3	3	-	2	2	2	2	1	-	1
C207.4	3	3	3	3	-	2	2	2	2	1	-	1
C207.5	3	3	3	3	-	2	2	2	2	1	-	1
C207.6	3	3	3	3	-	2	2	2	2	1	-	1
C207	3	3	3	3	-	2	2	2	2	1	-	1

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C207.1	2	-
C207.2	2	-
C207.3	2	-
C207.4	2	-
C207.5	2	-
C207.6	2	-
C207	2	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH - 636 112,
THANJAVUR (TK), SALEM DISTRICT.

CE6401- CONSTRUCTION MATERIALS

COURSE OUTCOME:


C210.1	Ability to compare the properties of stones, bricks and concrete blocks.
C210.2	Apply the typical and potential applications of lime, cement and aggregates.
C210.3	Ability to understand the relationship between material properties and design a concrete Mix
C210.4	Ability to compare the properties of timber and other construction materials.
C210.5	Ability to compare the properties of most common and advanced building materials.
C210.6	Understand the important features of material selection for construction.

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME OUTCOME (PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C210.1	3	3	3	3	-	-	-	-	2	2	1	1
C210.2	3	3	3	3	-	-	-	-	2	2	1	1
C210.3	3	3	3	3	-	-	-	-	2	2	1	1
C210.4	3	3	3	3	-	-	-	-	2	2	1	1
C210.5	3	3	3	3	-	-	-	-	2	2	1	1
C210.6	3	3	3	3	-	-	-	-	2	2	1	1
C210	3	3	3	3	-	-	-	-	2	2	1	1

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C210.1	2	-
C210.2	2	-
C210.3	2	-
C210.4	2	-
C210.5	2	-
C210.6	2	-
C210	2	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6402-STRENGTH OF MATERIALS II

COURSE OUTCOME: Upon completion of the course, the students will be able to


C211.1	Determine the strain energy and compute the deflection of determinate beams, frames and trusses using energy principles.
C211.2	Analyse npropped cantilever, fixed beams for external loadings and support settlements.
C211.3	Analyse continuous beam using theorem of three moment equation for external loadings and support settlements
C211.4	Find the load carrying capacity of columns and stresses induced in columns and cylinders
C211.5	Determine principal stresses and planes for an element in three dimensional state of stress and study various theories of failure
C211.6	Determine the stresses due to Unsymmetrical bending of beams, locate the shear centre, and find the stresses in curved beams.

MAPPING OF COURSE OUTCOME (CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C211.1	3	3	3	2	-	-	-	-	2	2	2	1
C211.2	3	3	3	2	-	-	-	-	2	2	2	1
C211.3	3	3	3	2	-	-	-	-	2	2	2	1
C211.4	3	3	3	2	-	-	-	-	2	2	2	1
C211.5	3	3	3	2	-	-	-	-	2	2	2	1
C211.6	3	3	3	2	-	-	-	-	2	2	2	1
C211	3	3	3	2	-	-	-	-	2	2	2	1

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME OUTCOME(PO)

CO	PSO1	PSO2
C211.1	3	-
C211.2	3	-
C211.3	3	-
C211.4	3	-
C211.5	3	-
C211.6	3	-
C211	3	-


D.R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

CE6403 - APPLIED HYDRAULIC ENGINEERING

COURSE OUTCOME: Students will be able to


C212.1	Design best hydraulic sections in uniform flow
C212.2	Identify different surface profiles.
C212.3	Solve problems in uniform gradually varied flows in steady state conditions.
C212.4	Solve problems in rapidly varied flows in steady state conditions
C212.5	Design different turbines
C212.6	Design different pumps.

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C212.1	3	3	2	2	2	2	2	2	2	2	2	1
C212.2	3	3	2	2	2	2	2	2	2	2	2	1
C212.3	3	3	2	2	2	2	2	2	2	2	2	1
C212.4	3	3	2	2	2	2	2	2	2	2	2	1
C212.5	3	3	2	2	2	2	2	2	2	2	2	1
C212.6	3	3	2	2	2	2	2	2	2	2	2	1
C212	3	3	2	2	2	2	2	2	2	2	2	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PSO1	PSO2
C212.1	2	3
C212.2	2	3
C212.3	2	3
C212.4	2	3
C212.5	2	3
C212.6	2	3
C212	2	3


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6404 –SURVEYING II

COURSE OUTCOME: The students completing the course will have

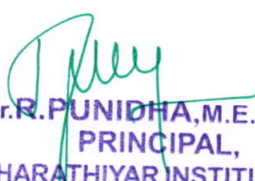
C213.1	Discuss Various components of control surveying System, their characteristics
C213.2	Know the various sources and errors of surveying and its adjustments
C213.3	Get knowledge about the significance of total station, working principle and its uses
C213.4	Know the concept of GPS and its segments, signal structure and receivers and its types
C213.5	Apply advanced methods in surveying and sounding methods to measure the distance
C213.6	Know the hydrographic surveying and determination of Azimuth by altitude

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C213.1	3	3	3	2	-	-	-	2	2	1	1	1
C213.2	3	3	3	2	-	-	-	2	2	1	1	1
C213.3	3	3	3	2	-	-	-	2	2	1	1	1
C213.4	3	3	3	2	-	-	-	2	2	1	1	1
C213.5	3	3	3	2	-	-	-	2	2	1	1	1
C213.6	3	3	3	2	-	-	-	2	2	1	1	1
C213	3	3	3	2	-	-	-	2	2	1	1	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C213.1	2	-
C213.2	2	-
C213.3	2	-
C213.4	2	-
C213.5	2	-
C213.6	2	-
C213	2	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL(TK), SALEM (DT).

CE6405 SOIL MECHANICS

COURSE OUTCOME: Students will be able to


C214.1	Classify the soil and assess the engineering properties based on index properties
C214.2	Apply the stress concepts in soils
C214.3	Apply and identify the settlement in soils
C214.4	Determine the shear strength of soil
C214.5	Analyze finite and slope protection measures
C214.6	Analyze infinite slopes and slope protection measures

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C214.1	3	3	3	3	-	-	2	2	-	-	2	1
C214.2	3	3	3	3	-	-	2	2	-	-	2	1
C214.3	3	3	3	3	-	-	2	2	-	-	2	1
C214.4	3	3	3	3	-	-	2	2	-	-	2	1
C214.5	3	3	3	3	-	-	2	2	-	-	2	1
C214.6	3	3	3	3	-	-	2	2	-	-	2	1
C214	3	3	3	3	-	-	2	2	-	-	2	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PSO1	PSO2
C214.1	2	3
C214.2	2	3
C214.3	2	3
C214.4	2	3
C214.5	2	3
C214.6	2	3
C214	2	3


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6411-STRENGTH OF MATERIALS LABORATORY

COURSE OUTCOME: Students will be able to


C215.1	Determine the strength of materials under externally applied loads.
C215.2	Have a clear understanding of the design for strength and stiffness.
C215.3	Learn fundamental concepts of Stress, Strain and deformation of solids with applications To bars and beams.
C215.4	Sknow the mechanism of load transfer in beams, the induced stress resultants and Deformations
C215.5	Possess the ability to understand the effect of torsion on shafts
C215.6	They will understand the properties of cement

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C215.1	3	3	3	3	2	2	2	2	2	1	1	1
C215.2	2	3	3	3	2	2	2	2	2	1	1	1
C215.3	3	3	3	3	2	2	2	2	2	1	1	1
C215.4	3	3	3	3	2	2	2	2	2	1	1	1
C215.5	3	3	3	3	2	2	2	2	2	1	1	1
C215.6	3	3	3	3	2	2	2	2	2	1	1	1
C215	3	3	3	3	2	2	2	2	2	1	1	1

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME SPECIFIC OUTCOME(PSO)

CO	PSO1	PSO2
C215.1	3	-
C215.2	3	-
C215.3	3	-
C215.4	3	-
C215.5	3	-
C215.6	3	-
C215	3	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6412- HYDRAULIC ENGINEERING LABORATORY

Course Outcome: Students will be able to

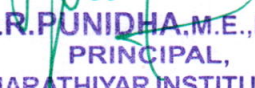
C216.1	The students will be able to measure flow(Discharge) in pipes
C216.2	The students will be able to measure flow(Discharge)in open channel
C216.3	The students will be able to verify the energy equation.
C216.4	The students will be able to determine energy loss due to friction and fittings
C216.5	The students will be able to study performance of pumps and its characteristic curve.
C216.6	The students will be able to study performance of pumps and its characteristic curve.

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C216.1	3	3	3	3	2	2	2	2	2	1	1	1
C216.2	3	3	3	3	2	2	2	2	2	1	1	1
C216.3	3	3	3	3	2	2	2	2	2	1	1	1
C216.4	3	3	3	3	2	2	2	2	2	1	1	1
C216.5	3	3	3	3	2	2	2	2	2	1	1	1
C216.6	3	3	3	3	2	2	2	2	2	1	1	1
C216	3	3	3	3	2	2	2	2	2	1	1	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMMESPECIFIC OUTCOME(PSO)

CO	PSO1	PSO2
C216.1	1	2
C216.2	1	2
C216.3	1	2
C216.4	1	2
C216.5	1	2
C216.6	1	2
C216	1	2


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6501-STRUCTURAL ANALYSIS

Course Outcome: Students will be able to

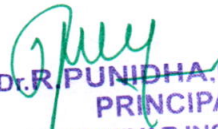
C301.1	Analyze continuous beams, pin-jointed indeterminate plane frames and rigid plane frames by strain energy method
C301.2	Analyze the moving loads
C301.3	Gain the knowledge to analyze arch structures
C301.4	Analyze the continuous beams and rigid frames by slope deflection method
C301.5	Analyze continuous beams and rigid frames with and without sway by the concept of moment distribution method
C301.6	Know the framed structures and arches

Mapping of Course Outcome(CO)with Programme Outcome(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C301.1	3	3	3	3	-	3	2	2	2	1	1	1
C301.2	3	3	3	3	-	3	2	2	2	1	1	1
C301.3	3	3	3	3	-	3	2	2	2	1	1	1
C301.4	3	3	3	3	-	3	2	2	2	1	1	1
C301.5	3	3	3	3	-	3	2	2	2	1	1	1
C301.6	3	3	3	3	-	3	2	2	2	1	1	1
C301	3	3	3	3	-	3	2	2	2	1	1	1

Mapping of Course Outcome(CO)with Programme Specific Outcome(PSO)

CO	PSO1	PSO2
C301.1	3	-
C301.2	3	-
C301.3	3	-
C301.4	3	-
C301.5	3	-
C301.6	3	-
C301	3	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6502- FOUNDATION ENGINEERING

COURSE OUTCOME:The students will be able to

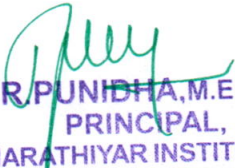
C302.1	Suggest various methods involved in sub soil exploration, Sampler and Sampling Techniques
C302.2	Design the foundation based on the bearing capacity of soil
C302.3	Carry out various test involved in settlement of foundation
C302.4	Identify the suitable type of footing for different loading conditions.
C302.5	Design pile foundations and determine their settlement for different soil conditions
C302.6	Analyze various pressure acting on retaining walls

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C302.1	3	3	3	3	-	2	2	2	2	2	2	1
C302.2	3	3	3	3	-	2	2	2	2	2	2	1
C302.3	3	3	3	3	-	2	2	2	2	2	2	1
C302.4	3	3	3	3	-	2	2	2	2	2	2	1
C302.5	3	3	3	3	-	2	2	2	2	2	2	1
C302.6	3	3	3	3	-	2	2	2	2	2	2	1
C302	3	3	3	3	-	2	2	2	2	2	2	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME(PSO)

CO	PSO1	PSO2
C302.1	2	1
C302.2	2	1
C302.3	2	1
C302.4	2	1
C302.5	2	1
C302.6	2	1
C302	2	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6503- ENVIRONMENTAL ENGINEERING

COURSE OUTCOME: The students will be able to


C303.1	Insight into the structure of drinking water supply systems, including water transport, treatment and distribution
C303.2	Acquire knowledge in various unit operations and processes in water treatment
C303.3	Design the various functional units in water treatment
C303.4	Know the water quality criteria and standards, and their relation to public health
C303.5	Design and evaluate water supply project alternatives on basis of chosen criteria
C303.6	Optimize the design of distribution system for water based on their alternate requirement considering the operation and maintenance requirement.

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C303.1	3	3	3	2	-	-	2	2	2	-	1	1
C303.2	3	3	3	2	-	-	2	2	2	-	1	1
C303.3	3	3	3	2	-	-	2	2	2	-	1	1
C303.4	3	3	3	2	-	-	2	2	2	-	1	1
C303.5	3	3	3	2	-	-	2	2	2	-	1	1
C303.6	3	3	3	2	-	-	2	2	2	-	1	1
C303	3	3	3	2	-	-	2	2	2	-	1	1

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME SPECIFIC OUTCOME(PSO)

CO	PSO1	PSO2
C303.1	3	-
C303.2	3	-
C303.3	3	-
C303.4	3	-
C303.5	3	-
C303.6	3	-
C303	3	-


DR. PUNDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6504-HIGHWAY ENGINEERING

COURSEOUTCOME: The students will be able to

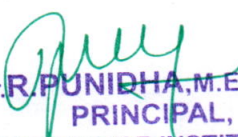
C304.1	Planning,design for the construction of road structures
C304.2	Design of aligning a new roadway
C304.3	Design flexible and rigid pavement as per IRC standards and other methods
C304.4	Knowledge about standard tests of highway materials and the methodology of road construction practice
C304.5	Maintenance of highways as per IRC standards and other specifications.
C304.6	Brief knowledge about flexible pavement,rigid pavement,highways construction and maintenance as per IRC standards and other methods

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C304.1	3	3	3	3	-	-	2	2	-	-	2	1
C304.2	3	3	3	3	-	-	2	2	-	-	2	1
C304.3	3	3	3	3	-	-	2	2	-	-	2	1
C304.4	3	3	3	3	-	-	2	2	-	-	2	1
C304.5	3	3	3	3	-	-	2	2	-	-	2	1
C304.6	3	3	3	3	-	-	2	2	-	-	2	1
C304	3	3	3	3	-	-	2	2	-	-	2	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C304.1	2	1
C304.2	2	1
C304.3	2	1
C304.4	2	1
C304.5	2	1
C304.6	2	1
C304	2	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6506-CONSTRUCTION TECHNIQUES,EQUIPMENT AND PRACTICES

COURSE OUTCOME: Student will be able to

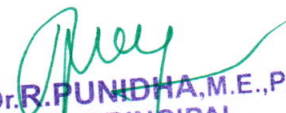
C306.1	Know the different construction techniques and structural systems
C306.2	Know various techniques and practices on masonry construction, flooring, and roofing.
C306.3	Plan the requirements for substructure construction.
C306.4	Know the methods and techniques involved in the construction of various types of super Structures
C306.5	Select, maintain and operate hand and power tools and equipment used in the building construction sites.
C306.6	Know about various construction procedures from foundation to superstructure.

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C306.1	3	3	3	3	-	3	3	3	-	3	3	1
C306.2	3	3	3	3	-	3	3	3	-	3	3	1
C306.3	3	3	3	3	-	3	3	3	-	3	3	1
C306.4	3	3	3	3	-	3	3	3	-	3	3	1
C306.5	3	3	3	3	-	3	3	3	-	3	3	1
C306.6	3	3	3	3	-	3	3	3	-	3	3	1
C306	3	3	3	3	-	3	3	3	-	3	3	1

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C306.1	3	-
C306.2	3	-
C306.3	3	-
C306.4	3	-
C306.5	3	-
C306.6	3	-
C306	3	-


 Dr. R. PUNDHA, M.E., Ph.D.,
 PRINCIPAL,
 BHARATHIYAR INSTITUTE OF
 ENGINEERING FOR WOMEN,
 DEVIYAKURICH! - 636 112,
 THALAIVASAL (TK), SALEM (DT).

CE6511-SOIL MECHANICS LABORATORY

COURSE OUTCOME: Students will be able to

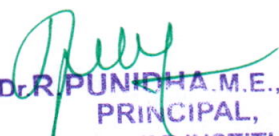
C308.1	Classify the soil and assess the engineering properties based on index properties
C308.2	Know the stress concepts in soils
C308.3	Apply and identify the settlement in soils
C308.4	Determine the shear strength of soil
CE308.5	Analyse both finite and infinite slopes and slope protection measures

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C308.1	3	3	3	3	2	2	2	2	2	2	2	1
C308.2	3	3	3	3	2	2	2	2	2	2	2	1
C308.3	3	3	3	3	2	2	2	2	2	2	2	1
C308.4	3	3	3	3	2	2	2	2	2	2	2	1
C308.5	3	3	3	3	2	2	2	2	2	2	2	1
C308	3	3	3	3	2	2	2	2	2	2	2	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME(PSO)

CO	PSO1	PSO2
C308.1	2	2
C308.2	2	2
C308.3	2	2
C308.4	2	2
C308.5	2	2
C308	2	2


DR. PUNISHA M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6601/DESIGN OF REINFORCED CONCRETE & BRICK MASONRY

Course Outcome: Upon completion of the course ,the students will be able to


C310.1	Exposure to the design of continuous beams
C310.2	Acquire knowledge in the design of slabs
C310.3	Analyse the design of Staircase
C310.4	Get knowledge in the design of walls
C310.5	Gain awareness in the design of brick masonry structures
C310.6	Introduction about yield line theory

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C310.1	3	3	3	2	-	-	2	2	2	2	2	1
C310.2	3	3	3	2	-	-	2	2	2	2	2	1
C310.3	3	3	3	2	-	-	2	2	2	2	2	1
C310.4	3	3	3	2	-	-	2	2	2	2	2	1
C310.5	3	3	3	2	-	-	2	2	2	2	2	1
C310.6	3	3	3	2	-	-	2	2	2	2	2	1
C310	3	3	3	2	-	-	2	2	2	2	2	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME(PSO)

CO	PSO1	PSO2
C310.1	3	-
C310.2	3	-
C310.3	3	-
C310.4	3	-
C310.5	3	-
C310.6	3	-
C310	3	-


Dr. R. PUNIDHA M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6602-STRUCTURAL ANALYSISII

COURSE OUTCOME:The students will be able to


C311.1	Gain knowledge on primary structures and ability to analyse intermediate structures
C311.2	Analyze continuous beam, pin- jointed frame and rigid frames
C311.3	Problem solving ability on truss and triangular element
C311.4	Gain knowledge on plastic modulus, shape and load factor
C311.5	Analyze of Plastic analysis of intermediate beam
C311.6	Know analyse suspension cables and bridges

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C311.1	3	3	2	2	2	-	2	-	2	2	2	-
C311.2	3	3	2	2	2	-	2	-	2	2	2	-
C311.3	3	3	2	2	2	-	2	-	2	2	2	-
C311.4	3	3	2	2	2	-	2	-	2	2	2	-
C311.5	3	3	2	2	2	-	2	-	2	2	2	-
C311.6	3	3	2	2	2	-	2	-	2	2	2	-
C311	3	3	2	2	2	-	2	-	2	2	2	-

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C311.1	3	-
C311.2	3	-
C311.3	-	-
C311.4	2	-
C311.5	3	-
C311.6	3	-
C311	3	-


Dr. R. PUNIDHA M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6603-DESIGN OF STEEL STRUCTURES

COURSE OUTCOME:

Upon completion of the course, the students will be able to


C312.1	Know the technical competence in the design of steel building
C312.2	Apply the concepts of working stress and limit state design philosophies
C312.3	Design common bolted and welded connections for steel structures
C312.4	Design tension members and understand the effect of shearlag.
C312.5	Apply the design concept of axially loaded columns and column
C312.6	Apply specific problems related to the design of laterally restrained and unrestrained steel beams

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C312.1	3	3	3	2	-	-	-	2	2	2	2	1
C312.2	3	3	3	2	-	-	-	2	2	2	2	1
C312.3	3	3	3	2	-	-	-	2	2	2	2	1
C312.4	3	3	3	2	-	-	-	2	2	2	2	1
C312.5	3	3	3	2	-	-	-	2	2	2	2	1
C312.6	3	3	3	2	-	-	-	2	2	2	2	1
C312	3	3	3	2	-	-	-	2	2	2	2	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C312.1	3	-
C312.2	3	-
C312.3	3	-
C312.4	3	-
C312.5	3	-
C312.6	3	-
C312	3	-


Dr. R. PUNITHA M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6604- RAILWAYS, AIRPORTS AND HARBOUR ENGINEERING

COURSE OUTCOME: The students will be able to


C313.1	Know the history of Indian railways, components of track and geometric design Of railway track
C313.2	Understand the concept of drainage, earth work, tunneling, and modern method of track maintenance, urban rail, Metro and under ground railways.
C313.3	Develop knowledge on airport planning and to acquire knowledge on site Investigation for location and design considerations on runway and taxi ways.
C313.4	Gain knowledge on airport buildings, motor vehicle parking, lightings and air traffic Control systems.
C313.5	Acquaint knowledge on harbor engineering, classification of harbours.
C313.6	Gain knowledge on Coastal Structures like Piers, Breakwaters, Wharves, Jetties, Quays, Spring Fender and will have awareness about coastal erosion.

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C313.1	3	3	3	3	-	2	2	2	-	-	2	2
C313.2	3	3	3	3	-	2	2	2	-	-	2	2
C313.3	3	3	3	3	-	2	2	2	-	-	2	2
C313.4	3	3	3	3	-	2	2	2	-	-	2	2
C313.5	3	3	3	3	-	2	2	2	-	-	2	2
C313.6	3	3	3	3	-	2	2	2	-	-	2	2
C313	3	3	3	3	-	2	2	2	-	-	2	2

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C313.1	3	1
C313.2	3	1
C313.3	3	1
C313.4	3	1
C313.5	3	1
C313.6	3	1
C313	3	1


 Dr. R. PUNIDHA, M.E., Ph.D.,
 PRINCIPAL,
 BHARATHIYAR INSTITUTE OF
 ENGINEERING FOR WOMEN,
 DEVIYAKURICH! - 636 112,
 THALAIVASAL (TK), SALEM (DT).

CE6605-ENVIRONMENTAL ENGINEERINGII

COURSE OUTCOME: The Students on completing the course will have


C314.1	Ability to estimate sewage generation and design sewer system including sewage pumping stations
C314.2	Required understanding on the characteristics and composition of sewage ,self-Purification of streams
C314.3	Ability to perform basic design of the unit operations and processes that are used in sewage treatment
C314.4	Apply the standard methods for disposal of sewage.
C314.5	Gain knowledge on sludge treatment and disposal.
C314.6	Knowledge on construction and operation & maintenance of sewage treatment plants.

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C314.1	3	3	3	3	3	3	-	2	2	-	-	1
C314.2	3	3	3	3	3	3	-	2	2	-	-	1
C314.3	3	3	3	3	3	3	-	2	2	-	-	1
C314.4	3	3	3	3	3	3	-	2	2	-	-	1
C314.5	3	3	3	3	3	3	-	2	2	-	-	1
C314.6	3	3	3	3	3	3	-	2	2	-	-	1
C314	3	3	3	3	3	3	-	2	2	-	-	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C314.1	3	-
C314.2	3	-
C314.3	3	-
C314.4	3	-
C314.5	3	-
C314.6	3	-
C314	3	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6002 –CONCRETE TECHNOLOGY

COURSE OUTCOME: Upon completion of the course, the students will be able to

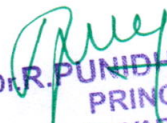
C315.1	Understand the properties of concrete and the role of ingredients like cement, aggregate, admixtures in concrete.
C315.2	Gain knowledge about the chemical and mineral admixtures.
C315.3	Proportion the concrete using various mix design concepts.
C315.4	Apply the testing procedures for work ability and strength for fresh concrete
C315.5	Apply the testing procedures for strength and durability for hardened concrete
C315.6	Select appropriate type of concrete for specific requirements.

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C315.1	3	3	3	3	2	-	-	2	-	1	1	1
C315.2	3	3	3	3	2	-	-	2	-	1	1	1
C315.3	3	3	3	3	2	-	-	2	-	1	1	1
C315.4	3	3	3	3	2	-	-	2	-	1	1	1
C315.5	3	3	3	3	2	-	-	2	-	1	1	1
C315.6	3	3	3	3	2	-	-	2	-	1	1	1
C315	3	3	3	3	2	-	-	2	-	1	1	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C315.1	3	1
C315.2	3	1
C315.3	3	1
C315.4	3	1
C315.5	3	1
C315.6	3	1
C315	3	1


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6611- ENVIRONMENTAL ENGINEERING LABORATORY

COURSE OUTCOME:The Students on completing the course will have

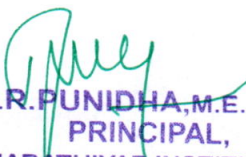
C316.1	Ability to estimate sewage generation and design sewer system including sewage pumping stations
C316.2	Required understanding on the characteristics and composition of sewage, self Purification of streams
C316.3	Ability to perform basic design of the unit operations and processes that are used in sewage treatment
C316.4	Apply the standard methods for disposal of sewage.
C316.5	Gain knowledge on sludge treatment and disposal.
C316.6	Knowledge on construction and operation & maintenance of sewage treatment plants.

Mapping of Course Outcome(CO)with Programme Outcome(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C316.1	3	3	3	3	3	3	2	2	2	2	1	1
C316.2	3	3	3	3	3	3	2	2	2	2	1	1
C316.3	3	3	3	3	3	3	2	2	2	2	1	1
C316.4	3	3	3	3	3	3	2	2	2	2	1	1
C316.5	3	3	3	3	3	3	2	2	2	2	1	1
C316.6	3	3	3	3	3	3	2	2	2	2	1	1
C316	3	3	3	3	3	3	2	2	2	2	1	1

Mapping of Course Outcome(CO)with Programme Specific Outcome(PSO)

CO	PSO1	PSO2
C316.1	3	-
C316.2	3	-
C316.3	3	-
C316.4	3	-
C316.5	3	-
C316.6	3	-
C316	3	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6612- CONCRETE AND HIGHWAY ENGINEERING LABORATORY

COURSE OUTCOMES


C316.1	Get a basic knowledge on tests on fresh concrete
C316.2	Gain the knowledge on tests on hardened concrete
C316.3	Get a basic knowledge on tests on aggregates
C316.4	Gain the knowledge on tests on bricks
C316.5	Knowledge about standard tests of highway materials and the methodology of road construction practice
C316.6	Maintenance of highways as per IRC standards and other specifications.

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C316.1	3	3	3	3	2	2	2	2	2	1	1	1
C316.2	3	3	3	3	2	2	2	2	2	1	1	1
C316.3	3	3	3	3	2	2	2	2	2	1	1	1
C316.4	3	3	3	3	2	2	2	2	2	1	1	1
C316.5	3	3	3	3	2	2	2	2	2	1	1	1
C316.6	3	3	3	3	2	2	2	2	2	1	1	1
C316	3	3	3	3	2	2	2	2	2	1	1	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C316.1	2	-
C316.2	2	-
C316.3	2	-
C316.4	2	-
C316.5	2	-
C316.6	2	-
C316	2	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL'(TK), SALEM (DT).

CE6701/STRUCTURAL DYNAMICS AND EARTHQUAKE ENGINEERING

COURSE OUTCOME: The students will be able to

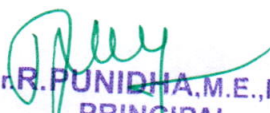
C401.1	Gain knowledge on single degree of freedom system
C401.2	Definitions and analysis of TDOF system and MDOF
C401.3	Know the basics terms of earthquakes
C401.4	Behavior of different types of structures under EQ loading
C401.5	Lessons learnt from past earthquakes in earthquake resist design
C401.6	Analysis of lateral loads and base shear subjected to earthquake

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C401.1	3	3	3	3	-	-	2	2	-	-	1	-
C401.2	3	3	3	3	-	-	2	2	-	-	1	-
C401.3	3	3	3	3	-	-	2	2	-	-	1	-
C401.4	3	3	3	3	-	-	2	2	-	-	1	-
C401.5	3	3	3	3	-	-	2	2	-	-	1	-
C401.6	3	3	3	3	-	-	2	2	-	-	1	-
C401	3	3	3	3	-	-	2	2	-	-	1	-

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C401.1	2	-
C401.2	2	-
C401.3	2	-
C401.4	2	-
C401.5	2	2
C401.6	2	2
C401	2	2


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6703- WATER RESOURCES AND IRRIGATION ENGINEERING

COURSE OUTCOME:The students will be able to

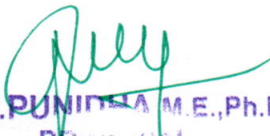
C403.1	Have knowledge and skills on crop water requirements.
C403.2	Apply the methods and management of irrigation.
C403.3	Gain knowledge on types of Impounding structures
C403.4	Apply methods of irrigation including canal irrigation.
C403.5	Get knowledge on water management on optimization of water use.

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C403.1	3	3	3	2	-	-	-	2	2	-	1	1
C403.2	3	3	3	2	-	-	-	2	2	-	1	1
C403.3	3	3	3	2	-	-	-	2	2	-	1	1
C403.4	3	3	3	2	-	-	-	2	2	-	1	1
C403.5	3	3	3	2	-	-	-	2	2	-	1	1
C403	3	3	3	2	-	-	-	2	2	-	1	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C403.1	3	-
C403.2	3	-
C403.3	3	-
C403.4	3	-
C403.5	3	-
C403	3	-


Dr. R. PUNITHA M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6704- ESTIMATION AND QUANTITY SURVEYING

COURSE OUTCOME:


C404.1	Estimate of quantities of items for different types of buildings by various methods.
C404.2	Prepare rate Analysis for all Building works,canals,roads and Cost Estimate.
C404.3	Know the types of specifications,principles for report preparation and tender notices.
C404.4	Gaining knowledge about type of contracts and drafting of contract documents.
C404.5	Prepare a value estimate and fixing therent for different properties
C404.6	Prepare there ports for different civil engineering projects

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C404.1	3	3	3	2	-	-	2	2	-	2	2	1
C404.2	3	3	3	2	-	-	2	2	-	2	2	1
C404.3	3	3	3	2	-	-	2	2	-	2	2	1
C404.4	3	3	3	2	-	-	2	2	-	2	2	1
C404.5	3	3	3	2	-	-	2	2	-	2	2	1
C404.6	3	3	3	2	-	-	2	2	-	2	2	1
C404	3	3	3	2	-	-	2	2	-	2	2	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C404.1	2	-
C404.2	2	-
C404.3	2	-
C404.4	2	-
C404.5	2	-
C404.6	2	-
C404	2	-


Dr. R. PUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVYAKURICH! - 636 12.
THALAIVASAL (TK), S (DT).

EN6501- MUNICIPAL SOLID WASTE MANAGEMENT

COURSE OUTCOME: The Student will be able to...


C405.1	Know of the nature, characteristics and ill effects of municipal solid
C405.2	Regulate requirements regarding municipal solid waste management.
C405.3	Suggest various storage and processing methods and ability to select appropriate method for a specific scenario
C405.4	Suggest various collection methods and routes of solid wastes
C405.5	Apply various disposal methods and post disposal effects of Municipal Solid Wastes.
C405.6	Ability to plan waste minimization and design storage, collection, transport, processing and disposal of municipal solid waste

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C405.1	3	3	-	-	3	3	3	2	-	2	2	-
C405.2	3	3	-	-	3	3	2	2	-	2	2	-
C405.3	3	3	-	-	3	3	3	2	-	2	2	-
C405.4	3	3	-	-	3	3	3	2	-	2	2	-
C405.5	3	3	-	-	3	3	2	2	-	2	2	-
C405.6	3	3	-	-	3	3	2	2	-	2	2	-
C405	3	3	-	-	3	3	3	2	-	2	2	-

MAPPING OF COURSE OUTCOME(CO) WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C405.1	3	2
C405.2	3	-
C405.3	3	2
C405.4	3	2
C405.5	3	2
C405.6	3	2
C405	3	2


Dr. R. FUNIDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVİYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6007/HOUSING PLANNING MANAGEMENT

COURSE OUTCOME:The students will be able to


C406.1	Classify the different housing sectors
C406.2	Know the concepts of slum clearance
C406.3	Gain the concept of layout and the design of housing units
C406.4	Classify the different techniques involved in the construction field
C406.5	Apply the concept of housing unit
C406.6	Analyze the basic details of housing management

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C406.1	3	3	3	-	-	2	2	2	-	2	2	-
C406.2	3	3	3	-	-	2	2	2	-	2	2	-
C406.3	3	3	3	-	-	2	3	2	-	2	2	-
C406.4	3	3	3	-	-	2	3	3	-	2	2	-
C406.5	3	3	3	-	-	2	2	2	-	2	2	-
C406.6	3	3	3	-	-	2	2	2	-	2	2	-
C406	3	3	3	-	-	2	2	2	-	2	2	-

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C406.1	2	-
C406.2	2	-
C406.3	2	-
C406.4	2	-
C406.5	2	2
C406.6	2	2
C406	2	2


Dr. R. PUNDHA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112.
THALAIVASAL (TK), SALEM (DT).

CE6021 - REPAIR AND REHABILITATION OF STRUCTURES

COURSE OUTCOMES:The students will be able to...

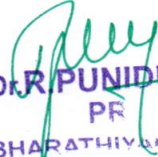
C411.1	Find out causes of deterioration.
C411.2	Apply various durability parameters suitably
C411.3	Usedifferenttypeofmaterialusedfor repair
C411.4	Choose among different techniques of repair
C411.5	Implement various methods of demolition practices
C411.6	Identify the cracks due to structural deficiency

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

Course outcome	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C411.1	3	3	3	3	-	-	3	3	-	-	3	2
C411.2	3	3	3	3	3	-	3	3	-	-	3	2
C411.3	3	3	3	3	-	-	3	3	-	-	3	2
C411.4	3	3	3	3	3	-	3	3	-	-	3	2
C411.5	3	3	3	3	-	-	3	3	-	-	3	2
C411.6	3	3	2	3	-	3	3	3	-	-	3	2
C411	3	3	3	3	3	3	3	3	-	-	3	2

Mapping of Course Outcome(CO)with Programme Specific Outcome(PSO)

CO	PSO1	PSO2
C411.1	3	2
C411.2	3	2
C411.3	3	2
C411.4	3	2
C411.5	3	2
C411.6	3	2
C411	3	2


Dr. R. PUNIDHA M.E., Ph.D.,
PR
BHARATHIYAN INSTITUTE OF
ENGINEERING FOR WOMEN,
SRIRANGAPET, SRIRANGAPET - 636 112,
THALAIVASAL(TK), SALEM (DT).

MG6851/PRINCIPLES OF MANAGEMENT

COURSE OUTCOME:The students will be able to


C409.1	Evaluate the global context for taking managerial actions of planning, organizing and controlling
C409.2	Assess global situation, including opportunities and threats that will impact management of an organization
C409.3	Integrate management principles into management practices
C409.4	Assess managerial practices and choices relative to ethical principles and standards
C409.5	Specify how the managerial tasks of planning, organizing, and controlling can be executed in a variety of circumstances
C409.6	Determine the most effective action to take in specific situations and Evaluate approaches to addressing issues of diversity

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C409.1	-	-	-	-	-	3	-	3	3	3	2	2
C409.2	-	-	-	-	-	3	-	3	3	3	2	2
C409.3	-	-	-	-	-	3	-	3	3	3	2	2
C409.4	-	-	-	-	-	3	-	3	3	3	2	2
C409.5	-	-	-	-	-	3	-	3	3	3	2	2
C409.6	-	-	-	-	-	3	-	3	3	3	2	2
C409	-	-	-	-	-	3	-	3	3	3	2	2

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C409.1	2	-
C409.2	2	-
C409.3	2	-
C409.4	2	-
C409.5	2	2
C409.6	2	2
C409	2	2


 Dr. R. PUNDHA, M.E., Ph.D.,
 PRINCIPAL,
 BHARATHIYAR INSTITUTE OF
 ENGINEERING FOR WOMEN,
 DEVIYAKURICH! - 636 112,
 THALAIVASAL (TK), SALEM (DT).

GE6757/TOTAL QUALITY MANAGEMENT

COURSE OUTCOME: The students will be able to

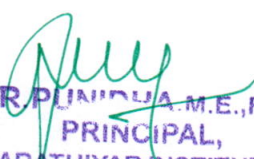
C410.1	Discuss various dimensions of product and service quality
C410.2	Apply the TQM principles for quality improvement in organization
C410.3	Distinguish various TQM tools and techniques used in Manufacturing and Service sectors
C410.4	Use QFD tool to design and develop a new product as per customer requirements
C410.5	Explain various ISO Standards and Quality systems practiced in various sector
C410.6	Summarize the basic concepts in total quality management relevant to manufacturing and service Sectors

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C410.1	-	-	3	3	-	3	-	3	3	3	3	-
C410.2	-	-	-	3	-	-	-	3	3	3	3	-
C410.3	-	-	-	3	-	-	-	3	3	3	3	-
C410.4	-	-	3	3	-	3	-	3	3	3	3	-
C410.5	-	-	3	3	-	-	3	3	3	3	3	-
C410.6	-	-	3	3	-	-	-	3	3	3	3	-
C410	-	-	3	3	-	3	3	3	3	3	3	-

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C410.1	-	-
C410.2	-	-
C410.3	-	-
C410.4	3	3
C410.5	-	-
C410.6	-	-
C410	3	3


Dr. R. P. JINDIA, M.E., Ph.D.,
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICHI - 636 112,
THALAIVASAL (TK), SALEM (DT).

CE6711 / COMPUTER AIDED DESIGN AND DRAWING LABORATORY

COURSE OUTCOME: The students will be able to

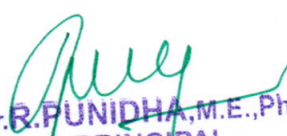
C407.1	Design and draft the reinforcement details of Cantilever and counterfort retaining wall using IS codes.
C407.2	Design and draw reinforcement details of solid slabs and T-beam bridge for IRC loading class. CO3 Design Intze type water tank and draw the sectional details.
C407.3	Design and draw reinforcement details of rectangular and circular water tanks using IS codes
C407.4	Design plate girder and truss girder bridges and draw the sectional details as per codal provisions CO6 Present the drawings both in conventional method and using modern software tool
C407.5	Design and draft the reinforcement details of Cantilever and counterfort retaining wall using IS codes.
C407.6	Design and draw reinforcement details of solid slabs and T-beam bridge for IRC loading class. CO3 Design Intze type water tank and draw the sectional details.

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME OUTCOME(PO)

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C407.1	3	3	3	3	2	2	2	2	2	1	1	1
C407.2	3	3	3	3	2	2	2	2	2	1	1	1
C407.3	3	3	3	3	2	2	2	2	2	1	1	1
C407.4	3	3	3	3	2	2	2	2	2	1	1	1
C407.5	3	3	3	3	2	2	2	2	2	1	1	1
C407.6	3	3	3	3	2	2	2	2	2	1	1	1
C407	3	3	3	3	2	2	2	2	2	1	1	1

MAPPING OF COURSE OUTCOME(CO)WITH PROGRAMME SPECIFIC OUTCOME (PSO)

CO	PSO1	PSO2
C407.1	2	-
C407.2	2	2
C407.3	2	-
C407.4	2	2
C407.5	2	-
C407.6	2	-
C407	2	2


Dr. R. PUNIDHA, M.E., Ph.D.
PRINCIPAL,
BHARATHIYAR INSTITUTE OF
ENGINEERING FOR WOMEN,
DEVIYAKURICH! - 636 112,
THALAIVASAL (TK), SALEM (DT).