



NIIST BHOPAL

NRI INSTITUTE OF INFORMATION SCIENCE & TECHNOLOGY

DEPARTMENT NAME: CIVIL ENGG

BRANCH

CIVIL

SESSION

JAN-JUNE
2019

Course Objective & Course Outcome

SEMESTER -VIII

SUBJECT/CODE : ADVANCE STRUCTURAL DESIGN II / CE8001

Course Objective:

To teach the students advance level design of steel structures.

Course Outcome:

Students will be able to design complicated structures like plate girder, gantry girder, Industrial structures, tanks and slabs.

SUBJECT/CODE : GEOTECHNICAL ENGINEERING II / CE8002

Course Objective:

To provide a coherent development to the students for the courses in sector of Geotechnical Engineering & Soil Improvement Techniques etc.

Course Outcome:

Students will be able to-

Outcome1

The students will gain an experience in the implementation of Geotechnical Engineering on engineering concepts which are applied in field Geotechnical Engineering.

Outcome2

The students will get a diverse knowledge of geotechnical engineering practices applied to real life problems of designing of structures.

Outcome3

The students will learn to understand the theoretical and practical aspects of geotechnical engineering along with the design and management applications.

SUBJECT/CODE : TRAFFIC ENGINEERING / CE8003 (2)

Course Objective:

To have an overall knowledge of the traffic components and assess the traffic characteristics and related problems

To provide knowledge of traffic control devices and its techniques in transportation interaction.

Course Outcome:

Students will be able to-

Outcome1

The students will gain knowledge in the fundamentals components of traffic engineering and its features.

Outcome2

The students will get a vast understanding on various traffic enforcements rules and regulations.

SUBJECT/CODE : GEOINFORMATICS / CE8004 (3)

Course Objective:

This course aims at introducing concept, principles and applications of Geographic Information Systems (GIS). Course also aims to develop the skill of using software and other tools of GIS in students.

This course aims to introduce students on concept of Remote Sensing (RS), overview of RS image processing and its' applications.

Course Outcome:

Students will be able to-

Outcome1

Student are able to understand the Basic concept of Remote sensing, Data and Information

Outcome2

Students are able to understand the Remote Sensing Platforms and Sensors

Outcome3

Students are able to understand Introduction to GIS & components of a GI

Outcome4

Integrated Applications of Remote sensing and GIS can be understood





NIIST BHOPAL

NRI INSTITUTE OF INFORMATION SCIENCE & TECHNOLOGY

DEPARTMENT NAME: CIVIL ENGG

BRANCH CIVIL

SESSION JAN-JUNE 2019

Course Objective & Course Outcome

SEMESTER -VI

SUBJECT/CODE : DESIGN OF HYDRALIC STRUCTURE S / CE6001

Course Objective:

The objective of EIA is to encourage consideration of the environment in the planning and decision-making process to arrive at actions that avoid or minimize adverse impacts on the environment.

Course Outcome:

Students will be able to-

Outcome1

The understanding of Significant Environmental Impacts will be developed.

Outcome2

Methods of Impact Identification will be understood.

Outcome3

The student will be able to understand the assessment of impact of air, water, noise and socio-economic environment

SUBJECT/CODE : STRUCTURAL DESIGN I / CE 6002

Course Objective:

To design the flexible and rigid pavements using different Empirical, semi-empirical and theoretical approaches

Course Outcome:

Students will be able to-

Outcome1

Students will identify suitable type of pavement.

Outcome2

Students understood Behaviour of structural components of Flexible pavement.

Outcome3

Student will know the design methods of flexible and rigid pavement

Outcome4

Students will understand the maintenance & repair of pavement

SUBJECT/CODE : GEOTECHNICAL ENGINEERING I / CE 6003

Course Objective:

The objective of this course is to introduce the students to the principles and practices of geotechnical exploration, foundation engineering, and ground improvement methods,

Course Outcome:

Students will be able to-

Outcome1

The students will gain an experience in the implementation of Geotechnical Engineering on engineering concepts which are applied in field Geotechnical Engineering

Outcome2

The students will get a diverse knowledge of geotechnical engineering practices applied to real life problems of designing of structures.

Outcome3

The students will learn to understand the theoretical and practical aspects of geotechnical engineering along with the design and management applications.



SUBJECT/CODE : HIGHWAY ENGINEERING /CE 6004

Course Objective: To provide a coherent development to the students for the courses in sector of Engineering like Transportation & Traffic Engineering etc.

Course Outcome: Students will be able to-

Outcome1 The students will gain an experience in the implementation of Transportation Engineering on engineering concepts which are applied in field Highway Engineering.

Outcome2 The students will get a diverse knowledge of highway engineering practices applied to real life problems.

Outcome3 The students will learn to understand the theoretical and practical aspects of highway engineering along with the design and management applications.

SUBJECT/CODE : ENVIRONMENTAL IMPACT ASSESSMENT /CE 6005

Course Objective: The objective of EIA is to encourage consideration of the environment in the planning and decision-making process to arrive at actions that avoid or minimize adverse impacts on the environment.

Course Outcome: Students will be able to-

Outcome1 The understanding of Significant Environmental Impacts will be developed.

Outcome2 Methods of Impact Identification will be understood.

Outcome3 The student will be able to understand the assessment of impact of air, water, noise and socio-economic environment





NIIST BHOPAL

NRI INSTITUTE OF INFORMATION SCIENCE & TECHNOLOGY

DEPARTMENT NAME: CIVIL ENGG

BRANCH CIVIL

SESSION JAN-JUNE 2019

Course Objective & Course Outcome

SEMESTER -IV

SUBJECT/CODE :ENERGY AND ENVIROMENTAL ENGG. /ES-401

Course Objective:

The objective of this Course is to provide an introduction to energy systems and renewable energy resources, with a scientific examination of the energy field and an emphasis on alternative energy sources and their technology and application.

Course Outcome:

Students will be able to-

Outcome1

Students are able to understand the energy & its importance

Outcome2

Student are able to understand a renewable & nonrenewable resources of energy

Outcome3

Concept of an ecosystem can be understood.

Outcome4

Students are able to understand the Introduction Definition: genetic, species and ecosystem of bio diversity

Outcome5

Environmental Pollution related to Civil Engineering can be understood

SUBJECT/CODE : CONSTRUCTION TECHNOLOGY / CE402

Course Objective:

This course will introduce and train students in the basic skills necessary to pursue a career in construction. This course covers foundations, flooring, framing, plumbing, electrical, sheet rock, windows, doors etc.

Course Outcome:

Students will be able to-

Outcome1

Students are able to understand the component of building with their function.

Outcome2

Students are able to understand construction procedure of different components

Outcome3

Design of Earthquake resistant Building can be implemented in general practice.

SUBJECT/CODE : STRUCTURAL ANALYSIS - I / CE 403

Course Objective:

To understand the concept of determinate and indeterminate structures, analyses of determinate and indeterminate structures. To understand the principle of virtual work and the application of influence line diagrams in structural analysis problems.

Course Outcome:

Students will be able to-

Outcome1

After completion of this subject student will be able to analyze Fixed and continuous beams.

Outcome2

Student will be able to analyze moving loads and will be able to draw influence line diagrams for simply supported beams.

Outcome3

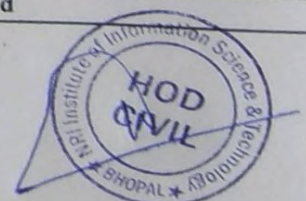
Student will also be able to analyze columns.

Outcome4

Student will also be able to analyze three hinge arches and three hinge suspension bridges.

Outcome5

Influence Line diagrams & Train load analysis can be understood



SUBJECT/CODE : TRANSPORTATION ENGG -I / CE 404

Course Objective:	The students will get a diverse knowledge of Railway, Bridge and Tunnel engineering practices applied to real life problems.
Course Outcome:	Students will be able to-
Outcome1	Steps involved in Planning of a railway track will be understood.
Outcome2	Students will get the feel of fundamentals of railway engineering from the syllabus.
Outcome3	under railway Engineering students get knowledge of railway geometrics, Signaling & interlocking Points, crossing and turnouts etc.
Outcome4	Subject will be helpful to introduce Bridge Engineering.
Outcome5	Similarly students get knowledge regarding fundamentals of tunnel its excavation methods, support systems, and executional aspects of tunnel

SUBJECT/CODE : ENGINEERING GEOLOGY & REMOTE SENSING / CE 405

Course Objective:	To study and identify different types natural materials like rocks & minerals and soil.
	This course aims to introduce students on concept of Remote Sensing (RS), overview of RS image processing and its' applications.
Course Outcome:	Students will be able to-
Outcome1	As a students in the Bachelor of Engineering (Civil Engineering) will undertake courses in geology Such as Rock and mineral.
Outcome2	Students are able to understand the use of different rock and mineral
Outcome3	Students are able to understand the different geological structures and their impact on civil engineering structure.
Outcome4	Students are able to decide the suitable site selection for civil engineering structures
Outcome5	Concept of GPS , GIS & Remote sensing will be delivered

