### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	PROBABILITY AND STATISTICS
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	II/I
<b>Regulation:</b>	R16
Subject Code:	R1621011
Name of the Faculty:	Mr. M POTHU RAJU

## COURSE OUTCOMES(COs):

S.No	Course Outcomes	Blooms Taxonomy level
CO1	Examine, analyze, and compare various Probability distributions for both discrete and continuous random variables.	Analyze
CO 2	Describe and compute confidence intervals for the mean of a population	Understand
CO 3	Describe and compute confidence intervals for the proportion and the variance of a population and test the hypothesis concerning mean, proportion and variance and perform ANOVA test	Understand
CO 4	Determine a curve to the numerical data	Apply

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	Basic Electrical & Electronics Engineering
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	II/I
<b>Regulation:</b>	R16
Subject Code:	R1621012
Name of the Faculty:	Mrs. K RAMYA

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine number of powerful engineering circuit analysis techniques such as KCL, KVL source transformation and several methods of simplifying networks.	Apply
CO 2	Summarize and explain the principal of operation and performance of D.C machine.	Understand
CO 3	Recognize and explain the principle of operation and performance of transformer	Understand
CO 4	Explain the construction, working principle and performance of synchronous Generator	Understand
CO 5	Design biasing circuits for transistors.	Create
CO 6	Explain concept of amplifier	Understand

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	Strength of Materials-I
Programme:	B.Tech
Academic Year	2019-20
Year/Semester:	II/I
<b>Regulation:</b>	R16
Subject Code:	R1621013
Name of the Faculty:	Mr. V SURESH

### **COURSE OUTCOMES(COs):**

S No	Course Outcomes	Blooms
5.1 10.	Course Outcomes	Taxonomy level
CO1	Discuss the basic materials behavior under the influence of different	Understand
	external loading conditions and the support conditions	Understand
CO 2	Recommended to draw the diagrams indicating the variation of the	Evoluoto
	key performance features like bending moment and shear forces	Evaluate
	Demonstrate bending concepts and calculation of section modulus	
CO 3	and for determination of stresses developed in the beams and	Apply
	deflections due to various loading conditions	
	Classify the assess stresses across section of the thin and thick	
CO 4	cylinders to arrive at optimum sections to withstand the	Analyzing
	internal pressure using Lame's equation.	

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	BUILDING MATERIALS AND CONSTRUCTION
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/I
<b>Regulation:</b>	R16
Subject Code:	R1621014
Name of the Faculty:	Mr. D. RAMBABU

### COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Identify the different building materials and their importance in building construction	Remember
CO 2	Differentiate brick masonry, stone masonry construction and use of lime and cement in various constructions	Understand
CO 3	Discuss the importance of building components and finishing.	Understand
CO 4	Explain the classification of aggregates, sieve analysis and moisture content usually required in building construction.	Understand

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	SURVEYING
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/I
<b>Regulation:</b>	R16
Subject Code:	R1621015
Name of the Faculty:	Mr. K. VINOD KUMAR

### COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Demonstrate the basic surveying skills	Applying
CO 2	Discuss use various surveying instruments	Understand
CO 3	Describe perform different methods of surveying	Remember
CO 4	Measure the compute various data required for various methods of surveying	Evaluate
CO 5	Sketch integrates the knowledge and produce topographical map.	Apply

### **Department of Civil Engineering**

#### **Course outcome**

<b>Course Title:</b>	FLUID MECHANICS
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/I
<b>Regulation:</b>	R16
Subject Code:	R1621016
Name of the Faculty:	Mr. M. TULASI SAI

## **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Describe the various properties of fluids and their influence on fluid motion and analyses a variety of problems in fluid statics and dynamics.	Understanding
CO 2	Calculate the forces that act on submerged planes and curves.	Applying
CO 3	Identify and analyse various types of fluid flows.	Remember
CO 4	Determine the integral forms of the three fundamental laws of fluid mechanics to turbulent and laminar flow through pipes and ducts in order to predict relevant pressures, velocities and forces.	Applying
CO 5	Draw simple hydraulic and energy gradient lines.	Evaluate
CO 6	Examine the quantities of fluid flowing in pipes, tanks and channels.	Apply

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	SURVEYING FIELD WORK-I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/I
<b>Regulation:</b>	R16
Subject Code:	R1621017
Name of the Faculty:	Mr. K. Vinod KUMAR

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the use of different surveying instruments	Understand
CO 2	Differentiate various conventional survey equipment like chain, compass, auto level and plane table	Understand
CO 3	Calculation of areas, drawing plans and contour maps using different measuring equipment at field level	Apply

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	STRENGTH OF MATERIALS LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/I
<b>Regulation:</b>	R16
Subject Code:	R1621018
Name of the Faculty:	Mr. Y. SOMBABU

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Apply the linear laws of elasticity as related to stress and strain	Apply
CO 2	calculate deflection of different sections at different loading conditions	Apply
CO 3	Differentiate between properties of a material	Understand
CO 4	Analyze the bending stress on different type of sections	Analyze

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	BUILDING PLANNING AND DRAWING
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
<b>Regulation:</b>	R16
Subject Code:	R1622011
Name of the Faculty:	Mr. MD SAMEER KHAN

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain plan various buildings as per the building by-laws	Understand
CO 2	differentiate the relation between the plan, elevation and cross section and identify the form and functions among the buildings	Understand
CO 3	Examine the skills of drawing building elements and plan the buildings as per requirements	Apply

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	STRENGTH OF MATERIALS- II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
<b>Regulation:</b>	R16
Subject Code:	R1622012
Name of the Faculty:	Mr. D RAMBABU

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the basic concepts of Principal stresses developed in a member when it is subjected to stresses along different axes and design the sections	Understand
CO 2	Explain the assess stresses in different engineering applications like shafts, springs, columns and struts subjected to different loading conditions	Understand
CO 3	Determine the assess forces in different types of trusses used in construction	Apply

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	HYDRAULICS AND HYDRAULIC MACHINERY
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
<b>Regulation:</b>	R16
Subject Code:	R1622013
Name of the Faculty:	Mr. V SURESH

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Solve uniform and non-uniform open channel flow problems.	Apply
CO 2	Apply the principals of dimensional analysis and similitude in hydraulic model testing	Apply
CO 3	Describe the working principles of various hydraulic machineries and pumps.	Understand

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	CONCRETE TECHNOLOGY
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
<b>Regulation:</b>	R16
Subject Code:	R1622014
Name of the Faculty:	Mr. M TULASI SAI

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	explain the basic concepts of concrete	Understand
CO 2	State the importance of quality of concrete.	Remember
CO 3	Explain the basic ingredients of concrete and their role in the production of concrete and its behavior in the field	Understand
CO 4	Analyze the fresh concrete properties and the hardened concrete properties	Analyze
CO 5	Classify the ingredients of concrete through lab test results. Design the concrete mix by BIS method.	Analyze
CO 6	Explain the basic concepts of special concrete and their production and applications. understand the behavior of concrete in various environments	Understand

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	STRUCTURAL ANALYSIS - I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
<b>Regulation:</b>	R16
Subject Code:	R1622015
Name of the Faculty:	Mr. Y. SOMBABU

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Analysis trusses, frames and arches	Analyze
CO 2	Analyses structures for moving loads	Analyze
CO 3	Classify conversant with classical methods of analysis.	Analyze

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	TRANSPORTATION ENGINEERING – I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
<b>Regulation:</b>	R16
Subject Code:	R1622016
Name of the Faculty:	Mr. A ASHOK KUMAR

### **COURSE OUTCOMES (COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain Plan highway network for a given area.	Understand
CO 2	Determine Highway alignment and design highway geometrics	Apply
CO 3	Design Intersections and prepare traffic management plans	Create
CO 4	Identify the suitability of pavement materials and design flexible and rigid pavements	Remember
CO 5	Discuss the Construct and maintain highways	Understand

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	FLUID MECHANICS AND HYDRAULIC MACHINERY LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
<b>Regulation:</b>	R16
Subject Code:	R1622017
Name of the Faculty:	Mr. M. TULASI SAI

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Measure theoretical discharge in pipes, Venturi meter, orifice meter and notches	Evaluate
CO 2	Demonstrate and conduct experiment to find characteristic curves of various pumps	Apply
CO 3	Demonstrate and conduct experiment to find characteristic curves of various turbines	Apply

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	SURVEY FIELD WORK- II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	II/II
<b>Regulation:</b>	R16
Subject Code:	R1622018
Name of the Faculty:	Mr. D. RAMBABU

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the different aspects of traverse with the help of theodolite.	Understand
CO 2	Analyze the method of triangulation.	Analyze
CO 3	Evaluate the different types of curves and methods to set them out.	Evaluate
CO 4	Discuss the different modern techniques using surveying instruments such as total station.	Understand

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	MANAGEMENT SCIENCE
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1631011
Name of the Faculty:	Mr. G. NARENDRABABU

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the management science approach to identification, analysis, decision, and implementation of problem solving.	Apply
CO 2	Identify, categorize and discuss management problems that can be analyzed by linear programming. Explain the importance of forecasting in organizations.	Apply
CO 3	Construct models for a variety of PERT/CPM. Describe the EOQ model and its variations or expansions.	Analyze
CO 4	illustrate the decision tree method of analysis for decision making under risk and under certainty and expected value	Apply
CO 5	Demonstrate the transportation method to solve problems manually and with the northwest corner method. Solve case problems using computer software.	Understand

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	ENGINEERING GEOLOGY
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1631012
Name of the Faculty:	Mrs. D NAGA PAVANI

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO 1	Identify and classify rock using basic geologic classification systems	Remember
CO 2	Explain the geologic concepts and approaches.	Understand
CO 3	Test the geological material and ground to check the suitability of civil engineering project construction.	Analyze
CO 4	Analyze the project site for mega/mini civil engineering projects. Site selection for mega engineering projects like Dams, Tunnels, disposal sites etc.	Analyze

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	STRUCTURAL ANALYSIS – II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1631013
Name of the Faculty:	Mr. Y. SOMBABU

## **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Analysis suspension bridges and arches	Analyze
CO 2	Classify the conversant with classical methods of analysis.	Analyze
CO 3	Analyze structures by finite element method	Analyze
CO 4	Analyze structures using Moment Distribution, Kani's Method and Matrix methods	Analyze

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	DESIGN AND DRAWING OF REINFORCED CONCRETE
	STRUCTURES
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1631014
Name of the Faculty:	M.ARADHANA RAO

## **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Solve the Work on different types of design philosophies	Apply
CO 2	Explain analysis and design of flexural members and detailing	Understand
CO 3	Design structures subjected to shear, bond and torsion	Create
CO 4	Design different type of compression members and footings	Create

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	TRANSPORTATION ENGINEERING – II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1631015
Name of the Faculty:	Mr. MD SAMEER KHAN

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Design geometrics in a railway track.	Create
CO 2	Design airport geometrics and airfield pavements.	Create
CO 3	Explanation about Plan, construct and maintain Docks and Harbors	Understand

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	CONCRETE TECHNOLOGY LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1631016
Name of the Faculty:	Mr. D RAMBABU

### COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine the consistency and fineness of cement.	Apply
CO 2	Determine the setting times of cement.	Apply
CO 3	Determine the specific gravity and soundness of cement.	Apply
CO 4	Determine the compressive strength of cement.	Apply
CO 5	Determine the workability of cement concrete by compaction factor, slump and Vee– Bee tests	Apply
CO 6	Determine the specific gravity of coarse aggregate and fine aggregate by Sieve analysis.	Apply
CO 7	Determine the flakiness and elongation index of aggregates.	Apply
CO 8	Determine the bulking of sand.	Apply
CO 9	Explain the non-destructive testing procedures on concrete	Understand

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	ENGINEERING GEOLOGY LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1631017
Name of the Faculty:	Mrs. D NAGA PAVANI

### COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Identify Mega-scopic minerals & their properties.	Remember
CO 2	Identify Mega-scopic rocks & their properties.	Remember
CO 3	Identify the site parameters such as contour, slope & aspect for topography.	Remember
CO 4	Identify the occurrence of materials using the strike & dip problems.	Remember

## **Department of Civil Engineering**

#### **Course outcome**

<b>Course Title:</b>	TRANSPORTATION ENGINEERING LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1631018
Name of the Faculty:	Mr. MD SAMEER KHAN

### I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Identify to test aggregates and judge the suitability of materials for the road construction	Remember
CO 2	Identify to test the given bitumen samples and judge their suitability for the road construction	Remember
CO 3	Identify to obtain the optimum bitumen content for the mix design	Remember
CO 4	Identify to determine the traffic volume, speed and parking characteristics	Remember

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	DESIGN AND DRAWING OF STEEL STRUCTURES
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1632011
Name of the Faculty:	Mr. A ASHOK KUMAR

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine the Work with relevant IS codes	Apply
CO 2	Analyze the design of structural steel members subjected to compressive, tensile and bending forces, as per current code.	Analyze
CO 3	Identify to design structural systems such as roof trusses and gantry girders.	Remember
CO 4	Calculate design and analyze beams and connections	Apply
CO 5	Classify the drawings pertaining to different components of steel structures	Analyze

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	GEOTECHNICAL ENGINEERING – I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/II
<b>Regulation:</b>	R16
Subject Code:	R1632012
Name of the Faculty:	Mr. V SURESH

## **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms
		Taxonomy level
CO1	Identify the definition of the various parameters related to soil	Remember
	mechanics and establish their inter-relationships.	
CO 2	Describe the methods of determination of the various index	Understand
	properties of the soils and classify the soils.	Onderstand
	Differentiate know the importance of the different engineering	
CO 3	properties of the soil such as compaction, permeability, consolidation	Understand
	and shear strength and determine them in the laboratory.	
CO 4	Use to apply the above concepts in day-to-day civil engineering	Apply
	practice.	Аррту

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	ENVIRONMENTAL ENGINEERING – I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/II
<b>Regulation:</b>	R16
Subject Code:	R1632013
Name of the Faculty:	Mrs. D NAGA PAVANI

## I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain Plan and design the water and distribution networks and sewerage systems	Understand
CO 2	Identify the water source and select proper intake structure	Remember
CO 3	Discuss the Characterization of water	Understand
CO 4	Select the appropriate appurtenances in the water supply	Analyze
CO 5	Selection of suitable treatment flow for raw water treatments	Analyze

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	WATER RESOURCES ENGINEERING-I
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1632014
Name of the Faculty:	Ms. D HARITHA

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Describe the theories and principles governing the hydrologic processes,	Understand
CO 2	Identify to quantify major hydrologic components and apply key concepts to several practical areas of engineering hydrology and related design aspects	Remember
CO 3	Examine Intensity-Duration-Frequency and Depth-Area Duration curves to design hydraulic structures.	Apply
CO 4	Describe develop design storms and carry out frequency analysis	Remember
CO 5	Determine storage capacity and life of reservoirs.	Apply
CO 6	Summarize unit hydrograph and synthetic hydrograph	Understand
CO 7	Determine the estimate flood magnitude and carry out flood routing.	Apply
CO 8	Determine aquifer parameters and yield of wells.	Apply
CO 9	Determine model hydrologic processes	Apply

### **Department of Civil Engineering**

### Course outcome mapping with PO's and PSO's

Course Title:	WASTE WATER MANAGEMENT
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R163201D
Name of the Faculty:	Mr. D. RAMBABU

## **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain treatment methods for any industrial wastewater.	Understand
CO 2	Discuss the manufacturing process of various industries.	Understand
CO 3	Describe the need of common effluent treatment plant for the industrial area in their vicinity	Understand

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	GEOTECHNICAL ENGINEERING LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1632016
Name of the Faculty:	Mr. Y SOMBABU

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine the Index properties of the soils like water content, specific gravity and Atterberg limits	Apply
CO 2	Identify the engineering properties like field density, shear strength, permeability, compaction and consolidation	Remember
CO 3	Test the soil to assess its ability to withstand the load	Analyze

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	ENVIRONMENTAL ENGINEERING LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1632017
Name of the Faculty:	Mrs. D NAGA PAVANI

### COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Estimation some important characteristics of water and wastewater in the laboratory	Evaluate
CO 2	Express to draw some conclusion and decide whether the water is potable or not.	Understand
CO 3	Describe whether the water body is polluted or not with reference to the state parameters in the list of experiments	Understand
CO 4	Estimation of the strength of the sewage in terms of BOD and COD	Evaluate

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	COMPUTER AIDED ENGINEERING LABORATORY
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1632018
Name of the Faculty:	Mr. A ASHOK KUMAR

### COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the paper –space environment thoroughly	Understand
CO 2	Develop the components using 2D and 3D wire frame models through various editing commands.	Create
CO 3	Generate assembly of various components of compound solids.	Create

## **Department of Civil Engineering**

Course outcome

Course Title:	ENVIRONMENTAL ENGINEERING -II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
Regulation:	R16
Subject Code:	R1641011
Name of the Faculty:	Mr. A. ASHOK KUMAR

#### COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the Plan and design the sewerage systems	Understand
CO 2	Select the appropriate appurtenances in the sewerage systems	Analyze
CO 3	Analyze sewage and suggest and design suitable treatment system for sewage treatment	Analyze
CO 4	Identify the critical point of pollution in a river for a specific amount of pollutant disposal into the river	Remember
Co 5	Tell a suitable disposal method with respect to effluent standards.	Remember

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	WATER RESOURCES ENGINEERING-II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
<b>Regulation:</b>	R16
Subject Code:	R1641012
Name of the Faculty:	Mr. P MOHAN RAO

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Estimate irrigation water requirements	Evaluate
CO 2	Design irrigation canals and canal network	Create
CO 3	Explain Plan an irrigation system	Understand
CO 4	Design irrigation canal structures	Create
CO 5	Explain the Plan and design diversion head works	Understand
CO 6	Analyze stability of gravity and earth dams	Analyze
CO 7	Design ogee spillways and energy dissipation works	Create

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	GEOTECHNICAL ENGINEERING – II
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
<b>Regulation:</b>	R16
Subject Code:	R1641013
Name of the Faculty:	Mr. M. ARADHANA RAO

### COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the various types of shallow foundations and decide on their location based on soil characteristics.	Understand
CO 2	Classify to compute the magnitude of foundation settlement to decide the size of the foundation.	Analyze
CO 3	Express to use the field test data and arrive at the bearing capacity.	Understand
CO 4	Define the design Piles based on the principles of bearing capacity.	Remember

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	REMOTE SENSING AND GIS APPLICATIONS
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/I
<b>Regulation:</b>	R16
Subject Code:	R1641014
Name of the Faculty:	Mr. MD SAMEER KHAN

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	be familiar with ground, air and satellite-based sensor platforms.	Understand
CO 2	interpret the aerial photographs and satellite imageries	Remember
CO 3	create and input spatial data for GIS application	Create
CO 4	apply RS and GIS concepts in water resources engineering	Apply
CO 5	applications of various satellite data	Understand

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	GROUND IMPROVEMENT TECHNIQUES
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1641011
Name of the Faculty:	Mr. K VINOD KUMAR

### I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the various methods of ground improvement and their suitability to different field situations.	Understand
CO 2	Determine to design a reinforced earth embankment and check its stability.	Apply
CO 3	Define the various functions of Geo-synthetics and their applications in Civil Engineering practice.	Remember
CO 4	Explain the concepts and applications of grouting.	Understand

## **Department of Civil Engineering**

#### **Course outcome**

Course Title:	ADVANCED STRUCTURAL ENGINEERING
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R164101
Name of the Faculty:	Mr. M. TULASI SAI

## **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Design raft foundations and different types of RCC retaining walls	Create
CO 2	Examine the analysis and design of different types of RCC water tanks	Apply
CO 3	Solve the problems design of RCC Bunkers, Silos and Chimneys	Apply
CO 4	Explain the various types of transmission towers and loading on them.	Understand

### **Department of Civil Engineering**

#### **Course outcome**

<b>Course Title:</b>	GIS & CAD LAB
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1641017
Name of the Faculty:	Mr. M. TULASI SAI

## I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Use to work comfortably on GIS software	Apply
CO 2	Digitize and create thematic map and extract important features	Analyze
CO 3	Develop digital elevation model	Create
CO 4	use structural analysis software to analyze and design 2D and 3D frames	Apply
CO 5	Design and analyze retaining wall and simple towers using CAD software.	Crate

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	IRRIGATION DESIGN AND DRAWING
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	III/I
<b>Regulation:</b>	R16
Subject Code:	R1641018
Name of the Faculty:	Mr. V SURESH

## I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Design the various irrigation structures.	Create

### **Department of Civil Engineering**

#### **Course outcome**

<b>Course Title:</b>	ESTIMATION SPECIFICATION & CONTRACTS
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/II
<b>Regulation:</b>	R16
Subject Code:	R1642011
Name of the Faculty:	Mr. MD SAMEER KHAN

## I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine the quantities of different components of buildings.	Apply
CO 2	Estimate to find the cost of various building components.	Evaluate
CO 3	Evaluate to finalizing the value of structures	Evaluate

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	CONSTRUCTION TECHNOLOGY AND MANAGEMENT
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/II
<b>Regulation:</b>	R16
Subject Code:	R1642012
Name of the Faculty:	Mr. M. TULASI SAI

## I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the plan construction projects, schedule the activities using network diagrams,	Understand
CO 2	Determine the cost of the project, control the cost of the project by creating cash flows and budgeting and to use the project information as decision making tool	Apply
CO 3	Discuss about different methods of planning	Remember
CO 4	Demonstrate the project management and construction techniques	Apply

### **Department of Civil Engineering**

#### **Course outcome**

Course Title:	PRESTRESSED CONCRETE
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/II
<b>Regulation:</b>	R16
Subject Code:	R1642013
Name of the Faculty:	Ms. D HARITHA

## I. COURSE OUTCOMES(COs):

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the different methods of prestressing	Understand
CO 2	Estimate effective prestress including the short- and long-term losses	Evaluate
CO 3	Analyze and design prestressed concrete beams under flexure and shear	Analyze
CO 4	Summarize the relevant IS Codal provisions for prestressed concrete	Understand

### **Department of Civil Engineering**

### **Course outcome**

Course Title:	SOLID AND HAZARDOUS WASTE MANAGEMENT
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/II
<b>Regulation:</b>	R16
Subject Code:	R164201C
Name of the Faculty:	Mrs. D NAGA PAVANI

## **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Design the collection systems of solid waste of a town	Create
CO 2	Design treatment of municipal solid waste and landfill	Crate
CO 3	Define the criteria for selection of landfill	Remember
CO 4	Determine Characterize the solid waste and design a composting facility	Analyze
CO 5	state the Method of treatment and disposal of Hazardous wastes	Remember

### **Department of Civil Engineering**

### **Course outcome**

Course Title:	PROJECT WORK
Programme:	B. Tech
Academic Year	2019-20
Year/Semester:	IV/II
<b>Regulation:</b>	R16
Subject Code:	R1642016
Name of the Faculty:	Mr. Y SOMBABU

### **COURSE OUTCOMES(COs):**

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Apply all levels of Engineering knowledge in solving the Engineering problems.	Apply
CO 2	Discuss Work together with team spirit.	Understand
CO 3	Use Civil Engineering software at least one.	Apply
CO 4	Develop Document the projects	Create