Department of Civil Engineering				
Course Outcomes - Academic Year 2019-20 3rd Semester				
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
1	Engineering Economics	CO1	Understand the scope, basics of the Economics. Able to explain the demand and supply for maintaning the market equilibrium.	2
		CO2	Explain the law of production.	2
		CO3	Understand the analysis of the cost, revenue and its minimization.	2
		CO4	Understand the market structure and break even analysis	2
		CO5	Explain the efect of interest and depreciation capital assets. Apply the engineering project cost evaluation for various projects.	3
		CO6	Explain the inflation, cause and measures and understand the banking system	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
2	Mathematics – III	CO1	Apply & solve Analytic Function, Cauchy-Riemann equations, line integral in complex plane, Cauchy Integral theorem, Taylor's series, Maclaurin's series, Laurent's series.	3
		CO2	Solve and explain Residue Integration method, Evaluation of Real Integrals, Error & Error Propagation, Lagranges Interpolation, Newton's Divided Difference Interpolation, Newton's Forward and backward Interpolation, Spline's Interpolation.	3, 2
		CO3	Explain Trapezoidal Rule, Simpson's 1/3rd Rule, Simpson's 3/8th Rule, Gauss Integral Formula, Euler's Method for ODE, Runge-Kutta 2nd order and 4th order Method, Multi-Step method.	2
		CO4	Apply & solve Probability & Random Variables, Probability Distribution Funtion, Probability Density Function, Bionomial Distribution, Poisson's Distribution, Uniform Distribution, Normal Distribution.	3
		CO5	Apply & solve distribution of several random variable, scope of statistics & random sampling, sampling distribution, correlation analysis, regression analysis.	3
		CO6	Solve Fitting of straight lines, Estimation of Parameter & statistical Hypothesis.	3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
3	Mechanics of Solid	CO1	Define types of stresses and strains and calculate the values of youngs modulus of elasicity ,modulus of rigidity and bulk modulus of elasticity.	1,3
		CO2	Calculate the the principapl stresses on principal plane.	3
		CO3	Calculate the shear force and bending moment of different types bo beam.	3
		CO4	Calculate torque and power produced by the rotating of rigid body.	3
		CO5	Classify types of springs and calculate the stiffness and spring rate of helical spring.	2 ,3
		CO6	Calculate the deflection produced in the beam.	3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
4	Fluid Mechanics and Hydraulic Machines	CO1	Verify the Bernoulli's theorem.	3
		CO2	Calculate the discharge of fluid through venturimeter,orifice meter.	3
		CO3	Calculate the pressure of fluids by using manometer,U-tube manometer and differential manometer.	3
		CO4	Explain the impact of jet on different plates and calculate the force exerted by the jet on the plate.	2 ,3
		CO5	Define hydraulic,mechanical,volumetric and overall efficiency and calculate the overall efficiency of Pelton,Francis and Kaplan turbine.	1 ,3
		CO6	Classify types of pump,explain the working of centrifugal pump and reciprocating pump and calculate the efficiency in centrifugal pump.	2 ,2,3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
5	Object Oriented Programming Using Java	CO1	Explain the basic concepts and features of OOPS, use of compiler and intrepreter in Java programming. Able to acquire the knowledge on JDK, JRE, JVM. And program execution.	2
		CO2	Understand the use of classes, objects, members of a class and relationships among them in different scenario. Able to explain the inheritance and string manipulation for various scenario.	2
		CO3	Understand and demonstrate the use of data abstraction, polimorphism, use of exception handling and multi threading.	2,3
		CO4	Understand the use of IO strean in java application. Acquire the idea of GUI design using various componemts of Applet and AWT.	2
		CO5	Make use of MVC architecture to develop various advanced GUI application using the module like SWING and JavaFX.	3
		CO6	Understand the impact of exception handling to avoid abnormal termination of program using checked and unchecked exceptions.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
6	Building Drawing Using Auto Cad	CO1	Learn how to provide a plan, elevation and side view of residential/office building	2
		CO2	Learn how to give the detailing of doors and windows	2
		CO3	Draw several types of footings, brick works, staircase, masonry arches and lintels	4
		CO4	Work on the project on establishment like bank building, post office,library, hostel, auditorium etc	3
		CO5	Differentiate the types of steel roof trusses	1
		CO6	Provide the detail of floor and wall joints	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
7	Fluid Mechanics and Hydraulic Machines Lab	CO1	Verify the Bernoulli's theorem.	3
		CO2	Calculate the discharge of fluid through venturimeter,orifice meter.	3
		CO3	Calculate the pressure of fluids by using manometer,U-tube manometer and differential manometer.	3
		CO4	Explain the impact of jet on different plates and calculate the force exerted by the jet on the plate.	2 ,3
		CO5	Define hydraulic,mechanical,volumetric and overall efficiency and calculate the overall efficiency of Pelton,Francis and Kaplan turbine.	1 ,3
		CO6	Classify types of pump,explain the working of centrifugal pump and reciprocating pump and calculate the efficiency in centrifugal pump.	2 ,2,3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
8	Oop Using Java Lab.	CO1	Understand the programming language concepts	2
		CO2	Write, Debug and document well-structured java applications	3
		CO3	Implement Java classes from specification, create and use objects from predefined class libraries	3
		CO4	Understand the behaviour of primitive data types , control statements , object reference and arrays	2
		CO5	Implement Modular , multithreading and event driven programming	3
		CO6	Implement interface, inheritance polymorphism,exception handling, file I/O and multithreading	3
Course Outcomes - Academic Year 2019-20 4th Semester				
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
1	Surveying	CO1	Measure the distance using chain and can calcukate error in readings.	2
		CO2	Perform levelling and contouring of given ground	2
		CO3	Apply the basic principles of surveying and can carry out the survey in the field for various purposes using chain, compass, plane table and Theodolite.	3
		CO4	Students will be able to plan a survey, taking accurate measurements, field booking, plotting and adjustment of traverse	4
		CO5	Use Dumpy levels and theodolite for taking measurements and for traversing	2
		CO6	Learn how to use modern surveying instruments.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
2	Transportation Engineering	CO1	Identify the current trends of transportation.	1
		CO2	Determine the characteristics of pavement materials and develop the acceptance criteria.	2
		CO3	Analyze and design the highway geometric elements & ability to design the pavement	3
		CO4	Design traffic managing infrastructure based on given situation.	4
		CO5	Design the super elevation of road for safe road	4
		CO6	Learn the construction procedure of flexible and rigid pavement,the processof WBM,GSB,WMM	1
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
3	Structural Analysis-I	CO1	Determine various internal forces in beams and frame from bending moment and shear force diagram	2
		CO2	Determine internal forces in the members of plane & space truss, three hinged arch and cables.	2
		CO3	Determine absolute maximum internal forces due to rolling or moving loads from Influenced line Diagrams	2
		CO4	Select appropriate method to determine slope and deflection of determinate beams and frames	3

		CO5	Determine structural stability of beam, column etc.	4
		CO6	Understand the concept of equivalent UDL	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
4	Construction Technology	CO1	Understand civil structures,fundamentals of its construction , preparatory work and implementation	2
		CO2	Learn how to work on excavation of pile fondation	2
		CO3	List the ways of concreting	1
		CO4	Learn the use of construction equipments	2
		CO5	Find anti-termite measures and its treatments	4
		CO6	Learn the ways of building maintenance and its safety measures	3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
5	Introduction to Physical Metallurgy and Engineering Materials	CO1	Define mechanical properties of material and explain F.C.C and B.C.C structure of material.	1, 2
		CO2	Clasify the types of steel and cast iron and explain Iron-Carbon equilibrium diagram.	2
		CO3	Explain time ,temperature and transformation diagram.	2
		CO4	Define the properties of non-ferrous material.	1
		CO5	Classify thermosettng and thermoplasic.	2
		CO6	Classify the composite material and Ceramic materials.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
6	Organisational Behaviour	CO1	Define organisational behaviour, and explain nature of learning.	1,2
		CO2	Define personality and explain determinants of personality, personality Traits.	1,2
		CO3	Explain perception and explain perceptual process, importance of perception in OB.	1,2
		CO4	Explain types of communication , gateways and Barriers to communication, communication as a tool for improving Interpersonal Effectiveness.	2
		CO5	Explain Theories of Leadership-Trait theory, Leader Behaviour theory, Contingency Theory, Leadership and Followership, How to be an effective leader.	2
		CO6	Explain organizational culture and organizational effectiveness.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
7	Field Surveying Sessional	CO1	Undertake measurement and plotting in civil engineering	1
		CO2	Perform levelling and contouring of given ground	2
		CO3	Apply the basic principles of surveying and can carry out the survey in the field for various purposes using chain, compass, plane table and Theodolite.	3
		CO4	Plan a survey, taking accurate measurements, field booking, plotting and adjustment of traverse	4
		CO5	Use dumpy levels and theodolite for taking measurements and for traversing	2
		CO6	Operate how to use modern surveying instruments.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
8	Transportation Engineering Laboratory	CO1	Learn how to determine the chrushing, impact and abrasion value of aggregate.	2
		CO2	Find the penetration, ductility, softening point value ,flash and fire point and specific gravity of bitumen	3
		CO3	Students will be able to understand the Marshall method of mix design and to calculate the stripping value of aggregate	2
		CO4	Demonstrate advanced equipments for characterization of pavement materials	2
		CO5	Evaluate the flakiness index,elongation index, specific gravity and water absorption of course aggregate	3
		CO6	Determine the CBR, GSB,WMM of soil subgrade	4
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
9	Material Testing Laboratory	CO1	Conduct different tests on bricks	2
		CO2	Determine the fineness,soundness,specific gravity of cement	3
		CO3	Learn how to determine the standard consistency, initial and final setting time of cement.	2
		CO4	Find the crushing value and finenessof aggregate	1
		CO5	Learn how to determine tensile and compressive strength of cement mortar	2
		CO6	Learn how to conduct different tests on steel	4

Course Outcomes - Academic Year 2019-20 5TH SEMESTER

SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
1	Internet & Web Technology	CO1	Explain the various internet protocole, addressing schemes, web server and application servers. Understand the structure of a web page.	2
		CO2	Understand the integration of CSS, HTML and Java scripting languages to develop and validate the web applications.	2
		CO3	Understand the development of dynamic web pages and deployment of the web applications in web servers. Explain various life cycle methods of server side scripting.	2
		CO4	Understand various security threats in the web application, role of firewall and proxy gateway applications.	2
		CO5	Apply the PHP as the serverside scripting and communicate to various databases.	3
		CO6	Describe and differentiate different Web Extensions and Web Services.	3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
2	Structural Analysis - Ii	CO1	Apply knowledge of mathematics, science, and engineering to understand indeterminate structure	1
		CO2	Identify, formulate and solve engineering problems using slope deflection method.	2
		CO3	Identify, formulate and solve structural analysis problems involving moving loads	2
		CO4	Identify, formulate and solve structural analysis problems involving analysis of two pinned arches.	3
		CO5	Use the techniques, skills, and modern engineering tools like stiffness method necessary for engineering practice.	3
		CO6	Understand the influence line concepts for indeterminate structures	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
3	Design of Steel Structures	CO1	Identify and compute the design loads on a typical steel building.	2
		CO2	Identify the different failure modes of steel tension and compression members and beams, and compute their design strengths.	2
		CO3	Select the most suitable section shape and size for tension and compression members and beams according to specific design criteria.	3
		CO4	Apply relevant provisions to ensure safety and serviceability of structural steel elements.	3
		CO5	Design bolted and welded connections for tension and compressive members and beams	4
		CO6	Get familiarised with structural steel fabrication process and construction.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
4	Water Supply & Sanitary Engineering	CO1	Select appropriate treatments to raw water used for domestic as well as construction purposes	1
		CO2	Plan the pipe-network for water supply and Sewage disposal effectively.	2
		CO3	Compute and Estimate the impurities present in water used for domestic as well as construction works.	4
		CO4	Prepare lay out plan and maintain water distribution and sewer-networks.	3
		CO5	Plan and implement house plumbing work effectively.	3
		CO6	Explain the process of treatment of waste water.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
5	Water Resource Engineering	CO1	Know the objectives of the study related to water.	1
		CO2	List the design criteria of different hydraulic structures.	1
		CO3	Understand the design criteria of different hydrologic structures.	2
		CO4	Identify the flood conditions and preventive measures.	3
		CO5	Learn the different theories of open channel flow.	1
		CO6	Understand the study of winds, tides and wave actions.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL

SL NO	SUBJECT	CO#	Students will be able to :	BTL
6	Advance Lab - I Structural Engineering Lab	CO1	Learn the working progress of augur boring and wash boring	2
		CO2	Test the disturbed and undisturbed samples of soil	3
		CO3	Relate the In-situ Testings of soil	2
		CO4	Demonstrate cyclic trail , free swell,swell potential and swelling Pressure test	3
		CO5	Work on fabrication,casting and testing of simply supported reinforced concrete beams	4
		CO6	Determine in-situ strnegth and qulity of concrete using rebound hammer and ultrasonic pulse velocity tester.	4
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
7	Operating System	CO1	Explain the role, structure, services and types of operating system also discuss various issues and types of system calls.	2
		CO2	Compare and contrast the common algorithm for both preemptive and non preemptive task in os such as FCFS, SJF, Priority, RR scheduling ,differentiate between process and thread ,various threading issues, cite the various approach to solve the problem of mutual exclusion related to critical regions.	2
		CO3	Understand the concept of deadlock in Operating systems how they can be managed and avoided through the implementation of Banker's algorithm and resource request algorithm and also cite different methods involved in recovery from deadlock.	2
		CO4	Learn how virtual memory is used and describe the operation of memory management unit, also define various page replacement strategies like FIFO, LRU, Optimal, also able to analyse the use of demand paging, and segmentation	2
		CO5	Explain various issues related to file system such as structure, access method, efficiency, performance directory structure and its implementation	2
		CO6	Understand various approaches of free space management and apply the knowledge to implement disk scheduling algorithms such as SSTF, LOOK, SCAN, C-LOOK. C-SCAN and also illustrating the overview of I/o hardware application I/O interface kernel I/O subsystem.	2

Course Outcomes - Academic Year 2019-20 6TH SEMESTER

SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
1	Green Technologies	CO1	Explain the concept of various forms of renewable energy	2
		CO2	Outline division aspects and utilization of renewable energy sources for both domestics and agricultural application	2
		CO3	Understand the need of Wind Energy and the various components used in energy generation and know the classifications	2
		CO4	Understand the concept of Biomass energy resources and their classification,	2
		CO5	Compare Solar, Wind and bio energy systems, their prospects, Advantages and limitations	2
		CO6	Explain green guidelines such as GRIHA and LEED .	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
2	Foundation Engineering	CO1	Analyse the retaining walls subjected to earth pressure.	2
		CO2	Compute the bearing capacity of soil.	3
		CO3	Assess the pile load capacity.	2
		CO4	Understand the well foundation concept.	1
		CO5	Carry out the planning for subsoil exploration.	3
		CO6	Have an elementary idea of knowing the various defects present in a rock mass.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
3	Irrigation Engineering	CO1	Solve problem on flood routine and design various hydraulic structures	3
		CO2	Assess the irrigation need of crops	2
		CO3	Design weirs in previous foundations.	4
		CO4	Design gravity dam and earthen dam design the canal systems	4
		CO5	Select and design canal fall	4
		CO6	Develop skills in the ground water flow, type of aquifer and yield from the well.	3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
4	Advanced Transportation Engineering	CO1	Understand the functions of various components in Rail, Air, Water transport systems and their importance.	2
		CO2	Prepare master plans for Airports, harbor site considering natural phenomenon and different harbor railway airport elements	3
		CO3	Have an in depth knowledge on curve sections super elevations and many other geometric design elements	2
		CO4	Predict the upcoming trends and changes which are likely to take place in transport and travel modes.	4
		CO5	Differentiate the workings of various transport systems and their workings in different scenarios.	2
		CO6	Provide the general layouts of the harbours.	3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
5	Prestressed Concrete	CO1	Understand the general mechanical behaviour of prestressed concrete.	2
		CO2	Analyse and design prestressed concrete flexural members.	4
		CO3	Apply design for vertical and horizontal shear in prestressed concrete, able to analyse transfer and development length as well as prestress losses along with design for deflection and crack control of prestressed concrete members.	3
		CO4	Analyse and design simple connections of prestressed concrete members.	4
		CO5	Identify and apply the applicable industry design codes relevant to the design of prestressed concrete members.	3
		CO6	Get familiarised with professional and ethical issues and the importance of lifelong learning in structural engineering along with the prestressed concrete fabrication and construction process.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
6	Business Communication & Skill For Interview	CO1	Communicate effectively in work places.	3
		CO2	Make effective presentation.	3
		CO3	Develop problem solving skills.	3
		CO4	Extend engineering ethics and human values.	2
		CO5	Develop leadership skills.	3
		CO6	Face group discussion and interview..	3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
7	Computer Network and Data Communication.	CO1	Describe the basic concepts of data communication, networks, Internet, OSI and TCP/IP models	2
		CO2	Illustrate the Digital-to-Digital, Analog-to-Analog and Digital-to-Analog conversion techniques	2
		CO3	Explain Analog-to-Analog conversion, different types of multiplexing techniques and transmission	2
		CO4	Understand the different functionalities of data link layer and discuss error detection and correction codes	2
		CO5	Discuss the different media access control protocols and IEEE standards for wired and wireless LANs	2
		CO6	Understand the routing protocols and analyze how to assign the IP addresses for the given network	2

Course Outcomes - Academic Year 2019-20 7TH SEMESTER

SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
1	Ground Improvement Technique	CO1	Understand the different ground improvement techniques	2
		CO2	Understand the various methods of stabilization	2
		CO3	Learn the methods and properties of reinforced soil	1
		CO4	Understand the basic concepts of geosynthetics.	2
		CO5	Understand the basic concept of consolidation and shear strength of soil	2
		CO6	Learn the use of geo synthetics and geo cells in construction work	1
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to:	
2	Environmental Impact Assessment	CO1	Understand the design philosophies and behaviour of structural steel.	2
		CO2	Analyse and design of tension members, columns, beams, beam-columns	4
		CO3	Analyse and design of simple bolted and welded connections.	3
		CO4	Design steel framing system and connections of a building in a team setting.	4
		CO5	Get familiarised with structural steel fabrication process and construction through field trip and/ or speaker presentation.	2
		CO6	Get familiarised with professional and ethical issues and the importance of lifelong learning in structural engineering	2

SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
3	Internet Of Things (IOT)	CO1	Define and explain various issues and challenges of IOT and understand the components of IOT.	1,2
		CO2	Understand various protocols of IOT and architecture of various IOT layers.	2
		CO3	Understand the resourse management like software agent, data synchronization and network architecture	2
		CO4	Understand various case studies of IOT application and use of IOT in Big Data and industry. Interfacing using Raspberry Pi/Arduino	2
		CO5	Outline the difference between WoT and IoT. Understand the use of IOT in Grid and Cloud	2
		CO6	Understand the revolution of Internet in Mobile Devices, Cloud &Sensor Networks	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
4	Marketing Management	CO1	Understand marketing concepts and their application to profit-oriented and non-profit oriented organizations	2
		CO2	Apply these concepts to the analysis of marketing problems and development of appropriate and creative marketing strategies to solve these problems	3
		CO3	Understand the need for a customer orientation in the competitive global business environment	2
		CO4	Have an appreciation that marketing is integrated with other functional areas of business	1
		CO5	Develop an understanding and acquiring skills in how to successfully design and implement marketing plans and strategies	2
		CO6	Understand the concept of marketing mix and its application in traditional and novel environments characterized by emerging information technologies	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
5	Seminar	CO1	Represent the technical concepts and understanding of the subject	1
		CO2	Demonstrate effective communication	2
		CO3	Demonstrate the presentation ability in front of a group of experts	2
		CO4	Apply modern software and/or application tools for representing	3
		CO5	Analyse the modern and contemporary trends in the engineering field	3
		CO6	Show professional ethics on a stage	1
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
6	Minor Project	CO1	Demonstrate the capability of effectively utilising the alotted time	3
		CO2	Apply the theoritical branch knowledge to the practical engineering product/services	3
		CO3	Show contriburtion to the team work	1
		CO4	Show cooperation to the team work	1
		CO5	Demonstrate the capability of learning from the failures	3
		CO6	Mentor/lead the team/a group of people	3
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
7	Cryptography and Network Security	CO1	Classify the symmetric encryption techniques	2
		CO2	Illustrate various Public key cryptographic techniques	2
		CO3	Understand the authentication and hash algorithms.	2
		CO4	Elaborate on authentication applications	2
		CO5	Summarize the intrusion detection and its solutions to overcome the attacks.	2
		CO6	Understand the basic concepts of system level security.	2

Course Outcomes - Academic Year 2019-20 8TH SEMESTER

SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
1	Environmental Geotechnique	CO1	Explain the concept of geosynthesis	2
		CO2	Dicuss forms of waste and their properties	1
		CO3	Select waste disposal sites and work on the siting criterias	4
		CO4	Dsign tailing dams/ash dykes etc	3
		CO5	Discuss on bio remediation and its principle	3
		CO6	Provide layouts of landfills of municipal and hazardous waste	4
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
2	Entrepreneurship Development	CO1	Define what entrepreneurship is, consider how everyone has the potential to be entrepreneurial, and to explore the constituents of the entrepreneurial process	1
		CO2	Identify steps required to research the potential for an innovative idea for the development of an existing enterprise, a new venture or a social change opportunity	3
		CO3	Examine the key resources required to exploit an innovative idea or opportunity to develop an existing business, launch a new venture, or initiate a social enterprise	3
		CO4	Identify the key steps required for exploiting an innovative idea or opportunity to develop an existing business, launch a new venture, or initiate a social enterprise	3
		CO5	Understand the basic development of entrepreneurship as a profession.	2
		CO6	Understand business models.	2
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
3	Seminar	CO1	Represent the technical concepts and understanding of the subject	1
		CO2	Demonstrate effective communication	2
		CO3	Demonstrate the presentation ability in front of a group of experts	2
		CO4	Apply modern software and/or application tools for representing	3
		CO5	Analyse the modern and contemporary trends in the engineering field	3
		CO6	Show professional ethics on a stage	1
SL NO	SUBJECT	COURSE OUTCOMES		BTL
		CO#	Students will be able to :	
4	Major Project	CO1	Demonstrate fair knowledge of most concepts of Engineering	3
		CO2	Apply the multi-disciplinary knowledge through the project	3
		CO3	Show independent decision making capability	1
		CO4	Apply modern tools and softwares for developing products and/or services	3
		CO5	Explain clear objectives of any assignment	3
		CO6	Mentor/lead the team/a group of people	3