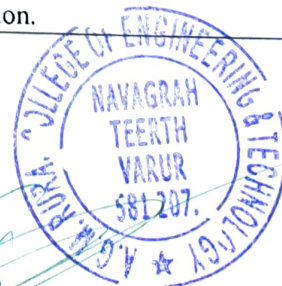




DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

SL.NO	SUB NAME	COs	CO Statement
ISEM			
1	Calculus and Linear Algebra	21MAT11.1	Apply the knowledge of calculus to solve problems related to polar curves and its applications in determining the bentness of a curve.
		21MAT11.2	Learn the notion of partial differentiation to calculate rate of change of multivariate functions and solve problems related to composite functions and Jacobian.
		21MAT11.3	Solve first-order linear/nonlinear ordinary differential equations analytically using standard methods.
		21MAT11.4	Demonstrate various models through higher order differential equations and solve such linear ordinary differential equations.
		21MAT11.5	Test the consistency of a system of linear equations and to solve them by direct and iterative methods.
2	Engineering Physics	21PHY12.1	Interpret the types of mechanical vibrations and their applications, the role of Shock waves in various fields.
		21PHY12.2	Demonstrate the quantization of energy for microscopic system.
		21PHY12.3	App[y LASER and Optical fibers in opto electronic system.
		21PHY12.4	Illustrate merits of quantum free electron theory and applications of Hall effect.
		21PHY12.5	Analyse the importance of XRD and Electron Microscopy in Nano material characterization.





S.D.M Jainmatt Trust®

A.G.M RURAL COLLEGE OF ENGINEERING AND TECHNOLOGY, VARUR

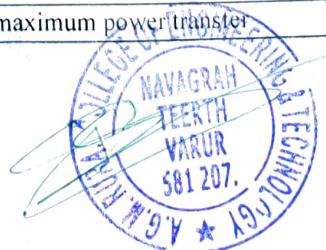
Navagrah Teerth, NH-4 P. B. Road Opp. VRL Head Office, VARUR-581207, Hubballi, Dist. Dharwad, Karnataka
(APPROVED BY AICTE NEW DELHI, AFFILIATED TO VTU BELAGAUM AND RECOGNIZED BY STATE GOVT.)

Phone: 0836-2312071, Fax: 0836-2312061, E-mail: principal@agmrcet.com, Web: www.agmrcet.ac.in



DEPARTMENT OF CIVIL ENGINEERING CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

3	Basic Electrical Engineering	21ELE13.1	Analyse basic DC and AC electric circuits.
		21ELE13.2	Explain the working principles of transformers and electrical machines.
		21ELE13.3	Explain the concepts of electric power transmission and distribution of power.
		21ELE13.4	Understand the wiring methods, electricity billing, and working principles of circuit protective devices and personal safety measures.
4	Elements of Civil Engineering and Mechanics	21CIV14.1	Understand the various fields of civil engineering.
		21CIV14.2	Compute the resultant of a force system and resolution of a force.
		21CIV14.3	Comprehend the action for forces, moments, and other types of loads on rigid bodies and compute the reactive forces.
		21CIV14.4	Locate the centroid and compute the moment of inertia of regular and built-up sections.
		21CIV14.5	Analyze the bodies in motion.
5	Engineering Graphics	21EVN15.1	To understand the basic principles and conventions of engineering drawing
		21EVN 15.2	To use drawing as a communication mode
		21EVN 15.3	To generate pictorial views using CAD software
		21EVN 15.4	To understand the development of surfaces
		21EVN 15.5	To visualize engineering components
6	Engineering Physics laboratory	21PHYL16.1	Understand the measuring techniques.
		21PHYL16.2	Operate different instruments and be capable to analyse the experimental results.
		21PHYL16.3	Construct the circuits and their analysis.
7	Basic Electrical	21ELE17.1	Verify KCL and KVL and maximum power transfer





S.D.M Jainmatt Trust®
A.G.M RURAL COLLEGE OF ENGINEERING AND TECHNOLOGY, VARUR
Navagrah Teerth, NH-4 P. B. Road Opp. VRL Head Office, VARUR-581207, Hubballi, Dist. Dharwad, Karnataka
(APPROVED BY AICTE NEW DELHI, AFFILIATED TO VTU BELAGUM AND RECOGNIZED BY STATE GOVT.)
Phone: 0836-2312071, Fax: 0836-2312061, E-mail: principal@agmrcet.com, Web: www.agmrcet.ac.in



DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

	Engineering Laboratory		theorem for DC circuits.
		21ELE17.2	Compare power factors of different types of lamps.
		21ELE17.3	Demonstrate the measurement of the impedance of an electrical circuit and power consumed by a 3-phase load.
		21ELE17.4	Analyze two-way and three-way control of lamps.
		21ELE17.5	Explain the effects of open and short circuits in simple circuits.
		21ELE17.6	Interpret the suitability of earth resistance measured.
8	Communicative English	21EGH18.1	Understand and apply the Fundamentals of Communication Skills in their communication skills. Understand and use all types of English vocabulary and language proficiency.
		21EGH18.2	Identify the nuances of phonetics, intonation and enhance pronunciation skills.
		21EGH18.3	To impart basic English grammar and essentials of language skills as per present requirement.
		21EGH18.4	Understand and use all types of English vocabulary and language proficiency.
		21EGH18.5	Adopt the Techniques of Information Transfer through presentation.
9	Innovation and Design Thinking	21ITD19.1	Appreciate various design process procedure
		21ITD19.2	Generate and develop design ideas through different technique
		21ITD19.3	Identify the significance of reverse Engineering to Understand products
		21ITD19.4	Draw technical drawing for design ideas





S.D.M Jainmatt Trust®
A.G.M RURAL COLLEGE OF ENGINEERING AND TECHNOLOGY, VARUR
Navagrah Teerth, NH-4 P. B. Road Opp. VRL Head Office, VARUR-581207, Hubballi, Dist. Dharwad, Karnataka
(APPROVED BY AICTE NEW DELHI, AFFILIATED TO VTU BELAGAUM AND RECOGNIZED BY STATE GOVT.)
Phone: 0836-2312071, Fax: 0836-2312061, E-mail: principal@agmrct.ac.in, Web: www.agmrct.ac.in



DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

		II SEM	
10	Advanced Calculus and Numerical Methods	21MAT21.1	Apply the concept of change of order of integration and change of variables to evaluate multiple integrals and their usage in computing the area and volume.
		21MAT21.2	Illustrate the applications of multivariate calculus to understand the solenoidal and irrotational vectors and also exhibit the inter dependence of line, surface and volume integrals.
		21MAT21.3	Formulate physical problems to partial differential equations and to obtain solution for standard practical PDE's.
		21MAT21.4	Apply the knowledge of numerical methods in modelling of various physical and engineering phenomena.
		21MAT21.5	Solve first order ordinary differential equations arising in engineering problems.
11	Engineering Chemistry	21CHE 22.1	Impart the basic knowledge of chemistry and its principles involved in electrochemistry, energy storage devices and its commercial applications.
		21CHE 22.2	Understand the basic principles of corrosion and its prevention, metal finishing and its technological importance
		21CHE 22.3	Master the knowledge of synthesis, properties and utilization of engineering materials like polymers & Nano materials.
		21CHE 22.4	Apply the knowledge of Green Chemistry principles for production of chemical compounds. understanding the concepts of alternative energy sources.
		21CHE 22.5	Understand the basic concepts of water chemistry & theory, basic principle and applications of volumetric analysis and analytical instruments.





DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

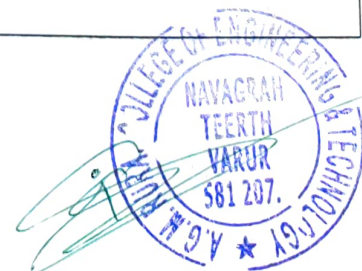
12	Problem Solving Through Programming	21PSP23/13.1	Elucidate the basic architecture and functionalities of a computer and also recognize the hardware parts.
		21PSP23/13.2	Apply programming constructs of C language to solve the real world problem
		21PSP23/13.3	Explore user-defined data structures like arrays in implementing solutions to problems like searching and sorting
		21PSP23/13.4	Explore user-defined data structures like structures, unions and pointers in implementing solutions
		21PSP23/13.5	Design and Develop Solutions to problems using modular programming constructs using functions
13	Basic Electronics and Communication Engineering	21ELN24/14.1	Describe the concepts of electronic circuits encompassing power supplies, amplifiers and oscillators
		21ELN24/14.2	Present the basics of digital logic engineering including data representation, circuits and the microcontroller
		21ELN24/14.3	Discuss the characteristics and technological advances of embedded systems.
		21ELN24/14.4	Relate to the fundamentals of communication engineering spanning from the frequency spectrum to the various
		21ELN24/14.5	Explain the different modes of communications from wired to wireless and the computing involved.
14	Elements of Mechanical Engineering	21EME25/15.1	Acquire a basic understanding role of Mechanical Engineering in the industry and society
		21EME25/15.2	Acquire a basic understanding of the formation of steam and its industrial application.
		21EME25/15.3	Acquire a basic understanding of renewable energy resources and basic concepts of Hydraulic turbines.
		21EME25/15.4	Acquire knowledge of various engineering materials and metal joining techniques.
		21EME25/15.5	Acquire essential experience with heat transfer devices.
		21EME25/15.6	Acquire knowledge on automobile technology in transport application and basics of Refrigeration and Air-Conditioning.
		21EME25/15.7	Acquire essential experience on basic Power transmission systems, including mechanical linkages.
		21EME25/15.8	Acquire knowledge of basic con





DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

15	Engineering Chemistry Laboratory	21CHEL26/16.1	Determine the pKa and coefficient of Viscosity of a given organic liquid.
		21CHEL26/16.2	Estimate the amount of substance present in the given solution using Potentiometer Conductometric and Colorimetric.
		21CHEL26/16.3	Determine the total hardness and chemical oxygen demand in the given solution by volumetric analysis method
		21CHEL26/16.4	Estimate the percentage of Nickel, copper and Iron in the given analyte solution by titration method.
		21CHEL26/16.5	CO5 Demonstrate flame photometric estimation of sodium & potassium and the synthesis of nanomaterials by Precipitation method. Handling different types of instruments for analysis of materials using small quantities of materials involved in quick and accurate results
16	Computer Programming Laborator	21CPL27/17.1	1. Define the problem statement and identify the need for computer programming
		21CPL27/17.2	2. Make use of C compiler, IDE for programming, identify and correct the syntax and syntactic errors in programming
		21CPL27/17.3	3. Develop algorithm, flowchart and write programs to solve the given problem
		21CPL27/17.4	4. Demonstrate use of functions, recursive functions, arrays, strings, structures and pointers in problem solving.
		21CPL27/17.5	5. Document the inference and observations made from the implementation. Write algorithms ,flowcharts and program for simple problems
17	Professional Writing Skills in	21EGH28.1	To understand and identify the Common Errors in Writing and Speaking.
		21EGH28.2	To Achieve better Technical writing and Presentation skills

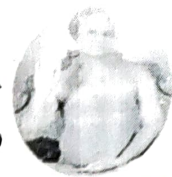




S.D.M Jainmatt Trust®

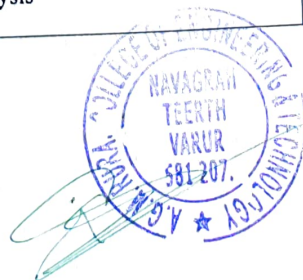
A.G.M RURAL COLLEGE OF ENGINEERING AND TECHNOLOGY, VARUR

Navagrah Teerth, NH-4 P. B. Road Opp, VRL Head Office, VARUR-581207, Hubballi, Dist. Dharwad, Karnataka
(APPROVED BY AICTE NEW DELHI, AFFILIATED TO VTU BELAGAUM AND RECOGNIZED BY STATE GOVT.)
Phone: 0836-2312071, Fax: 0836-2312061, E-mail: principal@agmrct.ac.in, Web: www.agmrct.ac.in



DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

	English	21EGH28.3	To read Technical proposals properly and make them to Write good technical reports.
		21EGH28.4	Acquire Employment and Workplace communication skills
		21EGH28.5	To learn about Techniques of Information Transfer through presentation in different level
18	Scientific Foundations of Health	21SFH29.1	To understand Health and wellness (and its Beliefs) To acquire Good Health & It's balance for positive mindset To inculcate and develop the healthy lifestyle habits for good health. To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world To adopt the innovative & positive methods to avoid risks from harmful habits in their campus & outside the To positively fight against harmful diseases for good health through positive mindset.
III SEM			
19	Transform Calculus, Fourier Series and Numerical Techniques	18MAT31.1	Use Laplace transform and inverse Laplace transform in solving differential/ integral equation arising in network analysis, control systems and other fields of engineering.
		18MAT31.2	Demonstrate Fourier series to study the behavior of periodic functions and their applications in system communications, digital signal processing and field theory.
		18MAT31.3	Make use of Fourier transform and Z-transform to illustrate discrete/continuous function arising in wave and heat propagation, signals and systems.
		18MAT31.4	Solve first and second order ordinary differential equations arising in engineering problems using single step and multistep numerical methods.
		18MAT31.5	Determine the extremals of functional using calculus of variations and solve problems arising in dynamics of rigid bodies and vibrational analysis





DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

20	GEODETIC ENGINEERING	21CV32.1	Execute survey using compass and plane table
		21CV32.2	Find the level of ground surface and Calculation of area and volumes
		21CV32.3	Operate theodolite for field execution
		21CV32.4	Estimate the capacity of reservoir
		21CV32.5	Interpret satellite imageries
21	STRENGTH OF MATERIALS	21CV33.1	Evaluate the behavior when a solid material is subjected to various types of forces (namely Compressive, Tensile, Thermal, Shear, flexure, Torque, internal fluid pressure) and estimate stresses and corresponding strain developed. (L3)
		21CV33.2	Estimate the forces developed and draw schematic diagram for stresses, forces, moments for simple beams with different types of support and are subjected to various types of loads (L3)
		21CV33.3	Evaluate the behavior when a solid material is subjected to Torque and internal fluid pressure and estimate stresses and corresponding strain developed. (L3)
		21CV33.4	Distinguish the behaviour of short and long column and calculate load at failure & explain the behaviour of spring
		21CV33.5	Examine and Evaluate the mechanical properties of various materials under different loading conditions
		21CV34.1	Apply geological knowledge in different civil engineering practice.
22	EARTH RESOURCE AND ENGINEERING	21CV34.2	Students will acquire knowledge on durability and competence of foundation rocks, and confidence enough to use the best building materials.
		21CV34.3	Competent enough to provide services for the safety, stability, economy and life of the structures that they construct
		21CV34.4	Able to solve various issues related to ground water exploration, build up dams, bridges, tunnels which are often confronted with ground water problems
		21CV34.5	Intelligent enough to apply GIS, GPS and remote sensing as a latest tool in different civil engineering for safe and solid construction.





S.D.M Jainmatt Trust®

A.G.M RURAL COLLEGE OF ENGINEERING AND TECHNOLOGY, VARUR

Navagrah Teerth, NH-4 P. B. Road Opp, VRL Head Office, VARUR-581207, Hubballi, Dist. Dharwad, Karnataka
(APPROVED BY AICTE NEW DELHI, AFFILIATED TO VTU BELAGAUM AND RECOGNIZED BY STATE GOVT.)
Phone: 0836-2312071, Fax: 0836-2312061, E-mail: principal@agmrcet.com, Web: www.agmrcet.ac.in



DEPARTMENT OF CIVIL ENGINEERING CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

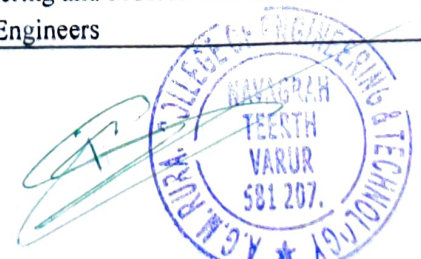
23	COMPUTER AIDED BUILDING PLANNING AND DRAWING	21CVL35.1	Prepare, read and interpret the drawings in a professional set up.
		21CVL35.2	Know the procedures of submission of drawings and Develop working and submission drawings for building.
		21CVL35.3	Plan and design of residential or public building as per the given requirements.
24	FIRE SAFETY IN BUILDINGS	21CV385.1	Understand types of fire, combustion process and fire resistance
		21CV385.2	Plan for fire safety and design of lifts
		21CV385.3	Design flow network in buildings
		21CV385.4	Design of electrical systems and maintenance
		21CV385.5	Perform health evaluation of buildings and suggest remedies
IV SEM			
25	Engineering Mathematics-IV	18MAT41.1	Use the concepts of analytic function and complex potentials to solve the problems arising in electromagnetic field theory.
		18MAT41.2	Utilize conformal transformation and complex integral arising in aero foil theory, fluid flow visualization and image processing.
		18MAT41.3	Apply discrete and continuous probability distributions in analyzing the probability models arising in engineering field.
		18MAT41.4	Make use of the correlation and regression analysis to fit a suitable mathematical model for the statistical data.
		18MAT41.5	Construct joint probability distributions and demonstrate the validity of testing the hypothesis.
26	FLUID MECHANICS & HYDRAULICS	21CV42.1	Understand fundamental properties of fluids and solve problems on Hydrostatics
		21CV42.2	Apply Principles of Mathematics to represent Kinematics and Bernoulli's principles
		21CV42.3	Compute discharge through pipes, notches and weirs
		21CV42.4	Design of open channels of various cross sections
		21CV42.5	Design of turbines for the given data and understand their operation characteristics





DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

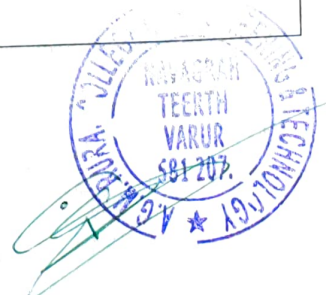
27	PUBLIC HEALTH ENGINEERING	21CV43.1	Estimate average and peak water demand for a community.
		21CV43.2	Evaluate water quality and environmental significance of various parameters and plan suitable treatment system.
		21CV43.3	Design the different units of water treatment plant
		21CV43.4	Understand and design the various units of wastewater treatment plant
		21CV43.5	Acquire capability to conduct experiments and estimate the concentration of different parameters and compare the obtained results with the concerned guidelines and regulations.
28	ANALYSIS OF STRUCTURES	21CV44.1	Evaluate slope and deflections in beams using geometrical methods
		21CV44.2	Determine deflections in trusses and frames using energy principles.
		21CV44.3	Analyze arches and cables for stress resultants
		21CV44.4	Apply slope deflection method in analyzing indeterminate structures and construct bending moment diagram.
		21CV44.5	Analyze continuous beams, frames and trusses using stiffness matrix method of analysis.
29	EARTH RESOURCES AND ENGINEERING LABORATORY	21CVL46.1	Comprehend the relations between minerals and rocks based on their physical properties
		21CVL46.2	Assess the suitability of materials used in building construction
		21CVL46.3	Differentiate geological investigations necessary for the construction of dams, bridges, and tunnels
		21CVL46.4	Describe the groundwater investigation using resistivity methods
		21CVL46.5	Understand the applications of Geospatial technology in Civil Engineering.
30	CONSTITUTION OF INDIA AND PROFESSIONAL ETHICS (CIP)	21CIP47.1	Have constitutional knowledge and legal literacy.
		21CIP47.2	Understand Engineering and Professional ethics and responsibilities of Engineers





DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

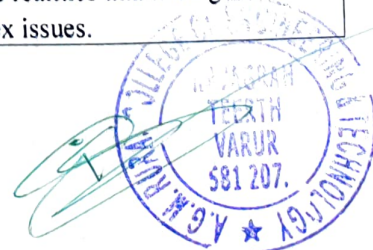
31	UNIVERSAL HUMAN VALUES-II: UNDERSTANDING HARMONY and ETHICAL HUMAN CONDUCT	21UHV49.1	Holistic vision of life
		21UHV49.2	Socially responsible behavior
		21UHV49.3	Environmentally responsible work
		21UHV49.4	Ethical human conduct
		21UHV49.5	Having Competence and Capabilities for Maintaining Health and Hygiene
		21UHV49.6	Appreciation and aspiration for excellence (merit) and gratitude for all
V SEM			
32	HYDROLOGY AND WATER RESOURCE ENGINEERING	21CV51.1	Provide a background in the theory of hydrological processes and their measurement
		21CV51.2	Estimate runoff and develop unit hydrographs.
		21CV51.3	Find the water requirement and frequency of irrigation for various crops
		21CV51.4	Find the canal capacity and compute the reservoir capacity
		21CV51.5	Analyze floods and droughts. Emphasize on the importance of conservation of water and water bodies.
33	TRANSPORTATION ENGINEERING	21CV52.1	Acquire the capability of proposing a new alignment or re-alignment of existing roads, conduct necessary field investigation for generation of required data
		21CV52.2	Evaluate the engineering properties of the materials and suggest the suitability of the same for pavement construction
		21CV52.3	Design road geometrics, structural components of pavement and drainage.
		21CV52.4	Evaluate the highway economics by few select methods and will have a basic knowledge of various highway financing concepts.





DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

34	DESIGN OF RC STRUCTURAL ELEMENTS	21CV53.1	Understand the design philosophy and principles.
		21CV53.2	Solve engineering problems of RC elements subjected to flexure, shear, and torsion.
		21CV53.3	Demonstrate the procedural knowledge in designs of RC structural elements such as slabs, columns, and footings.
		21CV53.4	Owns professional and ethical responsibility.
35	GEOTECHNICAL ENGINEERING	21CV54.1	Determine the index properties of soil and hence classify the soil
		21CV54.2	Assess the compaction and consolidation characteristics of soil
		21CV54.3	Determine the permeability of soils and assess the seepage in hydraulic structures
		21CV54.4	Evaluate shear parameters of the soil using shear tests
		21CV54.5	Ability to determine bearing capacity of soil and achieve proficiency in proportioning shallow isolated and combined footings for uniform bearing pressure
36	GEOTECHNICAL ENGINEERING LABORATORY	21CVL55.1	Physical and index properties of the soil
		21CVL55.2	Classify based on index properties and field identification
		21CVL55.3	To determine OMC and MDD, plan and assess field compaction program
		21CVL55.4	Shear strength and consolidation parameters to assess strength and deformation characteristics
		21CVL55.5	In-situ shear strength characteristics (SPT-Demonstration)
37	ENVIRONMENTAL STUDIES	21CIV57.1	Understand the principles of ecology and environmental issues that apply to air, land, and water issues on a global scale
		21CIV57.2	Develop critical thinking and/or observation skills and apply them to the analysis of a problem or question related to the environment.
		21CIV57.3	Demonstrate ecology knowledge of a complex relationship between biotic and a biotic component.
		21CIV57.4	Apply their ecological knowledge to illustrate and graph a problem and describe the realities that managers face when dealing with complex issues.





S.D.M Jainmatt Trust®
A.G.M RURAL COLLEGE OF ENGINEERING AND TECHNOLOGY, VARUR
Navagrah Teerth, NH-4 P. B. Road Opp, VRL Head Office, VARUR-581207, Hubballi, Dist. Dharwad, Karnataka
(APPROVED BY AICTE NEW DELHI, AFFILIATED TO VTU BELAGAUM AND RECOGNIZED BY STATE GOVT.)
Phone: 0836-2312071, Fax: 0836-2312061, E-mail: principal@agmrcet.com, Web: www.agmrcet.ac.in



DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

38	QUALITY CONTROL AND QUALITY ASSURANCE	21CVL581.1	Realize the importance of quality in construction
		21CVL581.2	Apply SQC techniques in different aspects of construction
		21CVL581.3	Implement QMS programs at different levels of construction
VI SEM			
39	CONSTRUCTION MANAGEMENT AND ENTREPRENURSHIP	21CV61.1	Understand various management principles of construction industry (L2)
		21CV61.2	Use planning, organizing, scheduling, monitoring and controlling techniques for managing construction activity (L4)
		21CV61.3	Understand importance of quality control and safety in construction. (L2)
		21CV61.4	Understand managing data pertaining to construction project. (L4)
		21CV61.5	Evaluate alternatives and develop capital budget for different scenarios.
40	CONCRETE TECHNOLOGY	21CV62.1	Assess and infer various properties of cement, cementitious materials, Fine and coarse aggregate as per codal provision and specifications (L2)
		21CV62.2	Design the concrete mix for the given materials as per IS:10262-2019 provisions (L4)
		21CV62.3	Understand the manufacturing process and asses the quality of green (L2)
		21CV62.4	Describe the properties of fresh and hardened concrete – Strength and Durability aspects (L3)
		21CV62.5	Examine and Evaluate properties of Cement and Concrete
41	DESIGN OF STEEL STRUCTURES	21CV63.1	Possess knowledge of Steel Structures Advantages and Disadvantages of Steel structures, steel code provisions and plastic behaviour of structural steel.
		21CV63.2	Understand the Concept of Bolted and Welded connections.
		21CV63.3	Understand the Concept of Design of compression members, built-up columns and columns splices
		21CV63.4	Understand the Concept of Design of tension members, simple slab base and gusseted base.
		21CV63.5	Understand the Concept of Design of laterally supported and un-supported steel beams.





DEPARTMENT OF CIVIL ENGINEERING
CO STATEMENT FOR THE SCHEME 2021 (BATCH 2021-2025)

42	Professional Elective-1 GROUND WATER HYDRAULICS	21CV645.1	Explain the importance of Groundwater
		21CV645.2	Paraphrasing the Characteristics of aquifers
		21CV645.3	Estimate the quantity of groundwater by various methods
		21CV645.4	Analyze the zones of groundwater resource
		21CV645.5	Analyze the quality of groundwater and understand Techniques of modeling
43	OCCUPATIONAL HEALTH & SAFETY	21CV653.1	Identify hazards in the workplace that pose a danger or threat to their safety or health, or that of others.
		21CV653.2	Control unsafe or unhealthy hazards and propose methods to eliminate the hazard.
		21CV653.3	Present a coherent analysis of a potential safety or health hazard both verbally and in writing, citing the occupational Health and Safety Regulations as well as supported legislation
		21CV653.4	Discuss the role of health and safety in the workplace pertaining to the responsibilities of workers, managers, supervisors.
		21CV653.5	Identify the decisions required to maintain protection of the environment, workplace as well as personal health and safety.

