



DNR COLLEGE OF ENGINEERING & TECHNOLOGY BHIMAVARAM.
DEPARTMENT OF CIVIL ENGINEERING
COURSE OUTCOMES

Program Name:	I B.TECH- CE	Class / Sem	I/I
Regulation	R20		

CO Statement -MATHEMATICS-I
Determine the sequence whether it is convergent or divergent by using the appropriate tests.
Analyse mean value theorems in real life problems.
Discuss linear differential equations with constant coefficients, complementary function and particular integrals.
Solve the differential equations related to various engineering fields.
Explain the different types of partial differential equations.
Apply the concept of multiple integrals in practical problem.

CO Statement- ENGLISH
Identify the context and pieces of specific information by understanding and responding to the written and spoken purpose thoroughly.
Apply suitable strategies for skimming and scanning to get the main idea of a text and locate specific information.
Construct sentences using proper grammatical structures and correct word forms.
Observe the principles of writing to paragraphs, arguments, essays and formal/informal communication.
Build confidence and adapt themselves to the social and public descriptions, discussions and presentations.
Support the importance of vocabulary and using them effectively in writing technical articles and presentations of any genre.

CO Statement-ENGINEERING PHYSICS
Explain the principles and applications of wave optics.
Interpret the development and applications of Laser light and its uses in optical fiber communication.
Classify the properties of dielectric and magnetic materials for various applications.
Identify the use of ultrasonics in different fields and in architectural acoustics
Apply powder method to measure the crystallinity of a solid
Analyze the applications to solve practical problems related to materials used for engineering

CO Statement-ENGINEERING DRAWING
Prepare drawings as per standards (BIS).
Solve specific geometrical problems involving points and lines.
Solve specific geometrical problems in plane geometry involving plane figures.
Solve specific geometrical problems in plane geometry involving solid figures.
Produce orthographic projection of engineering components working from pictorial drawings
Understand the basic AUTOCAD commands

CO Statement –ENGINEERING GEOLOGY
Identify and classify the geological minerals.
Analyze the rock strengths of various rocks.
Classify and measure the earthquake prone areas to practice the hazard zonation.
Classify, monitor and measure the Landslides and subsidence.
Analyze and interpret the Engineering Geologic maps.
Explain the ground conditions through geophysical surveys.

CO Statement –ENGLISH COMMUNICATION SKILLS LAB
Remember and understand the different aspects of English language proficiency with emphasis on LSRW skills.
Apply communication skills through various language learning activities.
Analyze the English speech sounds, stress, rhythm, intonation and syllable division for better listening comprehension.
Exhibit an acceptable etiquette essential in social settings.
Get awareness on mother tongue influence and neutralize it in order to improve fluency and clarity in spoken English.
Remember and understand the different aspects of English language proficiency with emphasis on LSRW skills.

CO Statement – ENGINEERING PHYSICS LAB
Operate optical instruments like microscope and spectrometer. To determine thickness of a hair/paper with the concept of interference.
Determine of radius of curvature of a given plano convex lens by Newton's rings and estimate the wavelength of different colors using diffraction grating.
Determine of dispersive power of the prism. To determine the wavelength of Laser light using diffraction grating.
Determine the rigidity modulus of a wire and verify the laws of sonometer. Determine the acceleration due to gravity using compound pendulum.
Study the variation of B versus H by magnetizing the magnetic material (B-H curve) and to plot the intensity of the magnetic field of circular coil carrying current with distance.
Determine the dielectric constant using charging and discharging method. Determine the frequency of a tuning fork by Melde's experiment.

CO Statement – BASICS OF CIVIL ENGG. WORKSHOP LAB
Identify various components of a building and give lump-sum estimate.
Determine distances and irregular areas using conventional survey instruments like chain, tape, cross-staff and compass.
Identify different soils.
Determine centre of gravity and moment of inertia of channel and I-sections.
Recognize the properties and manufacturing process of bricks and composition of cement and concrete.
Recognize the working principles of survey instruments.