Vidya Vikas Education Trust's
Universal College of Engineering, Kaman Road, Vasai-401208

DEPARTMENT OF CIVIL ENGINEERING

COURSE OUTCOMES

Year/Class/ Semester: S.E./CE/ III

Subject Code	Subject Name	CO's
CE-C301	Applied Mathematics III	At the end of the course student will be able to: CO1- Solve the Ordinary and Partial Differential Equations using Laplace Transformation. CO2- Solve Ordinary and Partial Differential Equations using Fourier series. CO3- Solve initial and boundary value problems involving ordinary differential equations. CO4- Fit the curve using concept of correlation and regression. CO5- Apply bilinear transformations and conformal mappings. CO6- Identify the applicability of theorems and evaluate the contour integrals
CE-C302	Surveying I	At the end of the course student will be able to: CO1- Understand various principles in Surveying and Levelling. CO2- Demonstrate use of varied surveying instruments on field with advantages and Limitations. CO3- Analyse and interpret Field data. CO4- Apply interpreted Field data on site.
CE-C303	Strength of Materials	At the end of the course student will be able to: CO1- Familiar with the concept of simple stress, strain and strain energy. CO2- Calculate the Shear force and bending moment for various types of flexural members. CO3- Understand the principle planes, stresses and shear stresses in beam. CO4- Understand the theory of simple bending in flexural members. CO5- Students have understood with the concept of stresses in axially and eccentrically loaded vertical members. **CO6-** Understand the thin cylindrical and spherical shell sand torsion in circular shaft.
CE-C303	Engineering Geology	At the end of the course student will be able to: CO1- Understand basic knowledge of Geology and explain the origin, texture, structures like fold, fault, joint etc of minerals and rocks along

		with their classification suitability of rock type for any civil engineering project CO2- Demonstrate 'Theory of Plate Tectonics' which helps to explain much of the global-scale geology including the formation of mountains, oceans, different landforms and the occurrence and distribution of earthquakes, volcanoes, landslides etc CO3- Explain methods of surface and subsurface investigation and interpret structural geology in order to understand deformational structures like fold, fault, joint, etc. and the forces responsible for their formation, along with the effects caused due to geological conditions during the construction of dams and tunnels. CO4- Explain groundwater zones, factors controlling water bearing capacity of rocks, geological work of ground water and techniques of recharge of groundwater.
CE-C305	Fluid Mechanics - I	At the end of the course student will be able to: CO1- Understand and compare different properties &types of fluids, their applications in pressure measurement. CO2- Analyze relative equilibrium, flow pattern of fluid. CO3- Apply knowledge of Euler's & Bernoulli's equation in practical application. CO4- Evaluate different flow measurement devices & discharge over different weirs.