



Vidya Vikas Education Trust's
Universal College of Engineering, Kaman Road, Vasai-401212

DEPARTMENT OF CIVIL ENGINEERING

COURSE OUTCOMES

Year/Class/ Semester: T.E./CE/ VI

Subject Code	Subject Name	CO's
CE-C601	Geotechnical Engg.– II	At the end of the course students will be able to: CO1- Understand concept of stability of slope and study various method of evaluating stability of slope. CO2- Understand lateral earth pressure theories and method to calculate active and passive earth pressure also able to check stability of retaining structure. CO3- Calculate bearing capacity to design various footing such as square, rectangle etc. CO4- Understand necessity of pile foundation and also able to design and calculate load on pile CO5- Understand concept of underground conduit and estimation of strut load in braced cut. CO6- Understand application of reinforced soil.
CE-C602	Design & Drawing Of Steel Structures	At the end of the course students will be able to: CO1- Get the idea of the properties of steel and working stress method & limit state method. CO2- Design of simple connections and bracket connections with bolted & welded. CO3- Get the idea about failures of tension member and design of tension member. CO4- Get the idea about failures of compression member and design of compression member as strut & column. CO5- Design column bases. CO6- Design laterally supported and unsupported beam. CO7- Design a truss. CO8- Design a plate girder using IS code.
CE-C603	Applied Hydraulics – II	At the end of the course students will be able to: CO1- Understand the boundary layer theory and boundary layer separation on the submerged bodies. CO2- Understand the impact of engineering solutions for boundary layer theory in the context of submerged bodies. CO3- Develop the understanding of the flow phenomena and parameters in channel section. CO4- Design most efficient channel section. CO5- Understand the different slope profiles and its effect on the flow characteristics. CO6- Apply the specific energy concepts on various channel sections.



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		CO7- Apply Kennedy's and Lacey's theory for designing irrigation channels.
CE-C604	Transportation Engg. – II	At the end of the course students will be able to: CO1- Understand the elements of Air Transportation such as terminal building, parking facilities, apron, hangars, markings and lightings, airport drainage, ATC etc. CO2- Design the airport elements such as runway orientation, length, gate and taxiway. CO3- Understand elements of water transportation like harbours, ports and breakwater including study of facilities and equipment's used. CO4- Decide the Cross Section of the Permanent way and suggest suitable ballast, sleepers, rail and their fixtures and fasteners. CO5- Understand and design the geometric elements of Railway Line such as Gradient, Curves, Super Elevation, Turnouts etc. CO6- Understand working of yards, signalling systems, maintenance of railway track and its construction and modernization.
CE-C605	Environmental Engineering - I	At the end of the course students will be able to: CO1- Understand the importance of sanitation. They will also learn to estimate water demand using population forecasting methods. CO2- Give layout of distribution system which is suitable for particular location. CO3- Get the idea about whole water treatment process and will be able to design sedimentation tank and rapid sand filter. CO4- Get the idea about different coagulants, disinfectant, iron removal, defluoridation, Reverse osmosis and hardness removing methods. CO5- Get the idea about how to manage the solid waste in the society. CO6- Give plumbing layout and improve the sanitation by providing modern plumbing systems with water efficient fixture.
CE-C606	Theory Of Reinforced And Prestressed Concrete	At the end of the course students will be able to: CO1- Understand the concept of reinforced concrete & working stress method (WSM). CO2- Analyse & design various types of beams& columns by WSM. CO3- Design slab, footing & shear bonds in structure by WSM. CO4- Understand basic principles, methods, losses & analysis of prestressed concrete. CO5- Learn the general design principles of a prestressed concrete member.