Vidya Vikas Education Trust's
Universal College of Engineering, Kaman Road, Vasai-401208
Accredited B+ Grade by NAAC

## DEPARTMENT OF CIVIL ENGINEERING

**Year/Class/Semester**:BE./CIVIL/VII

| Course Code | Course Name | CO's |
|---|---|---|
| CEC801 | **Construction Management** | *Student will be able to*<br>**CO1:** Explain & apply the knowledge of management functions like planning, scheduling, Executing & controlling the construction projects.<br>**CO2:** Prepare feasible project schedule by using various scheduling techniques.<br>**CO3**: Gain knowledge of managing various resources & recommend best method of allocating resources to the project<br>**CO4:** Develop optimum relationship between time & cost for construction project<br>**CO5**: Implement quality & safety measures on construction sites during execution of Civil Engineering projects.<br>**CO6**: Describe the importance of labour acts. |
| CEDLO8012 | **Design of Hydraulic Structures** | *Student will be able to*<br>**CO1:** Explain the Reservoir planning, storage capacity, Sedimentation & Reservoir losses.<br>**CO2:** Carry out the stability analysis of Gravity & Earth Dam.<br>**CO3:** Explain the causes of failure of various dams & their design criteria.<br>**CO4:** Design an ogee spillway.<br>**CO5:** Suggest suitable energy dissipation measures.<br>**CO6:** Describe the various minor irrigation structures such as Weirs & barrages, Canal Regulators and Cross-drainage works. |
| CEDLO8013 | **Construction Safety** | *Student will be able to*<br>**CO1:** Apply safety mechanisms and concepts for improving overall safety of construction sites<br>**CO2:** Demonstrate the various safety requirements<br>**CO3:** Explain the various techniques to prevent accidents.<br>**CO4:** Examine construction safety management.<br>**CO5:** Implement safety policies, methods and training on construction sites. |

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**Year/Class/Semester**:BE./CIVIL/VII

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| | | **CO6:** Practice safety in construction operations. |
| CEDLO8021 | **Repairs, Rehabilitation and Retrofitting of Structures** | *Student will be able to*<br>**CO1:** Describe the concept of repair and its need.<br>**CO2:** Classify various causes of deterioration of concrete structure and Distresses monitoring techniques.<br>**CO3:** Classify various materials of repairs and their properties.<br>**CO4:** Explain various methods of repairs of concrete structure.<br>**CO5:** Describe various methods of repairs of steel structure.<br>**CO6:** Explain seismic retrofitting and maintenance of heritage structures. |
| CEDLO8023 | **Transportation System Engineering** | *Student will be able to*<br>**CO1:** Compare different modes of transportation and describe National Urban Transport Policies.<br>**CO2:** Plan and design different elements of Airports, movements of aircrafts and helicopters.<br>**CO3:** Plan and design geometric elements of railway system and explain the elements of modern trains.<br>**CO4:** Explain different components of water transport.<br>**CO5:** Plan different public transport system, routing, scheduling and estimating transit capacity of the system.<br>**CO6:** Explain different elements of bridge and analyse various hydrological elements of bridge. |
| CECILOC 8011 | **Project Management** | *Student will be able to*<br>**CO1:** Apply selection criteria and select an appropriate project from different options.<br>**CO2:** Write work break down structure for a project and develop a schedule based on it.<br>**CO3:** Identify opportunities and threats to the project and decide an approach to deal with them strategically.<br>**CO4:** Use Earned value technique and determine & predict status of the project.<br>**CO5:** Capture lessons learned during project phases and document them for future reference |