

List and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

| COURSE CODE | COURSE NAME | DESCRIPTION | TOPIC ADDRESSED |
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| GE8076 | Professional Ethics In Engineering | <ul style="list-style-type: none"> ➤ To enable the students to create an awareness on Engineering Ethics and Human Values, to instil Moral and Social Values and Loyalty and to appreciate the rights of others. | Professional Ethics |
| GE6084 | Human Rights | <ul style="list-style-type: none"> ➤ To sensitize the Engineering students to various aspects of Human Rights | Human Values |
| GE8075 | Intellectual property rights | <ul style="list-style-type: none"> ➤ To give an idea about IPR, registration and its enforcement. | Professional Ethics |
| GE8291 | Environmental Science and Engineering | <ul style="list-style-type: none"> ➤ To study the nature and facts about environment. ➤ To finding and implementing scientific, technological, economic and political solutions to environmental problems. ➤ To study the interrelationship between living organism and environment. ➤ To appreciate the importance of environment by assessing its impact on the human world; envision the surrounding environment, its functions and its value. ➤ To study the dynamic processes and understand the features of the earth's interior and surface. ➤ To study the integrated themes and biodiversity, natural resources, pollution control and waste management | Environment and Sustainability |
| CE8392 | Engineering Geology | <ul style="list-style-type: none"> ➤ To understand the importance of geological knowledge such as earth, earthquake, volcanism and to apply this knowledge in projects such as dams, tunnels, bridges, roads, airport and harbour | Environment and Sustainability |
| EN8491 | Water Supply Engineering | <ul style="list-style-type: none"> ➤ To equip the students with the principles and design of water treatment units and distribution system | Environment and Sustainability |

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| CE8603 | Irrigation Engineering | <ul style="list-style-type: none"> ➤ Exposed to different phases in irrigation practices and Planning and management of irrigation. Further they will be imparted required knowledge on Irrigation storage and distribution canal system and Irrigation management. | Environment and Sustainability |
| CE8491 | Soil Mechanics | <ul style="list-style-type: none"> ➤ To impart knowledge to classify the soil based on index properties and to assess their engineering properties based on the classification. To familiarize the students about the fundamental concepts of compaction, flow through soil, stress transformation, stress distribution, consolidation and shear strength of soils. To impart knowledge of design of both finite and infinite slopes | Environment and Sustainability |
| CE8604 | Highway Engineering | <ul style="list-style-type: none"> ➤ To give an overview about the highway engineering with respect to, planning, design, construction and maintenance of highways as per IRC standards, specifications and methods | Environment and Sustainability |
| EN8592 | Wastewater Engineering | <ul style="list-style-type: none"> ➤ To help students develop the ability to apply basic understanding of physical, chemical, and biological phenomena for successful design, operation and maintenance of sewage treatment plants | Environment and Sustainability |
| CE8702 | Railways, Airports, Docks and Harbour Engineering | <ul style="list-style-type: none"> ➤ To introduce the students about Railways planning, design, construction and maintenance and planning design principles of airport and harbour | Environment and Sustainability |
| CE8005 | Air pollution and control engineering | <ul style="list-style-type: none"> ➤ To impart knowledge on the principle and design of control of Indoor/ particulate/ gaseous air pollutant and its emerging trends. | Environment and Sustainability |
| CE8008 | Transport and environment | <ul style="list-style-type: none"> ➤ To create an awareness / overview of the impact of Transportation Projects on the environment and society | Environment and Sustainability |

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| GE8071 | Disaster Management | <ul style="list-style-type: none"> ➤ To provide students an exposure to disasters, their significance and types. ➤ To ensure that students begin to understand the relationship between vulnerability, disasters, disaster prevention and risk reduction ➤ To gain a preliminary understanding of approaches of Disaster Risk Reduction (DRR) ➤ To enhance awareness of institutional processes in the country and ➤ To develop rudimentary ability to respond to their surroundings with potential disaster response in areas where they live, with due sensitivity | Environment and Sustainability |
| CE8001 | Ground improvement techniques | <ul style="list-style-type: none"> ➤ Exposed to various problems associated with soil deposits and methods to evaluate them. The different techniques will be taught to them to improve the characteristics of difficult soils as well as design techniques required to implement various ground improvement methods. | Environment and Sustainability |
| CE8003 | Rock engineering | <ul style="list-style-type: none"> ➤ To impart knowledge on fundamentals of rock mechanics and its application in solving simple problems associated with rock slopes and underground openings. Student gains the knowledge on the mechanics of rock and its applications in underground structures and rock slope stability analysis | Environment and Sustainability |
| CE8010 | Environmental and social impact assessment | <ul style="list-style-type: none"> ➤ To impart the knowledge and skills to identify, assess and mitigate the environmental and social impacts of developmental projects | Environment and Sustainability |
| EN8591 | Municipal solid waste management | <ul style="list-style-type: none"> ➤ conversant with the types, sources, generation, storage, collection, transport, processing and disposal of municipal solid waste | Environment and Sustainability |