|  |
| --- |
| **Techno India NJR Institute of Technology** |
| **Department of Civil Engineering** |
|  |
| **B. Tech Scheme 2023-24** |
| **SEMESTER**  | **1** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **1FY2-01** | Engineering Mathematics-I |
| **BSC** | **1FY2-03** | Engineering Chemistry |
| **HSMC** | **1FY1-04** | Communication Skills |
| **ESC** | **1FY3-06** | Programming for Problem Solving |
| **ESC** | **1FY3-09** | Basic Civil Engineering |
| **BSC** | **1FY2-21** | Engineering Chemistry Lab |
| **HSMC** | **1FY1-22** | Human Values Activities |
| **ESC** | **1FY3-24** | Computer Programming Lab |
| **ESC** |  **1FY3-27** | Basic Civil Engineering Lab |
| **ESC** | **1FY3-28** | Computer Aided Engineering Graphics |
| **SODECA** | **1FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |  |   |
| **SEMESTER**  | **2** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **2FY2-01** | Engineering Mathematics-II |
| **BSC** | **2FY2-02** | Engineering Physics |
| **HSMC** | **2FY1-05** | Human Values |
| **ESC** | **2FY3-07** | Basic Mechanical Engineering |
| **ESC** | **2FY3-08** | Basic Electrical Engineering |
| **BSC** | **2FY2-20** | Engineering Physics Lab |
| **HSMC** | **2FY1-23** | Human Values Activities |
| **ESC** | **2FY3-25** | Manufacturing Practices Workshop |
| **ESC** | **2FY3-26** | Basic Electrical Engineering Lab |
| **ESC** | **2FY3-29** | Computer Aided Machine Drawing |
| **SODECA** | **2FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **3** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | 3CE2-01 | ADVANCE ENGINEERING MATHEMATICS-I |
| **HSMC** | 3CE1-02 | TECHNICAL COMMUNICATION |
| **ESC** | 3CE3-04 | Engineering Mechanics |
| **PCC** | 3CE4-05 | SURVEYING |
| **PCC** | 3CE4-06 | FLUID MECHANICS |
| **PCC** | 3CE4-07 | BUILDING MATERIALS AND CONSTRUCTION |
| **PCC** | 3CE4-08 | ENGINEERING GEOLOGY |
| **PCC** | 3CE4-21 | Surveying Lab |
| **PCC** | 3CE4-22 | Fluid Mechanics Lab |
| **PCC** | 3CE4-23 | Computer Aided Civil Engineering Drawing |
| **PCC** | 3CE4-24 | Civil Engineering Maretials Lab |
| **PCC** | 3CE4-25 | Geology Lab |
| **PSIT** | 3CE7-30 | Industrial Training |
| **SODECA** | **3CE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **4** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | 4CE2-01 | ADVANCE ENGINEERING MATHEMATICS-II |
| **HSMC** | 4CE1-03 | MANAGERIAL ECONOMICS AND FINANCIAL ACCOUNTING |
| **ESC** | 4CE3-04 | BASIC ELECTRONICS FOR CIVIL ENGINEERING APPLICATIONS |
| **PCC** | 4CE4-05 | STRENGTH OF MATERIALS |
| **PCC** | 4CE4-06 | HYDRAULICS ENGINEERING |
| **PCC** | 4CE4-07 | BUILDING PLANNING |
| **PCC** | 4CE4-08 | CONCRETE TECHNOLOGY |
| **PCC** | 4CE4-21 | Material Testing Lab |
| **PCC** | 4CE4-22 | Hydraulics Engineering Lab |
| **PCC** | 4CE4-23 | Building Drawing |
| **PCC** | 4CE4-24 | Advanced Surveying Lab |
| **PCC** | 4CE4-25 | Concrete Lab |
| **SODECA** | **4CE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **5** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | 5CE3-01 | CONSTRUCTION TECHNOLOGY AND EQUIPMENT |
| **PCC** | 5CE4-02 | STRUCTURE ANALYSIS-I |
| **PCC** | 5CE4-03 | DESIGN OF CONCRETE STRUCTURES |
| **PCC** | 5CE4-04 | GEOTECHNICAL ENGINEERING |
| **PCC** | 5CE4-05 | WATER RESOURCE ENGINEERING |
| **PCC** | 5CE5-13 | Town Planning |
| **PCC** | 5CE5-14 | Repair and Rehabilitation of Structures |
| **PCC** | 5CE4-21 | Concrete Structures Design |
| **PCC** | 5CE4-22 | Geotechnical Engineering Lab |
| **PCC** | 5CE4-23 | Water Resource Engineering Design |
| **PSIT** | 5CE7-30 | Industrial Training |
| **SODECA** | **5CE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **6** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | 6CE3-01 | WIND AND SEISMIC ANALYSIS |
| **PCC** | 6CE4-02 | STRUCTURAL ANALYSIS-II |
| **PCC** | 6CE4-03 | ENVIRONMENTAL ENGINEERING |
| **PCC** | 6CE4-04 | DESIGN OF STEEL STRUCTURES |
| **PCC** | 6CE4-05 | Estimating & Costing |
| **PCC** | **6CE5-12** | SOLID AND HAZARDOUS WASTE MANAGEMENT |
| **PCC** | 6CE5-16 | Geographic Information System & Remote Sensing |
| **PCC** | **6CE4-21** | Environmental Engineering Design and Lab |
| **PCC** | 6CE4-22 | Steel Structure Design |
| **PCC** | 6CE4-23 | Quantity Surveying and Valuation |
| **PCC** | 6CE4-24 | Water and Earth Retaining Structures Design |
| **PCC** | 6CE4-25 | Foundation Design |
| **SODECA** | **6CE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **7** |
| **Category** | **Course Code** | **Course Title** |
| **PEC** | 7CE4-01  | Transportation Engineering |
| **OE** | 7AG6-60.2 | Environmental Engineering and Disaster Management |
| **PCC** | 7CE4-21  | Road Material Testing Lab |
| **PCC** | 7CE4-22  | Professional Practices & Field Engineering Lab |
| **PCC** | **7CE4-23**  | **Soft Skills Lab** |
| PCC | 7CE4-24  | Environmental Monitoring and Design Lab |
| **PSIT** | 7CE7-30  | Practical Training |
| **PSIT** | 7CE7-40  | Seminar |
| **SODECA** | **7CE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **8** |
| **Category** | **Course Code** | **Course Title** |
| PEC | 8CE4-01  | Project Planning and Construction Management |
| OE | 8TT6-60.2 | Disaster Management |
| **PCC** | 8CE4-21  | Project Planning & Construction Management Lab |
| **PCC** | 8CE4-22 | Pavement Design |
| **PSIT** | 8CE7-50  | Project |
| **SODECA** | **8CE8-00** | Social Outreach, Discipline & Extra Curricular Activities |

List & Description of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

CIVIL ENGINEERING DEPARTMENT

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO** | **NAME OF THE COURSE** | **YEAR** | **SEM** |
| **1** | **Project Planning & Construction Management** | **IV** | **VIII** |
|  | Description | This course guides the students towards the planning of a project in accordance with the available resources. With the help of different types of visual graphs and figures one can get to know how someone can plan a project to complete in a specified interval of time by optimizing the resources.Methods such as critical path method and PERT are used to analyze the structure of the project flow in a better way and others techniques are induced to complete it on a particular time.  |
| **2** | **Professional Practices & Field Engineering Lab** | **IV** | **VII** |
|  |  | This lab course helps students in preparing detailed estimates of any construction work. By introducing several methods such as center line method, long wall - short wall method one can easily calculated the dimension of a building. This subjects helps students in understanding the basic concepts of rate analysis, depreciation of building, salvage value and more. |
| **3** | **Discipline & Extra Curricular activity** | **IV** | **VIII** |
|  |  | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **4** | **Communication Skills** | **I** | **I** |
|  |  | This course helps students improve their professional communication in English for successful business interactions. Each chapter focuses on a particular area of communication in English: writing emails, speaking at meetings and interviews, giving presentations, and networking online. Whether a person wants to communicate to potential employers, employees, partners or clients, better English communication can help them achieve their language and professional goals. This course will focus especially on making those important connections to take the career or business to the next level.  |
| **5** | **Human Values** | **I** | **I** |
|  |  | The Courses Human Values envisages to instill the ethical values and to provide the knowledge about Ethics as a subject matter. The Course Human Value Education is aimed at providing the students with knowledge on Value System and its importance in Human existence. The objective of the course is listed as: Values are socially accepted norms to evaluate objects, persons, and situations that form part and parcel of sociality. A value system is a set of consistent values and measures. Knowledge of the values are inculcated through education. It contributes in forming true human being, who are able to face life and make it meaningful.  |
| **6** | **Human Values Activities** | **I** | **II** |
|  |  | Human Values involves various classroom activities through which teachers can take a measure of and improve the student’s inherent qualities, including responsibility, confidence, co-operation, respect and empathy.Each activity featured as part of this innovation is focused on specific human values. The positive change in students and learning environment through all these activities can be ensured by carrying these out on a regular basis throughout the course. Activities Includes Scouts & Guides, Planning, Implementation, Surveying and many more. |
| **7** | **Technical Communication** | **II** | **III/IV** |
|  |  | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |
| **8** | **Social Outreach, Discipline & Extra Curricular Activities** | **II** | **III/IV** |
|  |  | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **9** | **Technical Communication** | **III** | **IV** |
|  |  | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |
| **10** | **Disaster Management** | **IV** | **VIII** |
|  |  | Disaster Management provides detailed knowledge to students on disaster preparedness, reducing the effect and rehabilitation. This course provides learners with a regional, national and international perspective on disaster management.  |
| **11** | **Solid and Hazardous****Waste Management** | **III** | **VI** |
|  |  | This course provides students with an overview of the municipal solid waste management situation in low- and middle-income countries. It covers key elements of the waste management system, such as its technical, environmental, social, financial and institutional aspects. Besides understanding the challenges, students will be introduced to appropriate and already applied solutions through selected case studies. |
| **12** | **Environmental Engineering** | **III** | **VI** |
|  |  | Environmental engineering is a subfield of engineering that is concerned with the protection and preservation of the environment and environmental resources as well as the protection of populations from environmental threats. Environmental engineers study population growth and monitor air and water quality. |
| **13** | **Environmental Engineering Lab** | **III** | **VI** |
|  |  | The Environmental Engineering laboratory practical provides good insight into different experimental methods relevant to Environmental Engineering. In this lab we performs various test on drinker water and sewage samples to check pH value, total dissolved solids, BOD and COD, total suspended particles etc. |
| **14** | **Environmental monitoring & Design Lab** | **IV** | **VII** |
|  |  | Environmental monitoring lab uses instruments to carry out environmental baseline and compliance monitoring in all walk of sectors like petrochemical, mining, cement, highways, housing and infrastructure for EIA studies.Sampling and Testing Includes: Ambient Air, Water, Soil, Noise for Ambient and Stationary Sources, Stack Emissions, Solid and Hazardous Wastes, VOCs and Hydrocarbons, Fugitive Gas emissions, Indoor gas quality, Mercury, CO. |

|  |
| --- |
| **Techno India NJR Institute of Technology** |
| **Department of Computer Science Engineering** |
|  |
| **B. Tech Scheme 2023-24** |
| **SEMESTER**  | **1** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **1FY2-01** | Engineering Mathematics-I |
| **BSC** | **1FY2-03** | Engineering Chemistry |
| **HSMC** | **1FY1-04** | Communication Skills |
| **ESC** | **1FY3-06** | Programming for Problem Solving |
| **ESC** | **1FY3-09** | Basic Civil Engineering |
| **BSC** | **1FY2-21** | Engineering Chemistry Lab |
| **HSMC** | **1FY1-22** | Human Values Activities |
| **ESC** | **1FY3-24** | Computer Programming Lab |
| **ESC** |  **1FY3-27** | Basic Civil Engineering Lab |
| **ESC** | **1FY3-28** | Computer Aided Engineering Graphics |
| **SODECA** | **1FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |  |   |
| **SEMESTER**  | **2** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **2FY2-01** | Engineering Mathematics-II |
| **BSC** | **2FY2-02** | Engineering Physics |
| **HSMC** | **2FY1-05** | Human Values |
| **ESC** | **2FY3-07** | Basic Mechanical Engineering |
| **ESC** | **2FY3-08** | Basic Electrical Engineering |
| **BSC** | **2FY2-20** | Engineering Physics Lab |
| **HSMC** | **2FY1-23** | Human Values Activities |
| **ESC** | **2FY3-25** | Manufacturing Practices Workshop |
| **ESC** | **2FY3-26** | Basic Electrical Engineering Lab |
| **ESC** | **2FY3-29** | Computer Aided Machine Drawing |
| **SODECA** | **2FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **3** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | 3CS2-01 | Advanced Engineering Mathematics |
| **HSMC** | 3CS1-02 | Technical Communication |
| **ESC** | 3CS3-04 | Digital Electronics |
| **PCC** | 3CS4-05 | Data Structures and Algorithms |
| **PCC** | 3CS4-06 | Object Oriented Programming |
| **PCC** | 3CS4-07 | Software Engineering |
| **PCC** | 3CS4-21 | Data Structures and Algorithms Lab |
| **PCC** | 3CS4-22 | Object Oriented Programming Lab |
| **PCC** | 3CS4-23 | Software Engineering Lab |
| **PCC** | 3CS4-24 | Digital Electronics Lab |
| **PSIT** | 3CS7-30 | Industrial Training |
| **SODECA** | **3CS8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **4** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | 4CS2-01 | Discrete Mathematics Structures |
| **HSMC** | 4CS1-03 | Managerial Economics and Financial Accounting |
| **ESC** | 4CS3-04 | Microprocessor & Interface |
| **PCC** | 4CS4-05 | Database Management System |
| **PCC** | 4CS4-06 | Theory of Computation |
| **PCC** | 4CS4-07 | Data Communication and Computer Networks |
| **PCC** | 4CS4-21 | Microprocessor & Interfaces Lab |
| **PCC** | 4CS4-22 | Database Management System Lab |
| **PCC** | 4CS4-23 | Network Programming Lab |
| **PCC** | 4CS4-24 | Linux Shell Programming Lab |
| **PCC** | 4CS4-25 | Java Lab |
| **SODECA** | **4CS8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **5** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | 5CS3-01 | Information Theory & Coding |
| **PCC** | 5CS4-02 | Compiler Design |
| **PCC** | 5CS4-03 | Operating System |
| **PCC** | 5CS4-04 | Computer Graphics & Multimedia |
| **PCC** | 5CS4-05 | Analysis of Algorithms |
| **PCC** | 5CS5-12 | Human-Computer Interaction |
| **PCC** | 5CS4-21 | Computer Graphics & Multimedia Lab |
| **ESC** | 5CS4-22 | Compiler Design Lab |
| **PCC** | 5CS4-23 | Analysis of Algorithms Lab |
| **PCC** | 5CS4-24 | Advance Java Lab |
| **PSIT** | 5CS7-30 | Industrial Training |
| **SODECA** | **5CS8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
|  |   |   |
| **SEMESTER**  | **6** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | 6CS3-01 | Digital Image Processing |
| **PCC** | 6CS4-02 | Machine Learning |
| **PCC** | 6CS4-03 | Information Security System |
| **PCC** | 6CS4-04 | Computer Architecture and Organization |
| **PCC** | 6CS4-05 | Artificial Intelligence |
| **PCC** | 6CS4-06 | Cloud Computing |
| **PCC** | 6CS5-11 | Distributed System |
| **ESC** | 6CS4-21 | Digital Image Processing Lab |
| **PCC** | 6CS4-22 | Machine Learning Lab |
| **PCC** | 6CS4-23 | Python Lab |
| **PCC** | 6CS4-24 | Mobile Application Development Lab |
| **SODECA** | **6CS8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
|  |   |   |
| **SEMESTER**  | **7** |
| **Category** | **Course Code** | **Course Title** |
| **PEC** | 7CS4-01  | Internet of Things |
| OE | 7CE6-60.2  | Disaster Management |
| OE | 7AG6-60.2 | Environment Engg and Disaster Management |
| **PCC** | 7CS4-21  | Internet of Things Lab |
| **PCC** | 7CS4-22  | Cyber Security Lab |
| **PSIT** | 7CS7-30  | Industrial Training |
| **PSIT** | 7CS7-40  | Seminar |
| **SODECA** | **7CS8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
|  |   |   |
| **SEMESTER**  | **8** |
| **Category** | **Course Code** | **Course Title** |
| **PEC** | 8CS4-01  | Big Data Analytics |
| OE | 8AN6-60.2  | Factor of Human Interactions |
| **PCC** | 8CS4-21  | Big Data Analytics Lab |
| **PCC** | 8CS4-22  | Software Testing and Validation Lab |
| **PSIT** | 8CS7-50  | Project |
| **SODECA** | **8CS8-00** | Social Outreach, Discipline & Extra Curricular Activities |

List & Descriptions of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

COMPUTER SCIENCE & ENGINEERING

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO** | **NAME OF THE COURSE** | **YEAR** | **SEM** |
| **1** | **Disaster Management** | **IV** | **VII** |
|  | Description | Disaster Management provides detailed knowledge to students on disaster preparedness, reducing the effect and rehabilitation. This course provides learners with a regional, national and international perspective on disaster management. |
| **2** | **Communication skills** | **I** | **I** |
|  | Description | This course helps students improve their professional communication in English for successful business interactions. Each chapter focuses on a particular area of communication in English: writing emails, speaking at meetings and interviews, giving presentations, and networking online. Whether a person wants to communicate to potential employers, employees, partners or clients, better English communication can help them achieve their language and professional goals. This course will focus especially on making those important connections to take the career or business to the next level.  |
| **3** | **Technical Communication** | **II** | **III/IV** |
|  | Description | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |
| **4** | **Social Outreach, Discipline & Extra Curricular Activities** | **II** | **III/IV** |
|  | Description | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **6** | **Environmental Engineering and Disaster Management** | **IV** | **VII** |
|  | Description | Environmental engineering is a subfield of engineering that is concerned with the protection and preservation of the environment and environmental resources as well as the protection of populations from environmental threats. Environmental engineers study population growth and monitor air and water quality. |
| **8** | **Factor of Human Interactions** | **IV** | **VIII** |
|  | Description | **Factor of Human Interactions** (FHI) provide detail knowledge of process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse. |

|  |
| --- |
| **Techno India NJR Institute of Technology** |
| **Department of Electronics & Communication Engineering** |
|  |
| **B. Tech Scheme 2023-24** |
| **SEMESTER**  | **1** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **1FY2-01** | Engineering Mathematics-I |
| **BSC** | **1FY2-03** | Engineering Chemistry |
| **HSMC** | **1FY1-04** | Communication Skills |
| **ESC** | **1FY3-06** | Programming for Problem Solving |
| **ESC** | **1FY3-09** | Basic Civil Engineering |
| **BSC** | **1FY2-21** | Engineering Chemistry Lab |
| **HSMC** | **1FY1-22** | Human Values Activities |
| **ESC** | **1FY3-24** | Computer Programming Lab |
| **ESC** |  **1FY3-27** | Basic Civil Engineering Lab |
| **ESC** | **1FY3-28** | Computer Aided Engineering Graphics |
| **SODECA** | **1FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |  |   |
| **SEMESTER**  | **2** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **2FY2-01** | Engineering Mathematics-II |
| **BSC** | **2FY2-02** | Engineering Physics |
| **HSMC** | **2FY1-05** | Human Values |
| **ESC** | **2FY3-07** | Basic Mechanical Engineering |
| **ESC** | **2FY3-08** | Basic Electrical Engineering |
| **BSC** | **2FY2-20** | Engineering Physics Lab |
| **HSMC** | **2FY1-23** | Human Values Activities |
| **ESC** | **2FY3-25** | Manufacturing Practices Workshop |
| **ESC** | **2FY3-26** | Basic Electrical Engineering Lab |
| **ESC** | **2FY3-29** | Computer Aided Machine Drawing |
| **SODECA** | **2FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **3** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | 3EC2-01 | Advanced Engineering Mathematics-I |
| **HSMC** | 3EC1-02 | Technical Communication |
| **PCC** | 3EC4-04 | Digital System Design |
| **PCC** | 3EC4-05 | Signal & Systems |
| **PCC** | 3EC4-06 | Network Theory |
| **PCC** | 3EC4-07 | Electronics Devices |
| **PCC** | 3EC4-21 | Electronics Devices Lab |
| **PCC** | 3EC4-22 | Digital System Design Lab |
| **PCC** | 3EC4-23 | Signal Processing Lab |
| **ESC** | 3EC3-24 | Computer Programming Lab-I |
| **PSIT** | 3EC7-30 | Industrial Training |
| **SODECA** | **3EC8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **4** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | 4EC2-01 | Advanced Engineering Mathematics-II |
| **HSMC** | 4EC1-03 | Managerial Economics and Financial Accounting |
| **PCC** | 4EC4-04 | Analog Circuits |
| **PCC** | 4EC4-05 | Microcontrollers |
| **ESC** | 4EC3-06 | Electronics Measurement & Instrumentation |
| **PCC** | 4EC4-07 | Analog and Digital Communication |
| **PCC** | 4EC4-21 | Analog and Digital Communication Lab |
| **PCC** | 4EC4-22 | Analog Circuits Lab |
| **PCC** | 4EC4-23 | Microcontrollers Lab |
| **PCC** | 4EC4-24 | Electronics Measurement & Instrumentation Lab |
| **SODECA** | **4EC8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **5** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | 5EC 3-01 | Computer Architecture |
| **PCC** | 5EC 4-02 | Electromagnetics Waves |
| **PCC** | 5EC 4-03 | Control system |
| **PCC** | 5EC 4-04 | Digital Signal Processing |
| **PCC** | 5EC 4-05 | Microwave Theory & Techniques |
| **PCC** | 5EC 5-12 | Embedded Systems |
| **PCC** | 5EC 4-21 | RF Simulation Lab |
| **ESC** | 5EC 4-22 | Digital Signal Processing Lab |
| **PCC** | 5EC 4-23 | Microwave Lab |
| **PSIT** | 5EC 7-30 | Industrial Training |
| **SODECA** | **5EC8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **6** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | 6EC 3-01 | Power Electronics |
| **PCC** | 6EC 4-02 | Computer Network |
| **PCC** | 6EC 4-03 | Fiber Optics Communications |
| **PCC** | 6EC 4-04 | Antennas and Propagation |
| **PCC** | 6EC 4-05 | Information theory and coding |
| **PCC** | 6EC 5-11 | Introduction to MEMS |
| **PCC** | 6EC 4-21 | Computer Network Lab |
| **ESC** | 6EC 4-22 | Antenna and wave propagation Lab |
| **PCC** | 6EC 4-23 | Electronics Design Lab |
| **PSIT** | 6EC 4-24 | Power Electronics Lab |
| **SODECA** | **6EC8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **7** |
| **Category** | **Course Code** | **Course Title** |
| **PEC** | 7EC5-11  | VLSI Design |
| **OE** | 7CE6-60.2  | Disaster Management |
| **OE** | 7AG6-60.2 | Environment Engg and Disaster Management |
| **PCC** | 7EC4-21  | VLSI Design Lab |
| **PCC** | 7EC4-22  | Advance communication lab (MATLAB Simulation) |
| **PCC** | 7EC4-23  | Optical Communication Lab |
| **PSIT** | 7EC7-30 | Industrial Training |
| **PSIT** | 7EC7-40  | Seminar |
| **SODECA** | **7EC8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **8** |
| **Category** | **Course Code** | **Course Title** |
| **PEC** | 8EC5-11  | Artificial Intelligence And Expert Systems |
| **OE** | 8AN6-60.2  | Factor of Human Interactions |
| **PCC** | 8EC4-21  | Internet of Things (IOT) Lab |
| **PCC** | 8EC4-22  | Skill Development Lab |
| **PSIT** | 8EC7-50  | Project |
| **SODECA** | **8EC8-00** | Social Outreach, Discipline & Extra Curricular Activities |

List & Description of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO** | **NAME OF THE COURSE** | **YEAR** | **SEM** |
| **1** | **Discipline & Extra Curricular activity** | **IV** | **VII/VIII** |
|  |  | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **2** | **Communication skills** | **I** | **I** |
|  |  | This course helps students improve their professional communication in English for successful business interactions. Each chapter focuses on a particular area of communication in English: writing emails, speaking at meetings and interviews, giving presentations, and networking online. Whether a person wants to communicate to potential employers, employees, partners or clients, better English communication can help them achieve their language and professional goals. This course will focus especially on making those important connections to take the career or business to the next level.  |
| **3** | **Human Values** | **I** | **I** |
|  |  | The Courses Human Values envisages to instill the ethical values and to provide the knowledge about Ethics as a subject matter. The Course Human Value Education is aimed at providing the students with knowledge on Value System and its importance in Human existence. The objective of the course is listed as: Values are socially accepted norms to evaluate objects, persons, and situations that form part and parcel of sociality. A value system is a set of consistent values and measures. Knowledge of the values are inculcated through education. It contributes in forming true human being, who are able to face life and make it meaningful.  |
| **4** | **Human Values Activities** | **I** | **II** |
|  |  | Human Values involves various classroom activities through which teachers can take a measure of and improve the student’s inherent qualities, including responsibility, confidence, co-operation, respect and empathy.Each activity featured as part of this innovation is focused on specific human values. The positive change in students and learning environment through all these activities can be ensured by carrying these out on a regular basis throughout the course. Activities Includes Scouts & Guides, Planning, Implementation, Surveying and many more. |
| **5** | **Technical Communication** | **II** | **III/IV** |
|  |  | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |
| **6** | **Social Outreach, Discipline & Extra Curricular Activities** | **II** | **III/IV** |
|  |  | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **7** | **Technical Communication** | **II** | **III** |
|  |  | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |

|  |
| --- |
| **Techno India NJR Institute of Technology** |
| **Department of Electrical Engineering** |
|  |
| **B. Tech Scheme 2023-24** |
| **SEMESTER**  | **1** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **1FY2-01** | Engineering Mathematics-I |
| **BSC** | **1FY2-03** | Engineering Chemistry |
| **HSMC** | **1FY1-04** | Communication Skills |
| **ESC** | **1FY3-06** | Programming for Problem Solving |
| **ESC** | **1FY3-09** | Basic Civil Engineering |
| **BSC** | **1FY2-21** | Engineering Chemistry Lab |
| **HSMC** | **1FY1-22** | Human Values Activities |
| **ESC** | **1FY3-24** | Computer Programming Lab |
| **ESC** |  **1FY3-27** | Basic Civil Engineering Lab |
| **ESC** | **1FY3-28** | Computer Aided Engineering Graphics |
| **SODECA** | **1FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |  |   |
| **SEMESTER**  | **2** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **2FY2-01** | Engineering Mathematics-II |
| **BSC** | **2FY2-02** | Engineering Physics |
| **HSMC** | **2FY1-05** | Human Values |
| **ESC** | **2FY3-07** | Basic Mechanical Engineering |
| **ESC** | **2FY3-08** | Basic Electrical Engineering |
| **BSC** | **2FY2-20** | Engineering Physics Lab |
| **HSMC** | **2FY1-23** | Human Values Activities |
| **ESC** | **2FY3-25** | Manufacturing Practices Workshop |
| **ESC** | **2FY3-26** | Basic Electrical Engineering Lab |
| **ESC** | **2FY3-29** | Computer Aided Machine Drawing |
| **SODECA** | **2FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **3** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | 3EE2-01  | Advance Mathematics |
| **HSMC** | 3EE1-02 | Technical Communication |
| **PCC** | 3EE3-04 | Power generation Process |
| **PCC** | 3EE4-05 | Electrical Circuit Analysis |
| **ESC** | 3EE4-06 | Analog Electronics |
| **PCC** | 3EE4-07 | Electrical Machine - I |
| **PCC** | 3EE4-08 | Electromagnetic Field |
| **PCC** | 3EE4-21 | Analog Electronics Lab |
| **PCC** | 3EE4-22 | Electrical Machine-I Lab |
| **PCC** | 3EE4-23 | Electrical circuit design Lab |
| **PSIT** | 3EE7-30 | Training Seminar |
| **SODECA** | **3EE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **4** |
| **Category** | **Course Code** | **Course Title** |
| BSC | 4EE2-01 | Biology |
| **HSMC** | 4EE1-03 | Managerial Economics and Financial Accounting |
| **ESC** | 4EE3-04 | Electronic Measurement & Instrumentation |
| **PCC** | 4EE4-05 | Electrical Machine - II |
| **PCC** | 4EE4-06 | Power Electronics |
| **PCC** | 4EE4-07 | Signals & Systems |
| **PCC** | 4EE4-08 | Digital Electronics |
| **PCC** | 4EE4-21 | Electrical Machine - IILab |
| **PCC** | 4EE4-22 | Power Electronics Lab |
| **PCC** | 4EE4-23 | Digital Electronics Lab |
| **PCC** | 4EE4-24 | Measurement Lab |
| **SODECA** | **4EE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **5** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | 5EE3-01 | Electrical Materials |
| **PCC** | 5EE4-02 | Power System - I |
| **PCC** | 5EE4-03 | Control System |
| **PCC** | 5EE4-04 | Microprocessor |
| **PCC** | 5EE4-05 | Electrical Machine Design |
| **PCC** | 5EE5-12 | Electromagnetic Wave. |
| **PCC** | 5EE4-21 | Power System - I Lab |
| **ESC** | 5EE4-22 | Control System Lab |
| **PCC** | 5EE4-23 | Microprocessor Lab |
| **PCC** | 5EE4-24 | System Programming Lab |
| **PSIT** | 5EE7-30 | Industrial Training |
| **SODECA** | **5EE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **6** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | 6EE3-01 | Computer Architecture |
| **PCC** | 6EE4-02 | Power System - II |
| **PCC** | 6EE4-03 | Power System Protection |
| **PCC** | 6EE4-04 | Electrical Energy Conversion and Auditing |
| **PCC** | 6EE4-05 | Electric Drives |
| **PCC** | 6EE5-11 | Power System Planning. |
| **PCC** | 6EE4-21 | Power System - II Lab |
| **ESC** | 6EE4-22 | Electric Drives Lab |
| **PCC** | 6EE4-23 | Power System Protection Lab |
| **PCC** | 6EE4-24 | Modelling and simulation lab |
| **SODECA** | **6EE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **7** |
| **Category** | **Course Code** | **Course Title** |
| **OE** | 7CE6-60.2  | Disaster Management |
| **OE** | 7AG6-60.2 | Environment Engg and Disaster Management |
| **PEC** | 7EE5-11 | Wind and Solar Energy Systems |
| **PCC** | 7EE4-21  | Embedded Systems Lab |
| **PCC** | 7EE4-22  | Advance control system lab |
| **PSIT** | 7EE7-30  | Industrial Training |
| **PSIT** | 7EE7-40  | Seminar |
| **SODECA** | **7EE8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **8** |
| **Category** | **Course Code** | **Course Title** |
| **PEC** | 8EE4-11 | HVDC Transmisssion System |
| **OE** | 8AN6-60.2  | Factor of Human Interactions |
| PCC | 8EE4-21  | Energy Systems Lab |
| **PSIT** | 8EE7-50 | Project |
| **SODECA** | **8EE8-00** | Social Outreach, Discipline & Extra Curricular Activities |

List & Descriptions of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

ELECTRICAL ENGINEERING DEPARTMENT

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO** | **NAME OF THE COURSE** | **YEAR** | **SEM** |
| **1** | **Discipline & Extra Curricular activity** | **IV** | **VIII** |
|  | Description | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **2** | **Communication skills** | **I** | **I** |
|  | Description | This course helps students improve their professional communication in English for successful business interactions. Each chapter focuses on a particular area of communication in English: writing emails, speaking at meetings and interviews, giving presentations, and networking online. Whether a person wants to communicate to potential employers, employees, partners or clients, better English communication can help them achieve their language and professional goals. This course will focus especially on making those important connections to take the career or business to the next level.  |
| **3** | **Human Values** | **I** | **I** |
|  | Description | The Courses Human Values envisages to instill the ethical values and to provide the knowledge about Ethics as a subject matter. The Course Human Value Education is aimed at providing the students with knowledge on Value System and its importance in Human existence. The objective of the course is listed as: Values are socially accepted norms to evaluate objects, persons, and situations that form part and parcel of sociality. A value system is a set of consistent values and measures. Knowledge of the values are inculcated through education. It contributes in forming true human being, who are able to face life and make it meaningful.  |
| **4** | **Human Values Activities** | **I** | **II** |
|  | Description | Human Values involves various classroom activities through which teachers can take a measure of and improve the student’s inherent qualities, including responsibility, confidence, co-operation, respect and empathy.Each activity featured as part of this innovation is focused on specific human values. The positive change in students and learning environment through all these activities can be ensured by carrying these out on a regular basis throughout the course. Activities Includes Scouts & Guides, Planning, Implementation, Surveying and many more. |
| **5** | **Technical Communication** | **II** | **III/IV** |
|  | Description | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |
| **6** | **Social Outreach, Discipline & Extra Curricular Activities** | **II** | **III/IV** |
|  | Description | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **7** | **Technical Communication** | **III** | **IV** |
|  | Description | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |
| **8** | **Biology** | **II** | **IV** |
|  | Description | Objectives of this course provides a Purpose: To convey that Biology is as important a scientific discipline as Mathematics, Physics and Chemistry. Bring out the fundamental differences between science and engineering by drawing a comparison between eye and camera, Bird flying and aircraft. Mention the most exciting aspect of biology as an independent scientific discipline. |
| **9** | **Disaster Management** | **IV** | **VII** |
|  | Description | Disaster Management provides detailed knowledge to students on disaster preparedness, reducing the effect and rehabilitation. This course provides learners with a regional, national and international perspective on disaster management.  |
| **10** | **Neural Network** | **III** | **VI** |
|  | Description | The course has contents to develop Know the main provisions neuro mathematics, Know the main types of neural networks, Know and apply the methods of training neural networks, Know the application of artificial neural networks, To be able to formalize the problem, to solve it by using a neural network. |
| **11** | **Sustainable Engineering** | **IV** | **VII** |
|  | Description | This course provides students with an overview of develop an increased awareness among students on issues in areas of sustainability, To make students understand the role of engineering and technology within sustainable development, To give students some familiarity with the methods and tools used for sustainable product-service system development, To establish in students an understanding of the role and impact of engineering activities and engineering decisions on environmental, societal, and economic well-being. |

|  |
| --- |
| **Techno India NJR Institute of Technology** |
| **Department of Mechanical Engineering** |
|  |
| **B. Tech Scheme 2023-24** |
| **SEMESTER**  | **1** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **1FY2-01** | Engineering Mathematics-I |
| **BSC** | **1FY2-03** | Engineering Chemistry |
| **HSMC** | **1FY1-04** | Communication Skills |
| **ESC** | **1FY3-06** | Programming for Problem Solving |
| **ESC** | **1FY3-09** | Basic Civil Engineering |
| **BSC** | **1FY2-21** | Engineering Chemistry Lab |
| **HSMC** | **1FY1-22** | Human Values Activities |
| **ESC** | **1FY3-24** | Computer Programming Lab |
| **ESC** |  **1FY3-27** | Basic Civil Engineering Lab |
| **ESC** | **1FY3-28** | Computer Aided Engineering Graphics |
| **SODECA** | **1FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |  |   |
| **SEMESTER**  | **2** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **2FY2-01** | Engineering Mathematics-II |
| **BSC** | **2FY2-02** | Engineering Physics |
| **HSMC** | **2FY1-05** | Human Values |
| **ESC** | **2FY3-07** | Basic Mechanical Engineering |
| **ESC** | **2FY3-08** | Basic Electrical Engineering |
| **BSC** | **2FY2-20** | Engineering Physics Lab |
| **HSMC** | **2FY1-23** | Human Values Activities |
| **ESC** | **2FY3-25** | Manufacturing Practices Workshop |
| **ESC** | **2FY3-26** | Basic Electrical Engineering Lab |
| **ESC** | **2FY3-29** | Computer Aided Machine Drawing |
| **SODECA** | **2FY8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **3** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **3ME2-01** | Advance Engineering Mathematics-I |
| **HSMC** | **3ME1-02** | Technical Communication |
| **ESC** | **3ME3-04** | Engineering Mechanics |
| **PCC** | **3ME4-05** | Engineering Thermodynamics |
| **PCC** | **3ME4-06** | Materials Science and Engineering |
| **PCC** | **3ME4-07** | Mechanics of Solids |
| **PCC** | **3ME4-21** | Machine Drawing Practice |
| **PCC** | **3ME4-22** | Materials Testing Lab |
| **PCC** | **3ME4-23** | Basic Mechanical Engineering Lab |
| **PCC** | **3ME4-24** | Programming using MATLAB |
| **PSIT** | **3ME7-30** | Industrial Training |
| **SODECA** | **3ME8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **4** |
| **Category** | **Course Code** | **Course Title** |
| **BSC** | **4ME2-01** | Data analytics |
| **HSMC** | **4ME1-03** | Managerial Economics and Financial Accounting |
| **ESC** | **4ME3-04** | Digital Electronics |
| **PCC** | **4ME4-05** | Fluid Mechanics and Fluid Machines |
| **PCC** | **4ME4-06** | Manufacturing Processes |
| **PCC** | **4ME4-07** | Theory of machines |
| **PCC** | **4ME3-21** | Digital Electronics lab |
| **PCC** | **4ME4-22** | Fluid Mechanics lab |
| **PCC** | **4ME4-23** | Production practice lab |
| **PCC** | **4ME4-24** | Theory of machines Lab |
| **SODECA** | **4ME8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
| **SEMESTER**  | **5** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | **5ME3-01** | Mechatronics System |
| **PCC** | **5ME4-02** | Heat Transfer |
| **PCC** | **5ME4-03** | Manufacturing Technology |
| **PCC** | **5ME4-04** | Design of Machine Element-I |
| **PCC** | **5ME4-05** | Principles of Management |
| **PCC** | **5ME5-11** | Steam Engineering |
| **PCC** | **5ME4-12** | Automobile Engineering |
| **ESC** | **5ME3-21** | Mechatronics Lab |
| **PCC** | **5ME4-22** | Heat Transfer lab |
| **PCC** | **5ME4-23** | Production Engineering lab |
| **PCC** | **5ME4-24** | Machine Design Practice-I |
| **PSIT** | **3ME7-30** | Industrial Training |
| **SODECA** | **5ME8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |  |   |
| **SEMESTER**  | **6** |
| **Category** | **Course Code** | **Course Title** |
| **ESC** | **6ME3-01** | Measurement & Metrology |
| **PCC** | **6ME4-02** | Computer Integrated Manufacturing Systems |
| **PCC** | **6ME4-03** | Mechanical Vibrations |
| **PCC** | **6ME4-04** | Design of Machine Element-II |
| **PCC** | **6ME4-05** | Quality Management |
| **PCC** | **6ME5-11** | Refrigeration& Air Conditioning |
| **PCC** | **6ME4-21** | CIMS Lab |
| **PCC** | **6ME4-22** | Vibration Lab |
| **PCC** | **6ME4-23** | Machine Design Practice-II |
| **PCC** | **6ME4-24** | Thermal Engineering Lab-I |
| **SODECA** | **6ME8-00** | Social Outreach, Discipline & Extra Curricular Activities |
|  |  |   |
| **SEMESTER**  | **7** |
| **Category** | **Course Code** | **Course Title** |
| **PEC** | 7ME5-11 | IC Engine |
| **OE** | 7AG6-60.1 | Human Engineering and Safety |
| **PCC** | 7ME4-21  | FEA Lab |
| **PCC** | 7ME4-22  | Thermal Engineering Lab II |
| **PCC** | 7ME4-23  | Quality Control Lab |
| **PSIT** | 7ME7-30  | Industrial Training |
| **PSIT** | 7ME7-40  | Seminar |
| **SODECA** | 7ME8-00 | Social Outreach, Discipline & Extra Curricular Activities |
|  |   |   |
|  |   |   |
| **SEMESTER**  | **8** |
| **Category** | **Course Code** | **Course Title** |
| **PEC** | 8ME5-12 | Supply and Operations Management |
| **OE** | 8TT6-60.2 | Disaster Management |
| **PCC** | 8ME4-21  | Industrial Engineering Lab |
| **PCC** | 8ME4-22  | Metrology Lab |
| **PSIT** | 8ME7-50  | Project |
| **SODECA** | 8ME8-00 | Social Outreach, Discipline & Extra Curricular Activities |

List & Description of courses which address the Professional Ethics, Gender, Human Values, Environmental and Sustainability into the Curriculum

DEPARTMENT OF MECHANICAL ENGINEERING

|  |  |  |  |
| --- | --- | --- | --- |
| **S.NO** | **NAME OF THE COURSE** | **YEAR** | **SEM** |
| **1** | **Discipline & Extra Curricular activity** | **IV** | **VII,VIII** |
|  |  | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **2** | **Human Engineering and****Safety** | **IV** | **VII** |
|  | Description | A human engineering effort is conducted to develop or improve human interface of the system Achieve required effectiveness of human performance during system operation, maintenance and support and make economical demands upon personnel resources skills, training and costs. |
| **3** | **Communication skills** | **I** | **I/II** |
|  |  | This course helps students improve their professional communication in English for successful business interactions. Each chapter focuses on a particular area of communication in English: writing emails, speaking at meetings and interviews, giving presentations, and networking online. Whether a person wants to communicate to potential employers, employees, partners or clients, better English communication can help them achieve their language and professional goals. This course will focus especially on making those important connections to take the career or business to the next level.  |
| **4** | **Human Values** | **I** | **I/II** |
|  |  | The Courses Human Values envisages to instill the ethical values and to provide the knowledge about Ethics as a subject matter. The Course Human Value Education is aimed at providing the students with knowledge on Value System and its importance in Human existence. The objective of the course is listed as: Values are socially accepted norms to evaluate objects, persons, and situations that form part and parcel of sociality. A value system is a set of consistent values and measures. Knowledge of the values are inculcated through education. It contributes in forming true human being, who are able to face life and make it meaningful.  |
| **5** | **Human Values Activities** | **I** | **II** |
|  |  | Human Values involves various classroom activities through which teachers can take a measure of and improve the student’s inherent qualities, including responsibility, confidence, co-operation, respect and empathy.Each activity featured as part of this innovation is focused on specific human values. The positive change in students and learning environment through all these activities can be ensured by carrying these out on a regular basis throughout the course. Activities Includes Scouts & Guides, Planning, Implementation, Surveying and many more. |
| **6** | **Technical Communication** | **II** | **III/IV** |
|  |  | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |
| **7** | **Social Outreach, Discipline & Extra Curricular Activities** | **II** | **III/IV** |
|  |  | The primary goals of extracurricular activities focus on the individual student level, the institutional level, and the broader community level. These activities exist to complement the university's academic curriculum and to augment the student's educational experience. Extracurricular activities provide a setting to become involved and to interact with other students, thus leading to increased learning and enhanced development. |
| **8** | **Technical Communication** | **II** | **III** |
|  |  | In this course students will practice designing and giving strong, persuasive presentations. Students will learn how to communicate across cultures, genders, and generations, how to create a personal brand and leadership presence and how to hold effective meetings with global teams. Students will learn how to handle difficult conversations, and how to handle crisis communication; students will also learn writing skills immediately applicable in their daily activities. |