

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the curriculum

List of the curriculum courses where crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability are addressed:

| Sr. No | Name of Program | Year of study | Name of Course | Course Code | Issue Addressed |
|-----------|---------------------------------|----------------|---|----------------|--|
| 1 | Basic Engineering Science | First Year | Audit Course - I Environmental Studies-I | 101007 | Environment and Sustainability |
| 2 | Basic Engineering Science | First Year | Audit Course - II Environmental Studies-II | 101014 | Environment and Sustainability |
| 3 | Basic Engineering Science | First Year | Project Based Learning | 110013 | Professional Ethics & Human Values |
| 4 | Civil Engineering | Second Year | Audit Course Awareness to Civil Engineering Practices | 201007 | Human Values: Insight of code of ethics & Duties and responsibilities of the Engineers. Health and Safety: Health and Safety practices on site. |
| 5 | Civil Engineering | Second Year | Audit Course Road Safety Management | 201007 | 1) Human Values: Show changes in awareness levels, knowledge and understanding. |
| 6 | Civil Engineering | Second Year | Project Based Learning | 201017 | 1) Human Values: Important attributes like communication, presentation, organization, time management, research, inquiry, self- assessment, group participation, leadership and critical thinking. |
| 7 | Civil Engineering | Third Year | Water Supply Engineering | 301002 | Environment and Sustainability: Water treatment & rain water harvesting and GIS are addressed. |







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| 8 | Civil Engineering | Third Year | Seminar | 301006 | Human Values:Enhance critical thinking and develop the skill of technical writing along with presentation. |
|----|----------------------|---------------|---|----------|---|
| 9 | Civil Engineering | Third Year | Audit Course I: Professional Ethics and Etiquettes | 301011 a | Human Values: Professional etiquettes and manners, Global negotiating and Persuading, Integrity. |
| 10 | Civil Engineering | Third Year | Audit Course I: Sustainable Energy Systems | 301011 b | Environment and Sustainability: address realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability and sustainability. |
| 11 | Civil Engineering | Third Year | Waste Water Engineering | 301012 | Environment and Sustainability: Waste water treatment issues are addressed. |
| 12 | Civil Engineering | Third Year | Audit Course II: Leadership and Personality Development | 301021 a | Human Values: Develop inter personal skills and bean effective goal oriented team player. |
| 13 | Civil Engineering | Third Year | Audit Course II: Industrial Safety | 301021 b | Health, Environment and Sustainability: Health environment and security covers virtually every important area in administration |
| 14 | Civil Engineering | Final Year | Environmental Engineering – II | 401 001 | Health & Safety: Waste water treatment issues are addressed. |
| 15 | Civil Engineering | Final Year | Transportation Engineering | 401 002 | Health & Safety: Traffic engineering & control |
| 16 | Civil Engineering | Final Year | Elective-I (5) Advanced Engineering Geology with Rock Mechanics | 401004 | Health & Safety: Geological Hazards and mitigation |
| 17 | Civil Engineering | Final Year | Elective II (3) TQM and MIS in Civil Engineering | 401 005 | Professional Ethics & Human Values |







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| 18 | Civil Engineering | Final Year | Elective II (4) Earthquake Engineering | 401 005 | Environment and Sustainability |
|----|-------------------------|----------------|---|---------|--|
| 19 | Civil Engineering | Final Year | Project Phase-I | 401006 | Human Values: Plagiarism & Intellectual Property Rights |
| 20 | Civil Engineering | Final Year | Quantity Surveying, Contracts & Tenders | 401 008 | Professional Ethics & Human Values |
| 21 | Computer Engineering | Second Year | Business Communication Skills | 210249 | Professional Ethics |
| 22 | Computer Engineering | Second Year | Humanity and Social Science | 210250 | Human Values |
| 23 | Computer Engineering | Second Year | Audit Course 3 Smart Cities | 210251 | Environment and Sustainability |
| 24 | Computer Engineering | Second Year | Project Based Learning-II | 210258 | Human Values: Important attributes like communication, presentation, organization, time management, research, inquiry, self-assessment, group participation, leadership and critical thinking. |
| 25 | Computer Engineering | Second Year | Code of Conduct | 210259 | Professional Ethics |
| 26 | Computer Engineering | Second Year | Audit Course 4 Foreign Language | 210260 | Professional Ethics |
| 27 | Computer Engineering | Third Year | Elective-I: Internet of Things & Embedded Systems | 310245A | Environment and Sustainability |







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| 28 | Computer Engineering | Third Year | Seminar & Technical Education | 310249 | Professional Ethics, Human Values |
|----|---------------------------|----------------|---|---------------|---|
| 29 | Computer Engineering | Third Year | Audit Course 5 Cyber Security | 310250 | Health & Safety |
| 30 | Computer Engineering | Third Year | Elective-II: Information Security | 310254A | Health & Safety |
| 31 | Computer Engineering | Third Year | Internship | 310255 | Professional Ethics |
| 32 | Computer Engineering | Third Year | Audit Course 6 Leadership & Personality Development | 310259 | Professional Ethics |
| 33 | Computer Engineering | Final Year | Project Stage-I | 410248 | Human Values: Plagiarism & Intellectual Property Rights |
| 34 | Computer Engineering | Final Year | Project Stage-II | 410256 | Human Values: Plagiarism & Intellectual Property Rights |
| 35 | Computer Engineering | Final Year | Audit Course-7 Industrial Safety and Environment Conscious | 410249 | Health & Safety |
| 36 | Electrical Engineering | Second Year | Soft Skill | 203151 | Professional Ethics & Human Values |
| 37 | Electrical Engineering | Second Year | Audit Course-III Solar Thermal System | 203152(A) | Environment and Sustainability |
| 38 | Electrical Engineering | Second Year | Project Based Learning | 203152 | Professional Ethics & Human Values |







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| 39 | Electrical Engineering | Second Year | Audit Cource-IV Solar Photovoltaic Systems | 203153(A) | Professional Ethics |
|----|---------------------------|----------------|---|---------------|--|
| 40 | Electrical Engineering | Third Year | Industrial and Technology Management | 303141 | Professional Ethics & Human Values |
| 41 | Electrical Engineering | Third Year | Electrical Installation, Design and Condition Based Maintenance | 303144 | Safety Professional Ethics |
| 42 | Electrical Engineering | Third Year | Seminar | 303146 | Professional Ethics Environment and Sustainability |
| 43 | Electrical Engineering | Third Year | Audit Course V :Start-up and Disruptive Innovations | 303147B | Professional Ethics & Human Values |
| 44 | Electrical Engineering | Third Year | Energy Management | 303151D | Professional Ethics & Human Values |
| 45 | Electrical Engineering | Third Year | Internship | 303152 | Professional Ethics & Human Values |
| 46 | Electrical Engineering | Third Year | Audit Course VI :Project Management | 303153B | Environment and Sustainability Professional Ethics & Human Values |
| 47 | Electrical Engineering | Final Year | Project Stage-I | 403146 | Professional Ethics & Human Values |
| 48 | Electrical Engineering | Final Year | Project Stage-II | 403151 | Professional Ethics & Human Values |







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| 49 | Mechanical Engineering | Second Year | Audit Cource-III Design Thinking | 202046 | Professional Ethics & Human Values |
|----|---------------------------|----------------|---|---------|---|
| 50 | Mechanical Engineering | Second Year | Applied Thermodynamic s | 202048 | Environment and Sustainability |
| 51 | Mechanical Engineering | Second Year | Machine Shop | 202051 | Health & Safety |
| 52 | Mechanical Engineering | Second Year | Audit Course-IV Business Ethics | 202053 | Professional Ethics & Human Values |
| 53 | Mechanical Engineering | Third Year | Skill Development | 302047 | Professional Ethics & Human Values |
| 54 | Mechanical Engineering | Third Year | Audit Course V Entrepreneurship and IP strategy | 302048 | Professional Ethics & Human Values |
| 55 | Mechanical Engineering | Third Year | Internship/Mini project | 302055 | Health & Safety Environment and Sustainability Professional Ethics & Human Values |
| 56 | Mechanical Engineering | Third Year | Audit Course VI International Business | 302056 | Environment and Sustainability Professional Ethics & Human Values |
| 57 | Mechanical Engineering | Final Year | Energy Audit and Management | 402045C | Environment and Sustainability |
| 58 | Mechanical Engineering | Final Year | Elective VI Electrical and Hybrid Vehicle | 402051E | Environment and Sustainability Health & Safety |
| 59 | Mechanical Engineering | Final Year | Project Stage-I | 402046 | Health & Safety Environment and Sustainability Professional Ethics & Human Values |







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| 60 | Mechanical Engineering | Final Year | Project Stage-II | 402051 | Health & Safety Environment and Sustainability Professional Ethics & Human Values |
|----|---------------------------|---------------|--|--------------------|---|
| 61 | Mechanical Engineering | Final Year | Energy Engineering | 402049 | Environment and Sustainability |
| 62 | Mechanical Engineering | Final Year | Elective-III Industrial Engineering | 402044D | Health & Safety |
| 63 | Mechanical Engineering | Final Year | Audit Course- VII Yoga Practices Stress Management | 402054A 402054B | Health & Safety |

Total number of courses across all programs - 190

Total number of courses that addresses the cross cutting issues - 63

% of courses that addresses the various cross cutting issues - 33.16%



Dr. Neelkanth G. Nikam PRINCIPAL

