

**AY2025-26 CURRICULUM FOR BACHELOR OF ENGINEERING (ENVIRONMENTAL ENGINEERING)  
WITH SECOND MAJOR IN SUSTAINABILITY - PROFESSIONAL INTERNSHIP  
(FIRST YEAR ADMISSION)**

Last Updated : 2-Jul-25

| SUMMARY OF ACADEMIC UNIT REQUIREMENT |                    |          |                                      |                     |                    |                                  |            |
|--------------------------------------|--------------------|----------|--------------------------------------|---------------------|--------------------|----------------------------------|------------|
| Year of Study                        | Major Requirements |          | Interdisciplinary Collaborative Core |                     |                    | Broadening & Deepening Electives | Total AU   |
|                                      | Core               | Major PE | Common Core                          | Professional Series | Care, Serve, Learn |                                  |            |
| 1                                    | 29                 | 0        | 6                                    | 0                   | 0                  | 0                                | 35         |
| 2                                    | 20                 | 0        | 8                                    | 3                   | 3                  | 6                                | 40         |
| 3                                    | 12                 | 0        | 0                                    | 13                  | 0                  | 6                                | 31         |
| 4                                    | 19                 | 3        | 0                                    | 0                   | 0                  | 16                               | 38         |
| <b>Total</b>                         | <b>80</b>          | <b>3</b> | <b>14</b>                            | <b>16</b>           | <b>3</b>           | <b>28</b>                        | <b>144</b> |

\* Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

^ The Course will be double counted towards Primary Programme and Second Major in Sustainability

| YEAR 1 SEMESTER 1 |   |      |           |               |
|-------------------|---|------|-----------|---------------|
| Course Code       | Course Title  | Type | AU        | Pre-Requisite |
| MH1810            | Mathematics 1   | C    | 3         |               |
| PH1011            | Physics*  | C    | 3         |               |
| FE1073            | An Introduction to Engineering & Practices                | C    | 1         |               |
| CV1011            | Mechanics of Materials                                    | C    | 4         |               |
| CV1012            | Fluid Mechanics   | C    | 3         |               |
| CV1711            | Engineering Drawing and 3D Building Information Modelling | C    | 1         |               |
| CC0001            | Inquiry and Communication in an Interdisciplinary World   | CC   | 2         |               |
|                   |   |      | <b>17</b> |               |

| YEAR 1 SEMESTER 2 |   |      |           |               |
|-------------------|---|------|-----------|---------------|
| Course Code       | Course Title  | Type | AU        | Pre-Requisite |
| MH1811            | Mathematics 2   | C    | 3         | MH1810        |
| CV1014            | Introduction To Computational Thinking                  | C    | 3         |               |
| CV2020            | Water Resources Engineering                             | C    | 3         | CV1012        |
| EN2002            | Microbiological Principles of Environmental Engineering | C    | 3         |               |
| EG1001 ^          | Engineers In Society                                    | C    | 2         |               |
| CC0003            | Ethics & Civics in a Multi-Cultural World               | CC   | 2         |               |
| CC0015            | Health & Wellbeing                                      | CC   | 2         |               |
|                   |   |      | <b>18</b> |               |

| YEAR 2 SEMESTER 1 |  |      |           |               |
|-------------------|--|------|-----------|---------------|
| Course Code       | Course Title   | Type | AU        | Pre-Requisite |
| EN1001            | Environmental Chemistry                                  | C    | 3         |               |
| EN2004            | Geo-Environment and Soil Mechanics                       | C    | 3         |               |
| EN2711            | Environmental Engineering Laboratory A                   | C    | 1         |               |
| MH2814            | Probability & Statistics                                 | C    | 3         | MH1810        |
| CV0003            | Introduction to Data Science and Artificial Intelligence | PS   | 3         | CV1014        |
| CC0006            | Sustainability: Society, Economy & Environment           | CC   | 3         |               |
| ML0004            | Career Design & Workplace Readiness in the V.U.C.A World | CC   | 2         |               |
|                   |  |      | <b>18</b> |               |

| YEAR 2 SEMESTER 2 |                          |      |    |               |
|-------------------|--------------------------|------|----|---------------|
| Course Code       | Course Title             | Type | AU | Pre-Requisite |
| EN2003            | Water Supply Engineering | C    | 3  | CV1012        |

|        |  |        |           |                   |
|--------|--|--------|-----------|-------------------|
| EN2005 | Environmental Health and Safety Management | C      | 3         |                   |
| EN2712 | Environmental Engineering Laboratory B     | C      | 1         |                   |
| EN3003 | Environmental Transport Processes          | C      | 3         |                   |
| CC0007 | Science & Technology for Humanity          | CC     | 3         |                   |
|        | Service Learning                           | CSL    | 3         |                   |
|        | Sustainability-Core                        | BDE-SN | 3         | Refer to Syllabus |
|        | Sustainability-Core                        | BDE-SN | 3         | Refer to Syllabus |
|        |  |        | <b>22</b> |                   |

| YEAR 3 SEMESTER 1 |                                    |        |           |                   |
|-------------------|------------------------------------|--------|-----------|-------------------|
| Course Code       | Course Title                       | Type   | AU        | Pre-Requisite     |
| EN3001            | Solid & Hazardous Waste Management | C      | 3         | Year 3 Standing   |
| EN3002            | Wastewater Engineering             | C      | 3         | Year 3 Standing   |
| EN3004            | Air Pollution Control Engineering  | C      | 3         | Year 3 Standing   |
| EN3006            | Energy Resource Engineering        | C      | 3         |                   |
| HW0288            | Engineering Communication          | PS     | 2         | CC0001            |
| MLxxxx            | Profession Preparation             | PS     | 1         |                   |
|                   | Sustainability-Core                | BDE-SN | 3         | Refer to Syllabus |
|                   | Sustainability-Elective            | BDE-SN | 3         | Refer to Syllabus |
|                   |                                    |        | <b>21</b> |                   |

| YEAR 3 SEMESTER 2 |                         |      |           |                      |
|-------------------|-------------------------|------|-----------|----------------------|
| Course Code       | Course Title            | Type | AU        | Pre-Requisite        |
| EN3920            | Professional Internship | PS   | 10        | Year 3 standing &    |
|                   |                         |      |           | completed at least 4 |
|                   |                         |      |           | semesters of study   |
|                   |                         |      | <b>10</b> |                      |

| YEAR 4 SEMESTER 1 |  |        |           |                   |
|-------------------|--|--------|-----------|-------------------|
| Course Code       | Course Title                               | Type   | AU        | Pre-Requisite     |
| CV4012            | Project Planning & Management              | C      | 2         | Year 4 Standing   |
| EN4001            | Environmental Impact Analysis & Monitoring | C      | 3         |                   |
| EN4711            | Seminars on Built Environment              | C      | 1         |                   |
| EN4911            | Final Year Project                         | C      | 4         | Year 4 Standing   |
| EN4XXX            | Major Prescribed Elective                  | MPE    | 3         | Refer to Syllabus |
|                   | Sustainability-Core                        | BDE-SN | 3         | Refer to Syllabus |
|                   | Sustainability-Elective                    | BDE-SN | 3         | Refer to Syllabus |
|                   |  |        | <b>19</b> |                   |

| YEAR 4 SEMESTER 2 |  |        |           |                   |
|-------------------|--|--------|-----------|-------------------|
| Course Code       | Course Title                             | Type   | AU        | Pre-Requisite     |
| EN4003            | Environmental Systems Analysis           | C      | 2         |                   |
| EN4911            | Final Year Project                       | C      | 4         | Year 4 Standing   |
| EN4912            | Integrated Design Project                | C      | 3         | Year 4 Standing   |
|                   | Sustainability-Interdisciplinary Project | BDE-SN | 3         | Refer to Syllabus |
|                   | Sustainability-Elective                  | BDE-SN | 4         | Refer to Syllabus |
|                   | Sustainability-Elective                  | BDE-SN | 3         | Refer to Syllabus |
|                   |  |        | <b>19</b> |                   |

Total AU for Graduation : **144**