



## Master of Science (Climate Change and Green Technology) – 2023

### FIRST SEMESTER

| Course Code   | Course Title   | Lectures (L) Hours Per Week | Tutorial (T) Hours Per Week | Practical (P) Hours Per Week | FW/SW Credit | Total Credits |
|---|--|-----------------------------|-----------------------------|------------------------------|--------------|---------------|
|   | Fundamentals of Climate  | 4                           | -                           | -                            | 2            | 5             |
|   | Principles of Green Technology   | 4                           | -                           | -                            | 2            | 5             |
|   | Renewable Energy Technologies  | 4                           | -                           | 2                            | -            | 5             |
|   | Impacts and Dynamics of Climate Change                                     | 4                           | -                           | -                            | -            | 4             |
|   | Energy Policy  | 4                           | -                           | -                            | -            | 4             |
| BC604   | Communication Skills - I   | 3                           | -                           | -                            | -            | 3             |
| FREN145<br>GRMN136<br>SPAN144<br>JPAN116<br>CHIN116 | Foreign Language – I<br>French<br>German<br>Spanish<br>Japanese<br>Chinese | 2                           | -                           | -                            | -            | 2             |
|   | Open Electives (OE)  | 0-2                         | -                           | -                            | -            | 0-2           |
|   | <b>TOTAL REQUIRED</b>  |                             |                             |                              |              | <b>28</b>     |

### SECOND SEMESTER

| Course Code   | Course Title  | Lectures (L) Hours Per Week | Tutorial (T) Hours Per Week | Practical (P) Hours Per Week | FW Credit | Total Credits |
|---|---|-----------------------------|-----------------------------|------------------------------|-----------|---------------|
|   | Energy Efficiency and its Conservation                                      | 3                           | -                           | -                            | -         | 3             |
|   | Climate Resilient Agriculture   | 3                           | -                           | 2                            | -         | 4             |
|   | Sustainable Urban Planning  | 4                           | -                           | -                            | -         | 4             |
|   | Circular Economy and Sustainability   | 3                           | -                           | 2                            | -         | 4             |
|   | Energy Audit, Monitoring and Management                                     | 3                           | -                           | -                            | -         | 3             |
| BS602   | Behavioral Science - II   | 3                           | -                           | -                            | -         | 3             |
| FREN104<br>GRMN104<br>SPAN103<br>JPAN102<br>CHIN102 | Foreign Language – II<br>French<br>German<br>Spanish<br>Japanese<br>Chinese | 2                           | -                           | -                            | -         | 2             |
|   | <b>Specialization Electives: (Select any two)</b>                           |                             |                             |                              |           |               |
|   | Ecological Footprint & Carbon Credit  | 3                           | -                           | -                            | -         | 3             |
|   | Geospatial technology for Climate Study                                     | 3                           | -                           | 2                            | -         | 4             |
|   | Climate Change and Public Health  | 3                           | -                           | 2                            | -         | 4             |
|   | Climate Change Economics and Policy   | 3                           | -                           | -                            | -         | 3             |
|   | Environmental Statistics  | 3                           | -                           | 2                            | -         | 4             |
|   | Applications of Green Technologies  | 3                           | -                           | -                            | -         | 3             |
|   | <b>TOTAL REQUIRED</b>   |                             |                             |                              |           | <b>27-29</b>  |

### THIRD SEMESTER

| Course Code | Course Title   | Lectures (L) Hours Per Week | Tutorial (T) Hours Per Week | Practical (P) Hours Per Week | FW Credit | Total Credits |
|-------------|--|-----------------------------|-----------------------------|------------------------------|-----------|---------------|
|             | Sustainable Architecture and Green Building Design                           | 3                           | -                           | -                            | -         | 3             |
| ESCM733     | Environmental Impact Assessment and Green Auditing                           | 3                           | -                           | -                            | -         | 3             |
|             | Climate Modelling and Analytics  | 3                           | -                           | -                            | -         | 3             |
|             | Foreign Language – III<br>French<br>German<br>Spanish<br>Japanese<br>Chinese | 2                           | -                           | -                            |           | 2             |
|             | <b>Specialization Electives: (Select any three)</b>                          |                             |                             |                              |           |               |
|             | Sustainable Business Practices   | 3                           | -                           | -                            | -         | 3             |
|             | Sustainable Water Management   | 3                           | -                           | -                            | -         | 3             |
|             | Vulnerability Assessment Techniques of Climate Change                        | 3                           | -                           | -                            | -         | 3             |
|             | Climate Change and Artificial Intelligence                                   | 3                           | -                           | 2                            | -         | 4             |
|             | Climate Change and Disaster Risk Reduction                                   | 3                           | -                           | 2                            | -         | 4             |
|             | Domain Electives (DE)  | 0-3                         |                             |                              |           |               |
|             | Open Electives (OE)  | 0-2                         |                             |                              |           |               |
|             | Summer Internship  | 3                           | -                           | -                            | -         | 3             |
|             | Value Added Course: Professional Ethics                                      | 2                           | -                           | -                            | -         | 2             |
|             | <b>TOTAL REQUIRED</b>  |                             |                             |                              |           | <b>28</b>     |

### FOURTH SEMESTER

|  |                       |  |  |  |  |           |
|--|-----------------------|--|--|--|--|-----------|
|  | Dissertation          |  |  |  |  | <b>19</b> |
|  | <b>TOTAL REQUIRED</b> |  |  |  |  | <b>19</b> |