# Adamas University

## SCHOOL OF BASIC AND APPLIED SCIENCES

## Department of Chemistry

### PROGRAMME COURSE STRUCTURE
### FOR
### M.Sc. IN ENVIRONMENTAL SCIENCE AND SUSTAINABILITY

**Programme Code: CHM4204**
**Duration: 2 Years Full Time**
**Academic Year: 2026-2027**

**Program Structure for 2-year Postgraduate Programs with Exit Option**
**1st Year of PG curricular structure for 2-year PG Programmes (3+2)**

| 1st Year | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SEMESTER I** | | | | | | | | |
| **S.No** | **Type of Course** | **Code** | **Title of the Course** | **Contact Hours Per Week** | | | | **Total Credits** |
| | | | | **L** | **T** | **P** | **Total** | **C** |
| 1 | CC | EVS451 | Principles of Ecology | 3 | 0 | 1 | 5 | 4 |
| 2 | CC | EVS452 | Natural Resources and Management | 4 | 0 | 0 | 4 | 4 |
| 3 | CC | EVS453 | Chemistry for Environment | 3 | 0 | 1 | 5 | 4 |
| 4 | DSE/MDE | EVS454 | Concepts of Clean and Sustainable Energy | 3 | 0 | 1 | 5 | 4 |
| | | EVS455 | Climate Change Science and Policy | 3 | 0 | 1 | | |
| | | | MDE - Civil Services – General Studies | | | | | |
| 5 | RM | EVS456 | Statistics and Data Science in Environmental Systems | 3 | 0 | 1 | 5 | 4 |
| 6 | AEC | | Foreign Language (Select One from a basket) | 2 | 0 | 0 | 2 | 2 |
| 7 | SEC | EVS457 | Applications of Advanced Excel, R and Python in Environmental Science | 1 | 0 | 1 | 3 | 2 |
| 8 | SEC | | Career Development Course I | 1 | 0 | 0 | 1 | 1 |
| **Semester Credits** | | | | | | | **30** | **25** |
| **SEMESTER II** | | | | | | | | |
| 1 | CC | EVS460 | Air and Noise Pollution and Control Technologies | 3 | 0 | 1 | 5 | 4 |
| 2 | CC | EVS461 | Water Pollution and Control Technologies | 3 | 0 | 1 | 5 | 4 |
| 3 | CC | EVS462 | Waste Management and Resource Recovery | 3 | 0 | 1 | 5 | 4 |
| 4 | DSE | EVS463 | Environmental Economics and Green Accounting | 4 | 0 | 0 | 4 | 4 |
| | | | Any course aligning with the themes of specified DSE courses, subject to availability in the Swayam portal within the stipulated time frame, and as approved by the department | | | | | |
| 5 | MDE | EVS464 | Environmental Impact Assessment and Legal Frameworks | 4 | 0 | 0 | 4 | 4 |
| | | | Any course aligning with the themes of specified MDE courses, subject to availability in the Swayam portal within the stipulated time frame, and as approved by the department/Civil | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Service – General Studies | | | | | |
| 6 | AEC | | Foreign Language (Select One from a basket) | 2 | 0 | 0 | 2 | 2 |
| 6 | SEC | EVS465 | Industry, Ecological and Institutional Exposure Visit | - | - | - | | 2 |
| 7 | SEC | | Career Development Course II | 1 | 0 | 0 | 1 | 1 |
| **Semester Credits** | | | | | | | **26** | **25** |
| **Exit option with Post-Graduate Diploma after the first year or two semesters with the completion of courses equivalent to 50 credits** | | | | | | | | |

**2nd Year of PG curricular structure for 2-year PG Programmes**
**PG Curricular Structure with Coursework and Research**

| **2nd Year** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SEMESTER III** | | | | | | | | |
| **Sr. No** | **Type of Course** | **Code** | **Title of the Course** | **Contact Hours Per Week** | | | | **Total Credits** |
| | | | | **L** | **T** | **P** | **Total** | **C** |
| 1 | CC | EVS501 | Environmental Geosciences and Hydrology | 3 | 0 | 1 | 5 | 4 |
| 2 | CC | EVS502 | Environmental Biotechnology and Bioremediation | 3 | 0 | 1 | 5 | 4 |
| 3 | CC | EVS503 | Land Use/Land Cover and Urbanisation | 3 | 0 | 1 | 5 | 4 |
| 4 | DSE | EVS504 | Instruments for Environmental Applications | 3 | 0 | 1 | 5 | 4 |
| | | EVS505 | Disaster Management and Environmental Resilience | 3 | 0 | 1 | | |
| | | EVS506 | Environmental Health, Biochemistry and Toxicology | 3 | 0 | 1 | | |
| | | EVS507 | Sustainable Finance | 3 | 0 | 1 | | |
| 5 | INT | EVS508 | Internship | - | - | - | - | 2 |
| 6 | SEC | | Career Development Course III | 1 | 0 | 0 | 1 | 1 |
| 7 | Research | EVS509 | Dissertation - I | 0 | 0 | 6 | 12 | 6 |
| **Semester Credits** | | | | | | | **33** | **25** |
| **SEMESTER IV** | | | | | | | | |
| 1 | CC | EVS510 | ESG and Nature Based Solutions | 4 | 0 | 0 | 4 | 4 |
| 2 | DSE | EVS511 | Industrial Pollution Prevention and Clean Technologies | 4 | 0 | 0 | 4 | 4 |
| | | EVS512 | Health, Safety and Environment | 4 | 0 | 0 | | |
| 3 | ENT | EVS513 | Entrepreneurship Course | 0 | 2 | 0 | 2 | 2 |
| 4 | Research | EVS514 | Dissertation - II | 0 | 0 | 12 | 24 | 12 |
| | | | | | | | **34** | **22** |
| **Total Credits** | | | | | | | | **47** |

**Total Credits after 2 years M.Sc. Environmental Science and Sustainability = 97**