Sponsored Candidates

Candidates working in the Industry/Government are encouraged to apply for the full-time M.Sc. programmes. Upto five seats can be reserved in each programme for such candidates. All those who satisfy the minimum qualifications, mentioned in the above para may be admitted to the programme on the basis of an interview. These candidates are required to submit, at the time of interview, a sponsorship certificate from their employer on a proper letterhead, stating that for the period of his/her study at the University, the candidate will be treated as on duty with usual salary and allowances and that he/she will be fully relieved for the period of study for pursuing his/her studies. Sponsored candidate's application will be accepted only from those on the pay rolls of & sponsored by a registered company. Such applications would need to be accompanied by the audited balance sheet of the company and last year's income tax return of the applicant indicating the salary received from the company.

Placement

The students who complete MSc ESRM programme possess the requisite confidence and skills to work as efficient environmental researchers, project managers and policy planners in both public and private organizations. It will also be a structured route to doctoral research work. The University has a Placement Cell that helps students find suitable organizations to do their minor and major projects as well as final placement.

Some of the organizations where the students have been placed in the past are given below:

- United Nations Development Programme (UNDP)
- World Wide Fund (WWF)
- Shakti Sustainable Energy Foundation
- Emergent Ventures
- Deutsche Gesellschaft für Internationalev Zusammenarbeit GmbH (GIZ)
- Ashoka Trust for Research in Ecology and the Environment (ATREE)
- Ernst &Young
- HCL Foundation
- HCL Technologies
- IL&FS
- IORA Ecology
- International Water Management Institute (IWMI)
- National Institute of Hydrology (NIH)
- Tata Trust

Department of Energy and Environment

Given the global depletion of natural resources due to unsustainable consumption pathways societies have adopted, emerging economies like India are at crossroads to choose a trajectory which ensures inter-generational equity, inclusiveness and sustainability in their growth journey. The Department of Energy and Environment (DEE) at TSAS, aims to address the challenges relating to energy and environmental resource management through teaching, research and capacity building. The DEE creates a cadre of trained professionals committed to bring positive change through scientific, technological and policy innovations for strengthening resilience in communities. The DEE offers interdisciplinary post-graduate and doctoral programmes in renewable energy engineering & management, environmental studies & resource management, climate science & policy, and urban development & management to equip students with knowledge and skill sets to create solutions for sustainable development pathways in urban and rural habitats. The Department undertakes research in areas such as renewable energy, energy efficiency, air & water pollution, waste management, energy & environmental modelling, environment & health, sustainable consumption & production, sustainable agriculture, climate adaptation & mitigation, ecosystem management, and smart cities with focus on services, infrastructure & governance. The DEE encourages collaboration with industry, government, academic & research institutions, and multi-lateral organisations to deliver practice informed research and teaching.

About TERI School of Advanced Studies

Academic programmes at the TERI SAS are focused around the challenges of providing the rising global population with a limited and degraded natural resource base. In moving towards sustainability, the implicit understanding is that there is no panacea or straight road, with recognized and established methodologies, tools or specializations leading to such development. The solutions therefore do not lie in a specific subject discipline, but must be appropriate and relevant to the context or the practical problem being addressed. Developing such an understanding among its students is best achieved through exposure to a variety of subjects, tools, and methodologies offered in interdisciplinary mode. This has been the guiding philosophy behind the programmes offered by the TERI SAS and is practised by building a theoretical understanding in courses covering a variety of traditional disciplines, such as ecology, natural and social sciences, governance, policy, law, and engineering.

Over a period of two years, students converge upon a few areas of focus based upon their interest, having been exposed to a new way of thinking that looks at problems not from the lens of a subject specialist, but from the perspective of one who recognizes the complex linkages between man and his environment.

Apart from doctoral research, the TERI SAS offers MSc degree programmes in Environmental Studies and Resource Management, Environmental and Resource Economics, Geoinformatics, Water Science and Governance, Climate Science and Policy, and Plant Biotechnology; MBA programmes in Infrastructure and in Business Sustainability; MTech programmes in Renewable Energy Engineering and Management, Water Science and Governance and Urban Development and Management; and LL.M. programmes in Environment & Natural Resources Law and in Infrastructure & Business Law.

The University offers two MA programmes, one in Public Policy and Sustainable Development, and the other in Sustainable Development Practice. The TERI SAS is one of a select group of 22 institutions chosen worldwide by the MacArthur Foundation, USA, to run the Sustainable Development Practice programme. The University uses modern pedagogical tools, richly supplemented by field visits, live industry projects, and hands-on applications. It provides the very best in equipment and instruments, which includes state-of-the-art computer facilities, well-equipped laboratories, video-conferencing facilities, and access to South Asia's most comprehensive library on energy and environment.

TERI SAS has established excellent partnerships and collaborative arrangements with a number of institutions overseas, including Yale University, USA; The Freie University of Germany; Utrecht University, The Netherlands; North Carolina State University, USA; and University of Technology, Australia.

For further information, please contact

TERI School of Advanced Studies
10, Institutional Area
Vasant Kunj, New Delhi – 110 070, India

Tel. +91 11 71800222
Fax +91 11 2612 2874
E-mail registrar@terisas.ac.in
Web www.terisas.ac.in

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teri school of advanced studies

Established under Section 3 of the UGC Act, 1956
Accredited by NAAC

MSc

ENVIRONMENTAL STUDIES AND RESOURCE MANAGEMENT

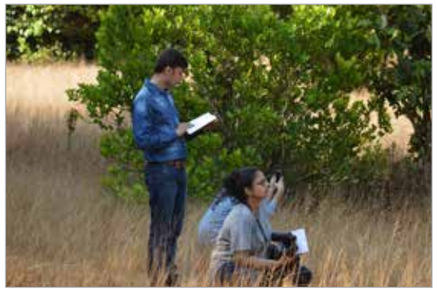
Of late there has been a growing realization that India should emerge as an economy driven by knowledge. Given the rapid progress that intellectual enterprises are making worldwide, higher education must benefit from a continuous accretion of knowledge through research. This is what TERI SAS is attempting to do through all its programmes, for the benefit of not only Indian citizens but people from other countries as well who would pass through the portals of this institution. This University offers education supported by rigorous research.

About the programme

There is an urgent need for efficient utilization and management of resources to ensure sustainable development. Such efforts require a deeper understanding of the development process, the driving factors and the interlinkages within the system.

The M.Sc. ESRM lays foundation for the students from diverse backgrounds to understand the interdisciplinarity of environmental and resources management and learn various tools and techniques. The programme is designed to build a cadre of professionals who are equipped with the knowledge and skillsets to deal with scientific and policy aspects related to environment and resource management.

The theoretical concepts acquired through classroom session and seminars are complemented by the exposure to the real-world scenarios through various field visits during the two years programme. Students also get opportunities to be part of ongoing research projects in the university and enhance their knowledge. This unique degree programme fosters young professionals towards innovative and independent career goals.



MSc (Environmental Studies and Resource Management)

Programme Outline

The curriculum has been designed by integrating the concept of sustainable development in an inter-disciplinary framework with an optimal blend of theory and practical components.
The programme comprises of a set of core and elective course spread across the first, second and third semesters. The core courses focus on building the foundation for the students within the subject area and the elective courses allows the students to gain in-depth knowledge and proficiency in a preferred domain. A minor research project during the summer at the end of the second semester and a major research project during the fourth semester allows the students to apply their learnings in understanding real-life scenarios.

Course Details

Semester 1

Course title
Ecology
Environmental Chemistry and Microbiology
Applied Mathematics
Technical Writing (Communication Skills and Technical Writing)

Course title
Introduction to Sustainable Development
Environmental Monitoring Laboratory
Environmental Geosciences
Environmental Statistics
Environmental Law and Policy

Semester 2

Course title (Core Courses)
Water Quality Management
Solid and Hazardous Waste Management
Air Quality Management
Research Methodology

Course title Elective Courses
Biodiversity Assessment and Conservation
Hydrology
Principles of Geoinformatics
Basic Course in Environmental and Resource Economics
Environment Health and Risk Assessment

Minor Project

As part of summer internship, students undertake a minor project for 8 weeks with a relevant industry or organization. The minor project is supervised by a professional/researcher in the industry/organization. The project carries credits and is assessed and graded.

Semester 3

Course title (Elective Courses)
Industrial Ecology
Wildlife Conservation and Management
Environmental Management System
Geoinformatics for Resource Management

Course title (Elective Courses)
Seminar Course in Global Change
Food Security and Agriculture
Multivariate Data Analysis
Groundwater Hydrology and Management

MSc (Environmental Studies and Resource Management)

Semester 3

Environmental Economics	Water and Wastewater Treatment Processes and Design
Environmental Modelling	Integrated Watershed Management
Governance and Management of Natural Resources	Aerosol Science
Independent Study	Satellite meteorology
Integrated Impact Assessment	

Semester 4

Major Project

Eligibility Criteria

A Bachelor's degree in Science/Engineering/Economics/Mathematics/Statistics/Geology/Geography with a minimum cumulative grade point average of 6.75 on a 10 point scale or equivalent, as determined by TERI SAS, wherever letter grades are awarded, or 60% marks in aggregate, wherever marks are awarded. For candidates with bachelor's degree in Humanities (e.g. Economics/ Geography), a relaxation of 5%/ 0.75 Cumulative Grade Point Average could be allowed.

Selection Procedure

Admission to the MSc programme is made on the basis of an online test and an interview conducted by the University.

Pedagogical Tools

The learner centric pedagogy comprises of classroom lectures enriched by case studies, field visits, term papers, assignment and tutorials, guest lectures by practitioners and experts, seminars and discussion forums.