

Information Brochure

2014/15

**TERI University, 10, Institutional Area
Vasant Kunj, New Delhi – 110 070**

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Important dates

1.	Issue of application form starts on	18 November 2013
2.	Last date of issue of application form	
	(a) By post	21 April 2014
	(b) At the counter, TERI University	25 April 2014
3.	(a) Last date of receipt of application forms	25 April 2014
	(b) Last date for receipt of application forms (for APGDRE)	30 June 2014
4.	Shortlisting of candidates for MBA programmes	2 May 2014
5.	Group discussions/interviews for MBA programmes	21-22 May 2014
6.	Date of online test for eligible M Sc, MA, M.Tech candidates	24-25 May 2014
7.	Declaration of results of GD/interviews of MBA programmes	3 June 2014
8.	(a) Declaration of shortlists (other than MBA and APGDRE)	6 June 2014
	(b) Declaration of shortlist (APGDRE)	10 July 2014
9.	Last date for payment of fees (for MBA)	13 June 2014
10.	Interviews for all programmes (other than MBA)	16-21 June 2014
11.	Interviews for sponsored candidates	23-27 June 2014
12.	Declaration of final list and wait list (other than MBA)	30 June 2014
13.	Last date for payment of fees (other than MBA and APGDRE)	11 July 2014
14.	Activation of wait-lists	14 July 2014
15.	Orientation and registration	21 July 2014
16.	Commencement of classes	22 July 2014
17.	Last date for payment of fees (for APGDRE)	31 July 2014
18.	Commencement of APGDRE programme	16 August 2014
19.	Last date for payment of fees (for APGDRE with late fees of Rs.2000/-)	25 August 2014

PLEASE NOTE

Applications can be submitted on-line at <www.teriuniversity.ac.in> or can be submitted/posted to:

Registrar
TERI University, 10, Institutional Area
Vasant Kunj, New Delhi – 110 070

Centre(s) for online test/interviews

- Doctoral Programmes (Ph D) – New Delhi
- M Sc. MA, M.Tech interviews – New Delhi, Bangalore, Guwahati, Pune
- M B A Group discussions/interviews – New Delhi
- Common online test is likely to be conducted at the following centres*.

Location of the centre	Centre code	Location of the centre	Centre code
New Delhi	001	Bhubaneshwar	012
Gurgaon	002	Chandigarh	013
Noida	003	Jaipur	014
Faridabad	004	Ranchi	015
Hyderabad	005	Bangalore	016
Vishakhapatnam	006	Cochin	017
Guwahati	007	Bhopal	018
Patna	008	Chennai	019
Ahmedabad	009	Agra	020
Mumbai	010	Lucknow	021
Pune	011	Kolkata	022

* Choice of centre is to be indicated in the application form. Centre's are likely to change depending on the number of students.

1 Programmes offered by the University

- Doctoral programmes (Ph D)
- M Sc (Environmental Studies and Resource Management)
- M Sc (Geoinformatics)
- M Sc (Plant Biotechnology)
- M Sc (Climate Science and Policy)
- M Sc (Economics) – with a specialization in Environmental & resource Economics
- M B A (Infrastructure)
- M B A (Business Sustainability)
- M Tech (Renewable Energy Engineering and Management)
- M.Tech (Urban Development and Management)
- Multi track programme on Water Science & governance
- MA (Sustainable Development Practice)
- Advanced PG Diploma (Renewable Energy) distance learning programme
- Diploma in Renewable Energy
- Certificate courses
- MA (Public Policy and Sustainable Development)

2 Doctoral programmes (Ph D)

2.1 Categories of admission

- (a) Full time with assistantship/without assistantship
- (b) Full time with UGC/CSIR/DBT/other research scheme scholarship
- (c) Sponsored
- (d) Part-time

Admission to the Ph D programmes will be made on the basis of a test/interview conducted by the Centre/Department concerned. Candidates may apply at any time through the year. Admission is subject to vacancies available in the relevant specializations.

Note: Only those candidates shortlisted by the department/center concerned will be sent call letters for interviews.

2.2 Minimum qualification for admission

Faculty of Applied Sciences

- (a) M Sc or M Phil in a relevant field or equivalent
- (b) Bachelor's degree in engineering or equivalent

Faculty of Policy and Planning

- (a) M Sc/MA/M Phil in a relevant field or equivalent.
- (b) Bachelor's degree in engineering or equivalent.

Candidates who possess a B Tech degree in the relevant field or equivalent are required to have a minimum CGPA of 7.5 on a 10 point scale or 70% marks.

2.3 Additional requirements for full-time sponsored candidates

These requirements are additional to the regulations governing Ph D students.

- (a) Sponsored candidates are required to submit a sponsoring certificate from their employers on proper letterhead stating that for the period of his/her studies in the programme, the candidate would 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 study and the fee of the candidate will be paid by the sponsoring organization.
- (b) Candidates seeking admissions to Ph D programmes on the basis of study leave must show proof at the time of interview of the fact that they will be/have been granted study leave for a minimum period of three years.

2.4 Additional requirements for part-time (sponsored and non-sponsored) candidates

These requirements are additional to the regulations governing Ph D students.

- (a) Employed candidates working in organizations approved by the Department/Centre Research Committee with a minimum experience of three years are eligible to be considered for part-time (sponsored, non-sponsored) admissions.
- (b) Sponsored candidates are required to submit a sponsoring certificate from their employers on proper letterhead stating that for the period of his/her studies and research work, the candidate would be treated as on duty with usual salary and allowances and that the fee of the candidate will be paid by the sponsoring organization.

- (c) Non-sponsored candidates are required to submit a 'No Objection Certificate' at the time of interview from their employer stating that the candidate is permitted to pursue studies on a part-time basis and that:
 - (i) His/her official duties permit him/her to devote sufficient time for research;
 - (ii) The candidate shall be provided access to the facilities in the field of research; and
 - (iii) He/she shall be permitted to attend classes at the University as required by the University.
- (d) Candidates seeking admission to a Ph D programme on the basis of study leave must show proof at the time of interview to the effect that they will be/have been granted study leave for a minimum period of two years.

Note: Part-time candidates will be required to attend all classes of the pre-Ph D programme. These are scheduled between 08:30 am and 5:30 p.m. Attendance requirements are strictly followed.

2.5 Pre-Ph D course requirements

In order to overcome any deficiency in the breadth of fundamental training or proper foundation for advanced work, special preliminary or pre-doctoral courses are offered by the University. These courses will be offered either by faculty members or by guest faculty and specialists in the profession. Candidates having a B Tech./M Sc/M A or equivalent degree are required to complete a minimum of 10 course credits. M Tech or equivalent degree holders are required to complete a minimum of 5 credits. Relaxation up to 6 credits (from 10 credits) in the course work can be considered for those with M Phil. degree as well as those with B Tech./M Sc/MA or equivalent, provided they have a minimum of five years experience in the relevant field. The course requirement will be determined by the Department Research Committee/ Centre Research Committee on the recommendations of the SRC (Student Research Committee) after due consideration of the background of the student in relation to the proposed topic of research. In addition to the above credit requirements, students are required to complete compulsory audit course in communication skills and in statistics. They are also required to complete a compulsory credit course in Research Methods.

2.6 CGPA (Cumulative Grade Point Average) requirements

The minimum CGPA requirement is 7.5. If the SGPA (Semester Grade Point Average) at the end of 1st Semester is above 7.0 but less than 7.5, he/she will be asked to take more courses in order to make up the required CGPA. If the SGPA at the end of the first semester and CGPA at the end of any subsequent semester is below 7.0, he/she will have to discontinue the doctoral programme. The course work must be completed within the first three semesters of joining the programme.

2.7 Comprehensive examination

A student shall be formally registered/admitted to the candidacy of Ph D degree only after he/she has cleared the comprehensive examination. Students will be permitted to take the

comprehensive examination only after they have submitted a research plan and have completed the course work including the compulsory audit courses. Full-time and part-time students must clear the comprehensive examination within a period of 18 months and 24 months, respectively, from the date of joining. A maximum of 2 chances will be given to any student to clear the comprehensive examination. Every student, after having completed the comprehensive examination must formally register for the candidacy.

2.8 Time limit for Ph D work

- (a) Candidates having a B Tech./M A/M Sc or equivalent degree are required to be registered for a period of not less than three years from the commencement of course work (date of registration). In exceptional cases the minimum period of registration may be reduced to two years with the approval of the Academic Council. The minimum period of registration for candidates having an M Tech or M Phil equivalent degree is two years. The minimum period of registration for part-time students will be five years.
- (b) A candidate is normally expected to submit his/her thesis within five years from the date of registration. This period may be extended by the Academic Council as a special case to a maximum of seven years after which the registration will stand cancelled.
- (c) A full-time candidate may be allowed by the Chairman, Academic Council, to convert his/her registration into part-time registration only after completion of three years from initial registration or after submission of a synopsis, whichever is earlier.
- (d) Full-time Ph D scholars with M Tech. qualification can be permitted to convert their registration from full-time to part-time after one year or after completion of course work and comprehensive examination whichever is later, if they get employed in the University's/TERI's sponsored projects.
- (e) Full-time Ph D scholars in the Faculty of Applied Sciences with M Sc qualifications can be permitted to convert their registration from full-time to part-time after two years or after completion of course work and comprehensive examination, whichever is later, if they get employed in the University's/TERI's sponsored projects. Such conversion will be permissible only if the work is in the projects of the University/TERI and not for employment outside. This provision will also be applicable to Ph D scholars with a B Tech degree.

2.9 Grant of leave to Ph D students

- (a) During course work a full-time Ph D student, during his/her stay at the University will be entitled to leave for 30 days, including leave on medical grounds, per academic year. He/she will not be entitled to mid-semester breaks, summer and winter vacations. Leave beyond 30 days in an academic year may be granted to a Research Scholar in exceptional cases subject to the following conditions:
 - (i) the leave beyond 30 days will be without assistantship/scholarship; and
 - (ii) such an extension of up to additional 30 days will be granted only once during the programme of the scholar.

The leave will be subject to the approval of the Head of Department/Dean/Faculty/Programme Coordinator concerned on the recommendation of the Supervisor,

and a proper leave account of each scholar shall be maintained by the Department concerned.

- (b) After completing the course work a full-time Ph D student during his/her stay at the University, will be entitled to leave for 30 days per academic year. He/she will not be entitled to mid-semester breaks, summer and winter vacations. In addition, a Ph D scholar who has completed his/her course work may be granted leave on medical grounds up to 10 days per academic year. Women research scholars will be eligible for maternity leave with assistantship for a period not exceeding 135 days once during the tenure of their programme.

2.10 Attendance requirements for Ph D students

A Ph D student, whether full-time or part-time, is expected to attend all classes in each course in which he/she is registered. In case his/her attendance is less than 75%, he/she will be debarred from the test/ examination for the course and will be awarded an F grade.

2.11 Financial assistance to Ph D students

The University does not award any scholarship to students. However, some assistantships are available in TERI's projects. Those students who wish to be considered for the award of assistantship from TERI's projects should mention this in the application form for admission. The amount of such assistantship will be governed by the terms and conditions of the project. Students who accept these assistantships are required to provide assistance to the project for up to 8 hours per week during the first year or up to the end of comprehensive examination, whichever is later. On completion of the comprehensive examination they can opt to work for up to 12 hours per week to receive enhanced assistantship. Note that admission to the programmes and award of assistantship are not linked. Those who are not awarded assistantships can continue with the programme as self-financing students.

2.12 Attendance requirement for assistantship

If a Ph D student's attendance falls below 75% in any course during a month, he/she will not be paid assistantship for that month. Further, if his/her attendance again falls short of 75% in any course in any subsequent month in that semester, his/her assistantship will be terminated. A research scholar after having completed the course work must attend to his/her research work on all working days and mark attendance except when he/she is on duly sanctioned leave. The requirement of 75% attendance will apply as above, on daily attendance except in cases where longer leave has been duly sanctioned within the leave entitlement of the student.

3 M Sc (Climate Science and Policy) M Sc (Environmental Studies and Resource Management)

3.1 Programme details

In view of the environmental challenges facing the world in the twenty-first century and in order to spread the experience which TERI has gained in preserving biodiversity and ecosystems, sustaining forests, translating scientific knowledge into sound policy, and integrating environmental issues into development, TERI University offers programmes leading to the award of M Sc in Climate Science and Policy and Environmental Studies and Resources Management.

The programmes, run by the Department of Natural Resources, are intended to educate students to become natural resource/environmental managers, scientists, researchers, and policy-makers through courses in natural sciences, economics, and public policy. Tools such as GIS (geographic information systems) and remote sensing are used in minor and major projects to help students understand the inter-disciplinary relationships.

3.2 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 University, 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.

3.3 Selection procedure

Admission to the M Sc programmes is made on the basis of an online test and interview conducted by the University. Applications are invited from the candidates by advertising the programmes in some leading newspapers every year.

The online test will be one-hour long and will consist of one paper with 100 multiple-choice questions.

The questions will be divided into three sections:

- Proficiency in English
- Analytical reasoning
- Quantitative ability

Wrong answers would invite negative marking. This would be followed by an interview.

3.4 Sponsored candidates

Candidates working in the Industry/Government are encouraged to apply for the full-time M Sc programmes. Upto two 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.

3.5 Programme outline

Year	Courses	Credits	Duration*
First year			
1 st semester	8 core courses of 1-3 credits each	21	15 weeks
2 nd semester	3 core courses and minimum 3 electives of 3 credits each	17	15 weeks
Summer	Minor project	2	8 weeks
Second year			
3 rd semester	Minimum 4 electives of 3-4 credits each	15	15 weeks
4 th semester	Major project	15	At the location of the project

* Does not include mid and end-semester breaks and evaluation schedules (based on major and minor tests and assignments)

Note: The above is an indicative programme outline, and could vary from programme to programme.

3.6 Pedagogical tools

The pedagogical tools will comprise not just classroom lectures but also case studies, field visits, evaluation, term papers, assignments and tutorials, a large number of guest lectures by practitioners and experts, seminars and discussion forums, and role play.

3.7 Course details - M Sc (Environmental Studies and Resource Management)

Semester 1

Core courses

1 Ecology

- 2 Environmental Chemistry and microbiology
- 3 Environmental law and policy
- 4 Environmental statistics
- 5 Research methodology and thesis writing
- 6 Environmental geosciences
- 7 Environmental monitoring laboratory
- 8 Introduction to sustainable development

Semester 2

- 1 Design for sustainability
- 2 Environmental health and risk assessment
- 3 Multivariate data analysis
- 4 Air quality management
- 5 Biodiversity assessment and conservation
- 6 Environmental pollution and control
- 7 Hydrology
- 8 Solid and hazardous waste management
- 9 Water conservation
- 10 Water quality management
- 11 Basic course in environmental and resource economics
- 12 Principles of geoinformatics
- 14 Technical Writing (Communication skills and technical writing)

Summer Semester

Minor Project

Semester 3

- 1 Urban ecosystems and sustainable cities
- 2 Cultural ecology and development
- 3 Energy and environment
- 4 Environmental economics
- 5 Environmental management system
- 6 Environmental modelling
- 7 Forest Management
- 8 Geoinformatics for resource management
- 9 Governance and management of natural resources
- 10 Groundwater hydrology and management
- 11 Independent study
- 12 Integrated impact assessment
- 13 Resource economics
- 14 Industrial ecology
- 15 Wildlife conservation and management
- 16 Environmental biotechnology and social concerns
- 17 Integrated watershed management

- 18 Landscape ecology
- 19 Vegetation science and site classification
- 20 Water and wastewater treatment processes and design
- 21 Water resources optimization and water quality modelling
- 22 Aerosol science
- 23 Climate modeling
- 24 Economics of climate change
- 25 Ecosystem dynamics and climate change
- 26 Glacier hydrology
- 27 Governance and climate change
- 28 Spatiotemporal data analysis
- 29 Sustainable urban habitat and climate

Semester 4

Major Project

3.8 Course details – M Sc (Climate Science and Policy)

Semester 1

- 1 Ecology
- 2 Basics of climate science
- 3 Environmental law and policy
- 4 Environmental statistics
- 5 Research methodology and thesis writing
- 6 Environmental geosciences
- 7 Introduction to sustainable development
- 8 Energy and environment
- 9 Environmental laboratory for climate scientists
- 10 Law and policy of climate change

Semester 2

- 1 Air pollution and climate change
- 2 Mitigation of climate change
- 3 Design for sustainability
- 4 Multivariate data analysis
- 5 Seminar course: Issues related to climate change
- 6 Climate change: Vulnerability, Impacts Adaptation & Resilience
- 7 Basic course in environmental and resource economics
- 8 Principles of geoinformatics
- 9 Technical Writing (Communication skills and technical writing)
- 10 Minor project

Semester 3

- 1 Urban ecosystems and sustainable cities

- 2 Cultural ecology and development
- 3 Energy and environment
- 4 Environmental economics
- 5 Environmental management system
- 6 Environmental modelling
- 7 Forest Management
- 8 Geoinformatics for resource management
- 9 Governance and management of natural resources
- 10 Groundwater hydrology and management
- 11 Independent study
- 12 Integrated impact assessment
- 13 Resource economics
- 14 Industrial ecology
- 15 Wildlife conservation and management
- 16 Environmental biotechnology and social concerns
- 17 Integrated watershed management
- 18 Landscape ecology
- 19 Vegetation science and site classification
- 20 Water and wastewater treatment processes and design
- 21 Water resources optimization and water quality modelling
- 22 Aerosol science
- 23 Climate modeling
- 24 Economics of climate change
- 25 Ecosystem dynamics and climate change
- 26 Glacier hydrology
- 27 Governance and climate change
- 28 Spatiotemporal data analysis
- 29 Sustainable urban habitat and climate

Semester 4

Major project

3.9 General guidelines

The minimum eligibility clause is only an enabling one. The University may fix higher criteria at the time of shortlisting, keeping in view the number of candidates, etc. In the event of a tie in marks in the online test, the student with a higher percentage of marks/CGPA at the Bachelor's degree will be given preference for admission. Candidates who are in the final year of their examination can be considered for admission only if they are able to produce a provisional certificate stating that they have passed the final examination in the qualifying degree by 28 July 2014

4 M Sc (Geoinformatics)

4.1 Programme details

Studies on environmental and sustainable development issues require a huge amount of well-calibrated spatial and non-spatial datasets on the dynamics of natural and socio-economic systems. In order to meet the demand for qualified human resources who can contribute to production and analysis of these kinds of datasets, TERI University offers a programme leading to the award of MSc (Geoinformatics). The programme, run by the Department of Natural Resources, is intended to educate students and professionals about project management, related law and policy apart from RS/GIS/GPS and modelling techniques. The programme also offers elective courses like landscape ecology, integrated impact assessment, environmental modelling, watershed management, and climate change to understand the interdisciplinary applications of this tool. Students who complete this programme will possess the confidence and skills to attract a wide range of potential employers in public and private organization. The programme will also prove a structured route to doctoral research work.

4.2 Eligibility criteria

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

4.3 Selection procedure

Admission to the M Sc programmes is made on the basis of an online test conducted by the University and an interview. Applications are invited from the candidates by advertising the programmes in some leading newspapers every year.

The online test will be one-hour long and will consist of one paper with 100 multiple-choice questions.

The questions will be divided into three sections:

- Proficiency in English
- Analytical reasoning
- Quantitative ability

Wrong answers would invite negative marking. This would be followed by an interview.

4.4 Sponsored candidates

Candidates working in the Industry/Government are encouraged to apply for the full-time M Sc programmes. Upto two 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.

4.5 Programme outline

Year	Courses	Credits	Duration*
First year			
1 st semester	7 core courses of 3-4 credits each	21	15 weeks
2 nd semester	7 core courses of 2-4 credits each	17	15 weeks
Summer	Minor project	2	
Second year			
3 rd semester	3 core and 4 elective courses of 3-4 credit each	15	15 weeks
4 th semester	Major project	15	At the location of the project

* Does not include mid and end-semester breaks and evaluation schedules (based on major and minor tests and assignments)

4.6 Pedagogical tools

The pedagogical tools will comprise formal class room teaching, workshops, hands-on practice, field, labs excursions, case studies, field visits, term papers, assignments and tutorials. Group and individual projects using diverse spatial-temporal datasets will be used to demonstrate specific issues in the domain of environmental and social sciences.

Interactive sessions will be arranged with players and stakeholders in data management and plan execution from the government, private sector, entrepreneurs and NGOs.

4.7 Course details

Semester 1

- 1 Principles of cartography
- 2 Principles of remote sensing
- 3 Principles of GIS and GPS
- 4 Project management
- 5 Environmental statistics
- 6 Research methodology and thesis writing

7 Fundamentals of computers and programming

Semester 2

- 1 Photogrammetry
- 2 Law and policy for maps and remote sensing
- 3 Spatial data modelling and GIS applications
- 4 Digital image processing and information extraction
- 5 Multivariate data analysis
- 6 Technical Writing (Communication skills and technical writing)

Summer Semester

Minor Project

Semester 3

- 1 Urban ecosystems and sustainable cities
- 2 Cultural ecology and development
- 3 Energy and environment
- 4 Environmental economics
- 5 Environmental management system
- 6 Environmental modelling
- 7 Forest Management
- 8 Geoinformatics for resource management
- 9 Governance and management of natural resources
- 10 Groundwater hydrology and management
- 11 Independent study
- 12 Integrated impact assessment
- 13 Resource economics
- 14 Industrial ecology
- 15 Wildlife conservation and management
- 16 Environmental biotechnology and social concerns
- 17 Integrated watershed management
- 18 Landscape ecology
- 19 Vegetation science and site classification
- 20 Water and wastewater treatment processes and design
- 21 Water resources optimization and water quality modelling
- 22 Aerosol science
- 23 Climate modeling
- 24 Economics of climate change
- 25 Ecosystem dynamics and climate change
- 26 Glacier hydrology
- 27 Governance and climate change
- 28 Spatiotemporal data analysis
- 29 Sustainable urban habitat and climate

Semester 4

Major Project

4.8 General guidelines

The minimum eligibility clause is only an enabling one. The University may fix higher criteria at the time of shortlisting, keeping in view the number of candidates, etc. In the event of a tie in marks in the online test, the student with a higher percentage of marks/CGPA at the Bachelor's degree will be given preference for admission. Candidates who are in the final year of their examination can be considered for admission only if they are able to produce a provisional certificate stating that they have passed the final examination in the qualifying degree by 28 July 2014.

5 M Sc (Plant Biotechnology)

5.1 Programme details

This programme aims to build capacity in the form of trained manpower in the field of plant biotechnology. This M Sc programme is unique because, it presents an integrated view of the subject while emphasizing scientific principles and techniques and, it also includes an overview of socio-economic and ethical concerns associated with biotechnology.

5.2 Eligibility criteria

A minimum eligibility of a Bachelor's degree in Sciences, preferably Life Sciences, with a minimum of 60% marks in aggregate (of all the years/semesters of the qualifying examinations), wherever marks are awarded, or a minimum cumulative grade point average of 6.75 on a 10 point scale will be required.

5.3 Selection procedure

Admission to the M Sc programmes is made on the basis of an online test conducted by the University and an interview followed by an interview. Applications are invited from the candidates by advertising the programmes in some leading newspapers every year.

The online test will be one-hour long and will consist of one paper with 100 multiple-choice questions.

The questions will be divided into three sections:

- Proficiency in English
- Analytical reasoning
- Quantitative ability

Wrong answers would invite negative marking. This would be followed by an interview.

5.4 Sponsored candidates

Candidates working in the Industry/Government are encouraged to apply for the full-time M Sc programmes. Upto two 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.

5.5 Programme outline

The proposed academic programme has been formulated with an objective of advancing education and research in the area of Plant Biotechnology within a regulatory framework. The programme may be deemed as one of its own kind since conceptual understanding will be imparted in cutting-edge science along with providing a preliminary exposure to regulatory issues and bioethical concerns related to plant biotechnology.

Rigorous training will be imparted to students through courses that cover various aspects of Plant Sciences, Genetic Engineering and Biotechnology. Hands-on training will be provided through commensurate bench-level training relating to the topics covered in each semester. The issues relating to scientific integrity and bioethical concern and importance of public awareness will also be covered. Additionally, the students will be acquainted with basic bio-statistical tools and techniques and trained in effective scientific communication.

The focus in the third semester will shift to specialized courses. These have been designed to highlight how the application of fundamental knowledge from the plant sciences, combined with genetic engineering tools, has addressed practical problems and furthered the expansion of basic knowledge as well. Courses have been specifically structured to impart concepts pertaining to advanced areas of research in plant biotechnology and contemporary approaches employed by molecular biologist. The course entitled “Plant Biotechnology Management and Regulatory Issues” is the hallmark of the programme. This course is included to sensitize the students to critical regulatory issues in field of plant biotechnology. The students will additionally be trained in theoretical aspects relating to Bioinformatics and Computational Biology, which provide important data-analysis and management tools in the post-genomic era. The final semester is dedicated to a major laboratory-based project to be undertaken by the student. Therefore, a graduate of this programme may be expected to have both the specialized knowledge and practical experience required to address contemporary problems in research and industry.

5.6 Pedagogical tools

The pedagogical tools will comprise intensive laboratory work, classroom lectures, tutorials, case studies, field visits, term papers, and assignments, a large number of guest lectures by experienced practitioners, seminars and discussion forums.

5.7 General guidelines

The minimum eligibility clause is only an enabling one. The University may fix higher criteria at the time of shortlisting, keeping in view the number of candidates, etc. In the event of a tie in marks in the online test, the student with a higher percentage of marks/CGPA at the Bachelor’s degree will be given preference for admission. Candidates who are in the final year of their examination can be considered for admission only if they are able to produce a provisional certificate stating that they have passed the final examination in the qualifying degree by 28 July 2014.

5.8 Course details

Semester 1

- 1 Applied mathematics
- 2 Communication skills
- 3 Plant biotechnology and crop improvement
- 4 Plant biotechnology laboratory - Part 1
- 5 Molecular plant physiology and biochemistry
- 6 Molecular and cell biology - Part 1
- 7 Principles of genetic engineering and recombinant DNA technology

Semester 2

- 1 Statistical techniques
- 2 Plant biotechnology laboratory - Part 2
- 3 Immunochemistry
- 4 Molecular and cell biology - Part 2
- 5 Molecular markers and breeding

Semester 3

- 1 Genomics and molecular genetics
- 2 Bioethics and public awareness
- 3 Bioinformatics and computational biology
- 4 Plant biotechnology laboratory - Part 3
- 5 Plant biotechnology and crop improvement
- 6 Advanced Statistics (Elective)
- 7 Plant biotechnology management and regulatory issues

Semester 4

Major project

6 M B A (Infrastructure)

6.1 Programme details

Management education is deep rooted in India with a large number of universities offering MBA degrees. The MBA (Infrastructure) programme at TERI University brings together this knowledge capital in a set of courses that cover all traditional business administration disciplines such as marketing, finance, and strategy. In addition, this programme caters to the need for a cadre of professionals with training for operation, management, and financing of infrastructure services. The aim is to achieve a critical mass of expertise and academic excellence for effective management of, and for influencing public policy and regulatory practice in infrastructure industries.

The MBA (Infrastructure) programme encompasses a comprehensive and well-structured two-year curriculum designed specifically to provide specialized training in the concepts and skills involved in the infrastructure service delivery, regulatory process, and competition policy, as well as helping the managers understand regulation from technical, economic, social, legal and political perspectives. The programme is open to both mid career professionals and fresh graduates. For mid-career professionals from regulated utilities, regulatory bodies, and consultancies, the course allows them the flexibility to take up a research thesis-based curriculum. It is mandatory for such students to undertake course work in the first year. In the second year, students will have to write a thesis and defend it at the end of the year. For graduates without work experience, course work will extend to 1½ years (3 semesters) followed by one semester of project work.

6.2 Eligibility

- Stream I For graduates without work experience.
- Stream II For graduates with work experience.

Eligibility for Stream I

(i) Bachelor's Degree with at least 50% marks or equivalent CGPA with English at 10+2 level.

Eligibility for Stream II

(ii) Graduates with a minimum of two year's experience in any of the following sectors namely government, regulatory bodies, industry, research/academic institutions, donor/consultant organizations.

6.3 Selection procedure

Candidates will be shortlisted based on the basis of CAT/GMAT/MAT score. Selection from shortlisted candidates will be on the basis of group discussions and interviews to be conducted by the University at New Delhi.

6.4 Sponsored candidates

Candidates working in the industry/government/regulatory bodies/research/academic institutions/donor/consultant organizations are encouraged to apply for the full-time M B A programme. All those who satisfy the minimum qualifications may be admitted to the programme on the basis of GD/interviews, to be held at New Delhi. 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.

6.5 Programme outline

Year	Courses	Credits	Duration*
First year (Common to both streams)			
1 st semester	7 core courses	21	15 weeks
2 nd semester	11 core courses	34	15 weeks
Second year (Stream I)			
3 rd & 4 th semester	Core credits 11(4courses), functional elective credits 6 (3 courses), non credit electives 5 courses	21	15 weeks
4 th semester	Major project	20	At the location of the project
Second year (Stream II)			
3 rd & 4 th semester	Major project	47	At the participant's workplace

* Does not include mid and end-semester breaks and evaluation schedules (based on major and minor tests and assignments)

6.6 Pedagogical tools

The pedagogical tools will comprise not just classroom lectures but also case studies, field visits, term papers, assignments and tutorials, a large number of guest lectures by practitioners and experts, seminars and discussion forums, and role play.

6.7 Course details

Semester 1

- 1 Management functions and organizational behaviour
- 2 Business communications
- 3 Principles and concepts of sustainability
- 4 Marketing management
- 5 Global economic environment, policy and governance

- 6 Sustainability reporting
- 7 Sustainable Urban Habitat and Climate Change
- 8 Energy policy and management
- 9 Research methods in management - 1
- 10 Managerial economics
- 11 Mathematics for business
- 12 Corporate accounting and reporting

Semester 2

- 1 Infrastructure policies reforms and law
- 2 Competition theory and policy
- 3 Economics of regulation: theory and evidence
- 4 Management information system
- 5 Econometrics and operations research for management
- 6 Macroeconomics
- 7 Production and operations management
- 8 Qualitative research methods in management
- 9 Sustainable business strategy
- 10 Corporate finance
- 11 Managing negotiations

Semester 3

- 1 Energy policy and management
- 2 Derivatives and risk management
- 3 Project appraisal
- 4 Rural banking and alternative financing
- 5 Business to business marketing
- 6 Consumer behaviour
- 7 Urban infrastructure management
- 8 Oil and gas business
- 9 Integrated marketing and communication
- 10 Financial intermediaries, institutions and regulations
- 11 Marketing of services
- 12 International financial management
- 13 Brand management
- 14 Risk management (Infrastructure projects)
- 15 Business and ethics
- 16 Global economic environment, policy and governance

Semester 4

- 1 Operation and management of power systems
- 2 Security analysis and portfolio management
- 3 Customer relationship management
- 4 Project management for business
- 5 Major project

7 M B A (Business Sustainability)

7.1 Programme details

Management education is deep rooted in India with a large number of universities offering MBA degrees. The MBA (Business Sustainability) programme at TERI University brings together this knowledge capital in a set of courses that cover all traditional business administration disciplines such as marketing, finance, and strategy.

However, as the growth story in the developing world unfolds in these tumultuous times, both industrial and non-industrial actors are being challenged to take on new roles in the modern society. While industry, given its repository of leadership capital, is being called upon to play a much larger role in societal development, governments and civil society organizations are being encouraged to work efficiently to achieve social objectives. For industry, now more than ever, there will be persistent demand for sustainable and ethical practices, and accountability to consumers and the public at large. For governments, the challenge is of meeting development goals, while addressing environmental degradation. These challenges have increased the demand for new skills and the need to internalize, within the current management education framework, a high level of social consciousness and ethical behaviour.

Apart from creating a fresh cadre of managers who internalize such sustainability concerns in their professional careers, it is imperative that the existing leadership reorients itself to consumer needs, societal pressures and environmental imperatives, in order to ensure convergence of the concepts of profitability and cost competitiveness with the need to be more responsive. Moreover, these leaders would need to work in progressively more diverse and multi-cultural contexts requiring a very different vision.

The MBA (Business Sustainability), intended for both fresh graduates and mid-career professionals, is an effort to align leadership in both industry and government to current contexts. In doing so, this programme will enhance the scope and knowledge body of management education in India by imparting conventional management skills to students as also by helping them develop new perspectives related to the integration of sustainable and ethical practices into management education. The students of this programme will be well equipped to meet the demands of a fast changing world.

This is not just an MBA programme; it's a MBA+ programme. This programme combines conventional MBA curriculum with new sustainability challenges that have direct impact on a firm's future performance – financial and otherwise. The programme also leverages TERI's knowledge capital in sustainable development to deepen the social and ethical consciousness of management education in India. The graduates of this programme will become competent business leaders with a holistic and long-term perspective for a world that demands new skills and attitude.

7.2 Eligibility

Bachelor's degree with at least 50% marks or equivalent CGPA with English at 10+2 level. Candidates appearing for the final year of bachelor's degree / awaiting results can also apply.

7.3 Selection procedure

Candidates will be shortlisted based on the basis of CAT/GMAT/MAT score. Selection from shortlisted candidates will be on the basis of group discussions and interviews to be conducted by the University at New Delhi.

7.4 Sponsored candidates

Candidates working in the industry/government/regulatory bodies/research/academic institutions/donor/consultant organizations are encouraged to apply for the full-time M B A programme. All those who satisfy the minimum qualifications may be admitted to the programme on the basis of GD/interviews, to be held at New Delhi. 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.

7.5 Programme outline

Year	Courses	Credits	Duration*
First year			
1 st semester	9 courses	26	15 weeks
2 nd semester	10 courses	29	15 weeks
Second year			
3 rd & 4 th semester	Core credits 12 (6 courses), functional elective credits 6 (3 courses), non credit elective (5 courses)	18	15 weeks
4 th semester	Major project	20	At the location of the project

* Does not include mid and end-semester breaks and evaluation schedules (based on major and minor tests and assignments)

7.6 Pedagogical tools

The pedagogical tools will comprise not just classroom lectures but also case studies, field visits, term papers, assignments and tutorials, a large number of guest lectures by practitioners and experts, seminars and discussion forums, and role play.

7.7 Course details

Semester 1

- 1 Management functions and organizational behaviour
- 2 Business communications
- 3 Principles and concepts of sustainability
- 4 Marketing management
- 5 Global economic environment, policy and governance
- 6 Sustainability reporting
- 7 Sustainable Urban Habitat and Climate Change
- 8 Energy policy and management
- 9 Research methods in management - 1
- 10 Managerial economics
- 11 Mathematics for business
- 12 Corporate accounting and reporting

Semester 2

- 1 Infrastructure policies reforms and law
- 2 Competition theory and policy
- 3 Economics of regulation: theory and evidence
- 4 Management information system
- 5 Econometrics and operations research for management
- 6 Macroeconomics
- 7 Production and operations management
- 8 Qualitative research methods in management
- 9 Sustainable business strategy
- 10 Corporate finance
- 11 Managing negotiations

Semester 3

- 1 Energy policy and management
- 2 Derivatives and risk management
- 3 Project appraisal
- 4 Rural banking and alternative financing
- 5 Business to business marketing
- 6 Consumer behaviour
- 7 Urban infrastructure management
- 8 Oil and gas business
- 9 Integrated marketing and communication
- 10 Financial intermediaries, institutions and regulations
- 11 Marketing of services
- 12 International financial management
- 13 Brand management
- 14 Risk management (Infrastructure projects)
- 15 Business and ethics

16 Global economic environment, policy and governance

Semester 4

- 1 Operation and management of power systems
- 2 Security analysis and portfolio management
- 3 Customer relationship management
- 4 Project management for business
- 5 Major project

8 MA (Sustainable Development Practice)

8.1 Programme details

The Master's in Sustainable Development Practice seeks to address a critical gap in sustainable development education in South Asia, where such capacity creation is essentially called for. TERI University was one of the few universities worldwide selected by the John D. and Catherine T. MacArthur Foundation, to receive a seed funding to create the new master's degree programme in development practice. Consequently, TERI University introduced M.A. in Sustainable Development Practice i.e. M.A. (SDP) which is now a part of the network of Global Master's in Development Practice (MDP).

M.A. (SDP) aims to develop an international cadre of development professionals, well-equipped to tackle, beyond cultural boundaries and across sectoral divisions, the interwoven challenges of extreme poverty, disease, climate change and ecosystem vulnerability specific to the region. It is designed on the basis of the recommendations of the global situation analysis of development training programmes undertaken during 2007-08 by the International Commission on Education for Sustainable Development Practice.

Highlights of the M.A. (SDP) Programme

A strong practice focus with cross-disciplinary and cross-sectoral orientation is the one of the most distinct feature of MA (SDP). Some of the other programme highlights are as follows:

- Students would learn the latest practices in sustainable development from international practitioners and academicians from our partner universities and research institutes
- Pedagogy strongly focuses on problem-based learning, case studies, seminars, and field visits. The group practicums integrate knowledge and skills taught in the course. Field visits allow students to learn and use practical skills to analyze and solve development problems holistically.
- Specializations in Renewable Energy, Urban Governance and Climate Change.
- Preparatory and mid-term seminars and workshops on basic subjects like communication skills and advanced quantitative techniques to enable students from diverse backgrounds to cope with the intensive coursework.

8.2 Eligibility criteria

To enter the programme, students must meet the following prerequisites.

An undergraduate degree in any discipline, from a recognized institution / university.
Candidates with prior experience in development sector would be preferred, although it is not mandatory.

8.3 Selection procedure

Indian Candidates: Admission to the Masters in (SDP) will be made on the basis of a statement of purpose, past academic performance, a common entrance test and personal interview.

Foreign Candidates: Admission to the Masters in (SDP) will be made on the basis of a statement of purpose, past academic performance and personal interview. Proficiency in English language is essential, and would be judged on the basis of TOEFL / IELTS scores. Applications will be first screened, and only short-listed candidates will be called for either telephonic or Skype interviews.

8.4 Sponsored candidates

Candidates working in the Industry / Government / Development Organizations are encouraged to apply for the full-time Masters in (SDP). All those who satisfy the minimum qualifications as mentioned above may be admitted to the programme after 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.

8.5 Programme outline

Year	Courses	Credits	Duration*
First year			
1 st semester	8 core courses	21	15 weeks
2 nd semester	8 core courses	24	15 weeks
Summer internship			
Second year			
3 rd semester	4 core courses + 3 electives	20	15 weeks
4 th semester	1 core course + 2 electives	9	15 weeks
Summer	Final Project	16	12 weeks

* Does not include mid and end-semester breaks and evaluation schedules (based on major and minor tests and assignments)

8.6 Course details

Semester I

- 1 Integrated approaches to sustainable development practice
- 2 Quantitative analysis for development practice
- 3 Social research methods
- 4 ICT for sustainable development
- 5 Principles of economics
- 6 Perspectives on development
- 7 Application of environmental science
- 8 Organisational behaviour and human resource management for non-profit organisations

Semester 2

- 1 Design for sustainability
- 2 Public policy processes and institutions
- 3 Geographical Information system
- 4 Development economics
- 5 Population and health: Techniques of analysis policy perspectives
- 6 Law, society and sustainable development
- 7 Key concepts of cultural and political ecology
- 8 Finance, accounting and procurement for development practice
- 9 Group practicum 2

Semester 3

- 1 Environmental economics
- 2 Rural energy systems
- 3 Governance and management of natural resources
- 4 Environmental law and policy
- 5 Provision of sustainable urban services
- 6 Basics of climate change: Science and policy
- 7 Renewable energy resources and technologies
- 8 Seminar course on challenges to sustainable development
- 9 Environmental implications of energy use
- 10 Integrated impact assessment
- 11 Project design and management for sustainable development practice
- 13 Introduction to public health

Semester 4

- 1 Good governance for sustainable urban development
- 2 Economics of climate change and adaptation
- 3 Renewable energy: Policy, planning and management
- 4 Managing non-governmental organizations
- 5 Final project

9 M Tech (Renewable Energy Engineering and Management)

9.1 Programme details

With global climate change issues occupying a prominent position in science and technology, industry and international relations, the role of renewable energy has come into a sharp focus in recent years. There is an increasing demand for energy engineers in general and renewable energy engineers in particular. This programme is intended to do the much-needed capacity building in renewable energy engineering and management. It is designed to train students in energy infrastructure, energy economics, energy conversion technologies etc, ultimately leading to a specialization in one of the several renewable energy technologies.

9.2 Eligibility criteria

A Bachelor's degree in any branch of engineering or MSc with a minimum cumulative grade point average of 6.75 on a 10 point scale or equivalent or 60% marks in aggregate

9.3 Selection procedure

Admissions to the M Tech regular programme will be based on the evaluation of the applications and an online written test and interview.

The online test will be one-hour long and will consist of one paper with 100 multiple-choice questions.

The questions will be divided into three sections:

- Proficiency in English
- Analytical reasoning
- Quantitative ability

Wrong answers would invite negative marking. This would be followed by an interview.

9.4 Sponsored candidates

Candidates working in the industry/government are encouraged to apply for all the programs. A letter of support from the employer will be required at the time of interview.

9.5 Programme outline

Year	Courses	Credits	Duration*
First year			
1 st semester	7 core courses	26	15 weeks
2 nd semester	6 core courses	21	15 weeks
Minor project		4	
Second year			
3 rd semester	4 core courses and 3 elective courses	22	15 weeks
4 th semester	Major Project	18	15 weeks

9.6 Pedagogical tools

The pedagogical tools consist of lectures, tutorials, practicals and field visits.

9.7 Course details

Semester 1

- 1 Research methodology
- 2 Thermodynamics and combustion
- 3 Conventional energy infrastructure
- 4 Renewable energy resource characteristics
- 5 Heat and mass transfer
- 6 Heat transfer lab
- 7 Power system lab
- 8 Power systems engineering
- 9 Fluid mechanics and turbomachinery

Semester 2

- 1 Energy auditing, energy efficiency and energy conservation
- 2 Renewable energy conversion technologies - I
- 3 Renewable energy conversion technologies - II
- 4 Applied numerical methods
- 5 Statistics for engineers
- 6 Technical writing

Semester 3

- 1 Issues in grid integration of power from renewable energy sources
- 2 Building energy and green building
- 3 Waste utilisation
- 4 Rural energy systems
- 5 Policy and regulatory aspects of renewable power generation
- 6 Solar thermal and solar photovoltaic power generation
- 7 Renewable energy and fossil fuel based thermal power generation
- 8 Smart grids
- 9 Wind power generation
- 10 Biofuels (potential, policies and case studies)
- 11 Project management
- 12 Energy economics - theory and practice
- 13 Advanced technologies for environmental protection and climate change
- 14 Environmental implications of energy use

Semester 4

- 1 Major- project

10 M Tech (Urban Development and Management)

10.1 Programme details

The complexities of managing sustainable development of urban areas in developing countries and globally require inter-disciplinary approach and expertise. While, on the one hand, there is a severe shortage of professionals with techno-managerial skills required for these tasks, on the other hand, the requirement for the same is increasing rapidly. The opportunities being created for careers in the area arise from the increased focus on sustainable urban development in government policies and programmes, the thrust on implementing various reforms in urban sector, the massive public and private sector investment being made in urban infrastructure development, real estate sector, township development and SEZs, and the need for building capacity of institutions engaged in urban governance, development and management. The uniqueness of this programme is in promoting learning through research based teaching and from engagement of practitioners.

The M. Tech. Programme is designed to build a pool of competent professionals having required technical skills, managerial capabilities and understanding of social, economic, environmental and legal issues associated with urban development, infrastructure and real estate sector. The programme equips students for a successful career in:

- * Urban local bodies, state governments and other public sector institutions involved in delivery of urban infrastructure and services
- * Institutions conducting research, training and capacity building activities
- * Private sector organizations engaged in real estate and urban infrastructure development and
- * Consultancy firms, NGOs and CBOs participating in urban development activities.

The four-semester (two years) M. Tech. UDM programme is structured to enable students from diverse backgrounds to grasp the contents of programme through 1 year (Semester 1 and 2) of course work at the university and 1 year (Semester 3 and 4) of research project work:

- * A set of courses that provide understanding of the theory, policy and practice related to urban development and enhance knowledge and technical skills required for planning and management of cities utilising a multi-disciplinary approach.
- * A set of courses that provide an understanding of the tools and techniques and domain knowledge necessary to analyse the challenges and opportunities in urban development.
- * Major research project work to build capacity to understand real-world urban development and management problems and develop sustainable solutions through engagement of students with institutions concerned with urban development.

10.2 Eligibility criteria

A candidate must possess minimum 55% marks in aggregate where ever marks are awarded or equivalent cumulative grade point average of 6.2 on a 10 point scale in B.E./B. Tech in any branch/discipline, B. Arch., B. Planning, OR Masters or equivalent degree in Science.

Sponsored candidates from government departments, urban local bodies, para-statal, consultancy and real estate development firms, community based organisations, and non-government organisations with B.E., B. Tech. or Master's degree in any discipline.

10.3 Selection procedure

Admissions will be based on an online test and interview. Preference will be given to GATE/Net qualified candidates.

10.4 Sponsored candidates

Sponsored candidates from government departments, urban local bodies, para-statal, consultancy and real estate development firms, community based organisations, and non-government organisations with B.E., B. Tech. or Master's degree in any discipline.

10.5 Programme outline

Year	Courses	Credits	Duration*
First year			
1 st semester	7 core courses	22	15 weeks
2 nd semester	8 core courses including 2 electives	20	15 weeks
Second year			
3 rd semester	Major Project part 1	15	15 weeks
4 th semester	Major Project part 2	15	15 weeks

10.6 Pedagogical tools

The choice of pedagogical tools will be based on the principle of active learning based on strong conceptual understanding? These would comprise classroom lectures, case studies, field visits, term papers, assignments and tutorials, a large number of lectures by practitioners and experts, seminars and discussion forums, and role plays. In particular, case studies drawn from real-world urban development and management challenges will be designed and integrated into the curriculum.

10.7 Course details

Semester 1

Theories of Urbanisation
Urban Ecology and Environment
Sustainable Provision and Management of Urban Services
Urban Legislations, Institutions and Governance
Urban Finance
Urban Development Policies and Programmes
Project Development, Management and Financing

Semester 2

E-Governance for Urban Development
Climate Resilient Cities
Urban Disaster Management
Development and Management of Special Urban Areas
Sustainable Urban Transport

Urban Water Supply, waste water and drainage
Solid Waste and Sanitation
Energy Efficient Buildings and Settlements
City and Regional Planning and Management
Geoinformatics for Urban Development
Stochastic Modelling and Urban Development
Real Estate Development
Regeneration and City Competitiveness
Research Methodology

Semester 3
Major Project part 1

Semester 4
Major Project part 2

11 Multi-track program in Water science and governance (M.Tech., M.Sc., PG Diploma and Certificate)

11.1 Programme details

The complex and inter-disciplinary nature of water resources problems coupled with the multi-level governance frameworks adopted for managing water resources require that they are dealt in an integrated manner by trained professionals who can analyze the problem using a holistic and system-based approach. There are various national and international institutions that offer discipline-specific and interdisciplinary programmes at postgraduate level in water resources engineering. However all these programmes have a major focus either on the science and engineering or on socio-economic aspects of water resources. The science, engineering, technology, legal, governance, socio-economic and other cross-cutting issues are not addressed in a holistic manner. Thus, there is a scarcity of formally trained manpower that has a broader and inclusive perspective towards water related problems. This inadequacy presents a strong case to understand the intersection between science and engineering, societal needs, and legal and governance framework. The framework of the programme is in consonance with the spirit of UN international year of water cooperation promulgated by United Nations General Assembly in the year 2013 and priorities defined in India's National Water Mission that advocates for water cooperation in an interdisciplinary framework by bringing in cultural, educational and scientific factors, as well as religious, ethical, social, political, legal, institutional and economic dimensions.

The format of the entire programme has been kept flexible that provides a fresh graduate as well as the working professionals to upscale their qualifications. Thus, a graduate depending on their qualifying degree have an option to directly go for any Master's degree programme (M.Tech. or M.Sc.); or can opt for a Certificate course, which can be obtained by successfully completing all core courses offered in the first semester; or can obtain a postgraduate diploma by completing the first two semesters (one year). Finally, a student opting for Master's degrees have to complete the field work and research component which is spread over in the next two semesters (second year).

11.2 Eligibility criteria

M.Tech Programme

Graduate, or equivalent in any branch of engineering, or postgraduates in any of the following disciplines or equivalent:

Environmental Science, Physics, Mathematics, Statistics, Chemistry, Geology, Atmospheric Science, Economics, Geography with marks/CGPA not below 60%/6.75 CGPA on a 10 point scale with Mathematics at 10+2 level.

M.Sc Programme/PG Diploma/Certificate

Graduate, or equivalent in any branch of engineering or in any of the following disciplines or equivalent:

Environmental Science, Physics, Mathematics, Statistics, Chemistry, Geology, Atmospheric Science, Economics, Geography with marks/CGPA not below 60%/6.75 CGPA on a 10 point scale with Mathematics at 10+2 level

11.3 Selection procedure

Admissions will be based on the basis of marks scored in the qualifying degree and performance in the interview.

11.4 Sponsored candidates

Candidates working in the industry/government organization are encouraged to apply for the programme. A NOC (No Objection Certificate)/sponsorship letter from the employer will be required at the time of interview.

11.5 Programme outline

Year	Courses	Credits	Duration*
First year			
1 st semester (All Prog.)	8 courses	25	15 weeks
2 nd semester (M Sc Prog.)	8 courses	23	15 weeks
2 nd semester (M Tech Prog.)	9 courses	25	15 weeks
2 nd semester (PG Diploma)	8 courses	23	15 weeks
Second year (For M.Tech/M Sc)			
3 rd semester	Project 1	16	15 weeks
4 th semester	Project 2	16	15 weeks

11.6 Pedagogical tools

The pedagogical tools consist of lectures, tutorials, practicals and industry/field visits. A number of experts from industry are invited to deliver lectures on special topics.

11.7 Course details

Semester 1

Water and sustainability science

Water law and policy

Water quality monitoring and assessment

Gender, rights and equity perspective for sustainable water management

Statistical methods in water resources

Water resources - Institutions and governance

Water resource systems and interactions

Water planning and management

Semester 2

Traditional knowledge and water management
Water economics and financial management
Water disasters: Management and planning
Water security and conflict management
Applied hydrology
Geoinformatics for water resources
Water demand management and optimization techniques
Water supply and sanitation
Water modelling and applications
Industrial pollution control
Glacier hydrology
Integrated watershed and river basin management
Water and agriculture
Water audit and demand management
Wetland conservation and management
Integrated impact assessment

Semester 3

Project 1

Semester 4

Project 2

12 M Sc (Economics) – with a specialization in Environmental & Resource Economics

12.1 Programme details

The rapid structural economic changes in developed and developing countries in the second half of the 20th century have created increasing pressure on environmental and natural resources. Though the need to protect the environment is recognized by most societies, how to achieve a balance between economic growth, social welfare and environmental health is widely debated.

Environmental and Resource Economics, which is a new and exciting branch of economics, integrates the discipline of economics with environmental sciences. It analyzes the conflict between production and consumption patterns of the societies and the limits imposed thereon by the environment.

M Sc Economics (with a specialization in environmental and resource economics) programme intends to examine the application of economic theory to environmental and natural resource issues within an interdisciplinary setting. The programme will especially target students wishing to become professional environment and resource economists in governments, corporations, international organizations and for those who want a career in research and consultancy in environmental and resource economics. At the end of 2-year intensive training in environmental and resource economics our students are expected to have acquired a high degree of technical ability and a solid understanding of economic theory as it relates to the environmental and natural resources; they should be able to confidently conduct independent quantitative research.

12.2 Eligibility criteria

B.A. (Hons.) / B.Sc. (Hons.) in Economics with 50 % or more marks in aggregate

OR

Bachelor degree with at least 60% marks, in Business Economics/ B.Com. / B.Stat. / B.Sc. (Physics or Mathematics) / BA (with Economics and Mathematics/Statistics) / B.Tech./B.E..

The applicant must have studied mathematics either at 10+2 level or at Bachelor's level, either as subsidiary or as honours.

12.3 Selection procedure

Admission to the M Sc programmes is made on the basis of an online test and interview conducted by the University. Applications are invited from the candidates by advertising the programmes in some leading newspapers every year.

The online test will be one-hour long and will consist of one paper with 100 multiple-choice questions.

The questions will be divided into three sections:

* Proficiency in English

- * Analytical reasoning
- * Quantitative ability

Wrong answers would invite negative marking. This would be followed by an interview.

12.4 Sponsored candidates

Candidates working in the Industry/Government are encouraged to apply for the full-time M Sc programmes. Upto two 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.

12.5 Programme outline

This will be an intensive 2-year programme on principles and techniques of environmental and resource economics and their application to public policy and will be updated regularly to keep it at the forefront of advanced training in its field. The first semester is intended to lay the foundation in basic economic theory and its practices. Following two semesters will train students in the theory and practice of environmental and resource economics. Students have the flexibility to pursue some specializations by selecting a set of elective courses from a long list of optional courses to be offered in the third semester. Students have to choose at least three elective courses in the third semester. In the fourth semester students are required to do a major research project on a particular problem of environmental and resource economics. This will enable students not only to apply the knowledge that they have gained in the different courses, but also to develop analytical mindsets.

Year	Courses	Credits	Duration*
First year			
1 st semester	5 core courses of 4 credits	20	15 weeks
2 nd semester	5 core courses of 4 credits each	20	15 weeks
Second year			
3 rd semester	1 core course of 4 credits each + choice of 4 electives of 3 credit each + thesis proposal of 4 credit	20	15 weeks
4 th semester	Major project + 2 electives of 3 credits	26	Depends on the location of project or requirement of organization

12.6 Pedagogical tools

The choice of pedagogical tools will be based on the principles of ‘active learning based on robust conceptual understanding’. These will comprise classroom lectures, case studies, field visits, term papers, assignments and tutorials, guest lectures by policy makers and experts, seminars and discussion forums, and role play.

12.7 Course details

Semester 1

- 1 Environment and economic development
- 2 Quantitative methods
- 3 Constrained optimization and linear Algebra
- 4 Macroeconomics
- 5 Microeconomics

Semester 2

- 1 Theory of environmental policy
- 2 Economics of natural resources
- 3 Econometrics
- 4 Indian economics and development
- 5 Game theory

Semester 3

- 1 Trade and the environment
- 2 Advanced econometric
- 3 Advanced macroeconomics
- 4 Time series and regression analysis
- 5 Theory of contracts
- 6 Game theory - II
- 7 Collective action and environmental management
- 8 Techniques of environmental valuation
- 9 Thesis proposal

Semester 4

- 1 Theory of finance
- 2 Indian agriculture in a global setting
- 3 Economics of health and environment
- 4 Public economics
- 5 Master's thesis

13 Advanced PG Diploma (Renewable Energy) Distance learning mode

13.1 Programme details

This course is designed to provide the students a comprehensive knowledge of different aspects of various renewable energies, in addition to energy efficiency and energy conservation. In the two years diploma course, you do all the following certificate courses, over a period of two years. You can choose the chronology of the certificate courses as per choice however we recommend the following. Also you can pursue only one certificate at a time.

CEIE (Certificate course in Energy Infrastructure & Efficiencies)

CRERP (Certificate course in Renewables Energy Resources and Policies)

CRE (Certificate course in Renewable Energy)

CSTEA (Certificate course in Software Tools for Energy Analysis)

The fee for the entire two year program is Rs. 70,000

Rs. 35,000 has to be paid at the time of registration/admission

Remaining Rs. 35,000 has to be paid within a year from registration

13.2 Eligibility criteria

A graduate in any stream.

13.3 Sponsored candidates

Working professionals are encouraged to apply for the programme. An NOC (no objection certificate) or a sponsorship letter from the employer, if applicable, has to be sent along with other documents before or at the time of registration.

13.4 Programme outline

Complete all four certificate courses to get Advanced PG diploma

CEIE

Energy infrastructure

Energy conservation and management

Engines

Introduction to basic engineering principles

CRE

Solar thermal technologies

Solar Power Generation through Photovoltaic route

Passive solar architecture
Biomass to Energy
Wind Power Generating Technologies
Hydro power generation
Other Renewables

CRERP
Renewable energy resources
Environmental and health impact of energy use
Policy, programmes, regulations etc.

CSTE
Software tools for energy analysis

13.5 Pedagogical tools

The pedagogical tools consist of lectures, tutorials, assignments, webinars, open-source software labs, live chat and interactions.

13.6 Webinars

Experts are invited for talks and for discussion on the subjects offered during the semester. Students can either come to the Delhi center or can watch it over Web.

Experts are invited to present talks on the subjects offered during the semester.

14 PG Diploma (Renewable Energy) Distance learning mode

14.1 Programme details

In this one year diploma course, you are free to choose any two of the following certificate courses, according to your preference and interest

CEIE (Certificate course in Energy Infrastructure & Efficiencies)

CRERP (Certificate course in Renewables Energy Resources and Policies)

CRE (Certificate course in Renewable Energy)

CSTEA (Certificate course in Software Tools for Energy Analysis)

The fee for the entire one year program is Rs. 35,000 to be paid at the time of registration/admission.

You can pick any two certificate programs but the second would be available to you online only after a period of 20 weeks.

14.2 Eligibility criteria

A graduate in any stream.

14.3 Sponsored candidates

Working professionals are encouraged to apply for the programme. An NOC (no objection certificate) or a sponsorship letter from the employer, if applicable, has to be sent along with other documents before or at the time of registration.

14.4 Programme outline

Pick any two certificate course get a diploma

CEIE

Energy infrastructure

Energy conservation and management

Engines

Introduction to basic engineering principles

CRE

Solar thermal technologies

Solar Power Generation through Photovoltaic route

Passive solar architecture

Biomass to Energy

Wind Power Generating Technologies

Hydro power generation
Other Renewables

CRERP
Renewable energy resources
Environmental and health impact of energy use
Policy, programmes, regulations etc.

CSTE
Software tools for energy analysis

14.5 Pedagogical tools

The pedagogical tools consist of lectures, tutorials, assignments, webinars, open-source software labs, live chat and interactions.

14.6 Webinars

Experts are invited for talks and for discussion on the subjects offered during the semester. Students can either come to the Delhi center or can watch it over Web.

Experts are invited to present talks on the subjects offered during the semester.

15 Certificate Course in Energy Infrastructure & Efficiencies (CEIE)

15.1 Programme details

What is the relationship between conventional energy infrastructure and energy conservation? How does a better relationship lead to achieve energy security and sustainable growth? This course will answer these complex questions. In this programme you will explore:

- * The conventional energy infrastructure for extraction and utilization of conventional energy sources like coal, oil and natural gas, nuclear and hydro.
- * The basic engineering principles and that acts as the foundation of the energy sector e.g. Heat work and thermodynamics.
- * How infrastructure supports the conventional energy system and its technologies
- * Various energy consuming thermal and electrical services common to most of the industry
- * Energy saving opportunities and their quantitative assessment in the generation equipment, supply lines and application units of these services.
- * Energy auditing techniques and methodology

15.2 Eligibility criteria

A graduate in any stream.

15.3 Sponsored candidates

Working professionals are encouraged to apply for the programme. An NOC (no objection certificate) or a sponsorship letter from the employer, if applicable, has to be sent along with other documents before or at the time of registration.

15.4 Programme outline

Energy infrastructure
Energy conservation and management
Engines
Introduction to basic engineering principles

15.5 Pedagogical tools

The pedagogical tools consist of lectures, tutorials, assignments, webinars, open-source software labs, live chat and interactions.

15.6 Webinars

Experts are invited for talks and for discussion on the subjects offered during the semester. Students can either come to the Delhi center or can watch it over Web.

Experts are invited to present talks on the subjects offered during the semester.

16 Certificate Course in Renewable Energy (CRE)

16.1 Programme details

How can sun facilitate space cooling? How can wind generate energy and an oil seed run a car? What makes small hydro renewable? This programme will answer these questions. This course is designed to give you an insight in to the world of renewable energy technologies. You will get a chance to investigate all aspects of renewable energy. In this programme you will explore:

- * Solar energy and its thermal and photovoltaic application
- * Details of passive solar architecture
- * Wind technologies
- * Various biomass to energy routes
- * Small hydro technologies
- * Geothermal, tidal, wave ocean energy technologies
- * Hydrogen and fuel cell

16.2 Eligibility criteria

A graduate in any stream.

16.3 Sponsored candidates

Working professionals are encouraged to apply for the programme. An NOC (no objection certificate) or a sponsorship letter from the employer, if applicable, has to be sent along with other documents before or at the time of registration.

16.4 Programme outline

Solar thermal technologies
Solar Power Generation through Photovoltaic route
Passive solar architecture
Biomass to Energy
Wind Power Generating Technologies
Hydro power generation
Other Renewables

16.5 Pedagogical tools

The pedagogical tools consist of lectures, tutorials, assignments, webinars, open-source software labs, live chat and interactions.

16.6 Webinars

Experts are invited for talks and for discussion on the subjects offered during the semester. Students can either come to the Delhi center or can watch it over Web.

Experts are invited to present talks on the subjects offered during the semester.

17 Certificate Course in Renewables Energy Resources and Policies (CRERP)

17.1 Programme details

What are the various renewable energy sources? How are these different from fossil energy? How eco-friendly are the renewable options? What tools are there to promote them? This course will answer these and many more questions. In this programme you will explore:

- * The various types of renewable energy
- * How to assess the potential and economy of a renewable-energy source at a particular location
- * The environmental and health impacts of both conventional and renewable energy
- * National & international renewable policies
- * Case studies

17.2 Eligibility criteria

A graduate in any stream.

17.3 Sponsored candidates

Working professionals are encouraged to apply for the programme. An NOC (no objection certificate) or a sponsorship letter from the employer, if applicable, has to be sent along with other documents before or at the time of registration.

17.4 Programme outline

Renewable energy resources
Environmental and health impact of energy use
Policy, programmes, regulations etc.

17.5 Pedagogical tools

The pedagogical tools consist of lectures, tutorials, assignments, webinars, open-source software labs, live chat and interactions.

17.6 Webinars

Experts are invited for talks and for discussion on the subjects offered during the semester. Students can either come to the Delhi center or can watch it over Web.

Experts are invited to present talks on the subjects offered during the semester.

18 Certificate Course in Software Tools for Energy Analysis (CSTEA)

18.1 Programme details

This programme is to train you for software application for clean energy and energy efficient projects. On successful completion of this course you would be able to:

- * Determine the technical and financial viability of potential renewable energy, energy efficiency and cogeneration projects.
- * Verify the ongoing energy performance of a facility
- * Forecast the social and environmental consequences of certain decisions that might be
- * Compare the cost and feasibility of different renewable energy configurations
- * Building simulation for passive & active solar design

Software covered would be:

- * RETscreen
- * HOMER
- * TRNSYS

18.2 Eligibility criteria

A graduate in any stream.

18.3 Sponsored candidates

Working professionals are encouraged to apply for the programme. An NOC (no objection certificate) or a sponsorship letter from the employer, if applicable, has to be sent along with other documents before or at the time of registration.

18.4 Programme outline

Software tools for energy analysis

18.5 Pedagogical tools

The pedagogical tools consist of lectures, tutorials, assignments, webinars, open-source software labs, live chat and interactions.

18.6 Webinars

Experts are invited for talks and for discussion on the subjects offered during the semester. Students can either come to the Delhi center or can watch it over Web.

Experts are invited to present talks on the subjects offered during the semester.

19 MA (Public Policy and Sustainable Development)

19.1 Programme details

The M.A. (Public Policy and Sustainable Development) - programme, encompasses a comprehensive and well-structured two-year curriculum on public policy formulation, analysis, evaluation, management, and links with development concerns.

With a judicious mix of courses covering basic concepts, a practical orientation, and new methodologies and tools, the programme intends to allow future leaders in the governments and other agencies to enhance their awareness of the overall public policy environment in which they have to make decisions. The programme is also intended to sharpen the understanding of the effects that policy decisions have on political, economic, social, and environmental aspects in domestic and international domains.

19.2 Eligibility criteria

Graduates with a minimum experience of five years in any of the following sectors: government, regulatory bodies, industry, research/academic institutions, NGOs and donor/consultant organizations.

19.3 Programme outline

Year	Courses	Credits	Duration
First semester	2 Refresher courses, 1 Seminar course, 4 Core courses	18	18 weeks
Second semester	1 Exposure project, 2 Core courses, 2 Elective courses	17	18 weeks
Summer semester	Select modules on public policy	4	6 weeks at university/universities abroad
Third & Fourth semesters	Major Project	31	About 3 weeks at the TERI University; the rest at the participants' workplace

19.4 Pedagogical Tools

The pedagogical tools will comprise not just classroom lectures but also case studies, field visits, quizzes, term papers, assignments and tutorials, a large number of guest lectures by practitioners and experts, seminars and discussion forums, and role play.

19.5 Course Details

Semester I

Public policy processes and institutions

Normative ethics

Fundamental paradigms of economics and the concepts and practice of economic regulation

Methodologies I: Statistical analysis and econometrics

Semester II

Basic course in environmental and resource economics

Urban infrastructure management and regulation

Power sector policies, reforms and planning

Population and health: Techniques of analysis policy perspectives

Law and economics of competition policy

Integrated impact assessment

Management functions and organisational behaviour

Decision making tools and systems

Exposure project

Strategic Communication for Public Policy

General Guidelines

20 Application procedure

It is recommended that applications be made online. Applications can be made on-line at <www.teriuniversity.ac.in>. The requisite payment of Rs 1250/- can be made through credit card/direct bank debit through a secure gateway. Payment can also be done by sending a demand draft subsequent to on-line registration. On-line registrations will be open till 5.00 p.m. on 25 April 2014.

Alternatively, the application forms and the information brochure can be obtained from Registrar, TERI University, 10, Institutional Area, Vasant Kunj, New Delhi – 110 070, or through post by sending a Demand Draft of Rs 1500/- drawn in favour of 'Registrar, TERI University' payable at New Delhi. The completed application forms must reach the Registrar by 5.00 p.m. on 25 April 2014.

Application forms may also be downloaded from the University's web site <www.teriuniversity.ac.in>, in which case a DD of Rs 1450/- must accompany the completed form. Candidates are permitted to apply for one or more of the programmes. In this case, candidates will be required to indicate their order of preference in the application form.

21 Registration for courses

All students are required to report for orientation and central registration before the commencement of the programme according to the schedule notified in advance. The courses run by the University in each programme are made known to the students at the orientation programme. Details may also be seen on the University web site.

21.1 Renewal of registration

Every student/candidate on the rolls of the University, whether full time, part-time or sponsored, will be required to renew his/her registration in the beginning of every semester till the completion of his/ her study programme. If a student fails to register in any semester within one week (four weeks for doctoral students) on the research phase from the specified date of registration it will be assumed that he/she is not interested in continuing the programme and his/her name will be struck off the rolls of the University.

21.2 Late registration

Late registration of students, owing to reasons beyond their control, could be permitted by the Registrar, if recommended by the concerned Head of the Centre/Department and on payment of a late registration fee of 1000 rupees.

Semester fees is to be paid within three days of registration for a particular semester. Late payment fees will be as follows:

- | | |
|--|-------------|
| (1) Upto 10 days from the date of registration | Rs. 1,000/- |
| (2) From 11 days to 30 days | Rs. 2,000/- |

If fees is not paid until 30 days from the date of registration, the student will be struck off the rolls. If a cheque/DD is dishonored by a bank for any reasons whatsoever it will be construed as non-payment of the fees, and the rule for late fee will apply on fresh submission of the fees.

The last date for late registration will be one week from the date of commencement of classes. Students who are not required to register for course work may be allowed a relaxation beyond the specified last date of registration up to 4 weeks from the date provided the student has informed the head of the department/centre and the Registrar before the last date of registration of his inability to come to the University, and provided reasons given by him/her are found to be satisfactory by the head of the department/centre concerned.

22 Credit system

Education at the TERI University is organized around the credit system of study. The prominent features of the credit system are a continuous evaluation of a student's performance and the flexibility to a student to progress at a pace suited to his/her ability or convenience, subject to fulfilling the minimum requirements for continuation at the University.

Each course in the programme has a certain number of credits, which describe its weightage. 1 credit =1 hour a week over 14 weeks. A student's performance is measured by the number of credits that he/she has completed satisfactorily. A minimum number of credits and grade point average is required for continuation in the programme and to qualify for the degree. Information regarding the academic requirements for these programmes is indicated in the Student's Handbook which will be supplied to the admitted candidates at the orientation. This may also be seen at the University's web site.

23 Placements

The University makes efforts to place students in suitable organizations for their major project work as well as in jobs after obtaining their degrees. A Placement Cell has been formed with the objective of exploring placement opportunities at an institutional level.

Students do a major project in collaboration with corporate organizations, consultancies, research, government and non-government organizations so as to get hands-on experience in their respective areas of specialization.

23.1 Organizations our students have been associated with for major project/final placement

Associated Cement Companies Ltd (ACC), Action Aid International, Ashoka Trust for Research in Ecology and Environment (ATREE), Ballarpur Industries Ltd, Coca Cola India, Consulting Engineering Services (CES), Department of Environment, Govt. of NCT, Delhi, Department of Forest & Wildlife, Govt. of NCT, Delhi, Danish Hydraulic Institute (DHI), ERM Group, Development Alternatives, Food and Agriculture Organization (FAO), International Crops Research Institute for the Semi Arid Tropics (ICRISAT) Hyderabad, India-Canada Environment Facility, Indian Oil Corporation (IOC), National Environmental Engineering Research Institute (NEERI), PRAGYA, Senergy Global, Senes Consultants India Pvt Ltd, Shree Cement Ltd, The Energy and Resources Institute (T E R I), Water and Sanitation Organization (WASMO), World Wide Fund for Nature (WWF), Winrock International India, Indian Institute of Technology, Kanpur, Gensol, Emergent Ventures, India, SGS.

24 Conduct and discipline

The student shall conduct himself/herself within and outside the precincts of the University, in a manner befitting the student of a university. He/she shall have a seriousness of purpose and shall in every way, train himself/herself to lead a life of earnest endeavour and cooperation. He/she shall show due courtesy and consideration to the employees of the University, good neighbourliness to his/her fellow students and respect to the teachers of the University and pay due attention and courtesy to visitors. Ragging in any form is banned in TERI University. The University treats ragging as a cognizable offence and stern action will be taken against offenders. The University reserves the right to require the withdrawal of any student at any time to safeguard its ideals of scholarship, character, and personal behaviour, or for any reason deemed sufficient.

25 Hostel accommodation

Limited hostel facilities are available, at present, only for (female) outstation candidates. Allotment will be made on the basis of entrance exam positions/academic performance.

26 Fee and payments

Doctoral programmes (Ph D)

Fee chargeable from the students (non-sponsored)

A. One-time payment (in Rupees)

Admission fee	150
Grade card	150
Provisional certificate	100
Student welfare fund	200
Alumni fee	500
Identity card	100
Modernization fees	1000
Dissertation/Thesis fee	1200
Total – A	3400

B. Semester-wise fees (in rupees)

Tuition fees	12000
Registration/enrolment	600
Examination fees	600
Internet and computer	2000
Accidental insurance*	210
Social charges	800
Development charges	2000
Total – B	18210

C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
Total – C	7000

Total fee payable at the time of admission – **Rs 28610/-**

* Each student will be covered under an accident insurance policy for Rs 2 lakh

Note: Tuition fee for sponsored candidates will be 1.5 times that of non-sponsored candidates.

M Sc (Climate Science and Policy, Environmental Studies and Resource Management and Economics)

A. One-time payment (in Rupees)

Admission fee	500
Grade card	150
Provisional certificate	100
Student welfare fund	200
Alumni fee	500
Identity card	100
Modernization fees	1000
Project fee	400
Total – A	2950

C. Semester-wise fees (in rupees)

Tuition fees	52000
Registration/enrolment	1000
Examination fees	2000
Internet and computer	2000
Accidental insurance	210
Social charges	800
Development charges	2000
Field Training	10000
Total – B	70010

C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
Total – C	7000

Total fee payable at the time of admission – **Rs 79,960/-**

* Each student will be covered under an accident insurance policy for Rs 2 lakh

Note: Tuition fee for sponsored candidates will be 1.5 times that of non-sponsored candidates.

M Sc (Geoinformatics), M Sc (Plant Biotechnology), (Water Science & Governance), M Tech (Renewable Energy Engineering and Management), (Urban Development Management) and Water Science and Governance

A. One-time payment (in rupees)

Admission fee	500
Grade card	150
Provisional certificate	100
Student welfare fund	200
Alumni fee	500
Identity card	100
Modernization fees	1000
Project fee	400
Total – A	2950

B. Semester-wise fee (in rupees)

Tuition fees	55000
Registration/enrolment	1000
Examination fees	2000
Internet and computer	2000
Lab fees	10000
Accidental insurance	210
Social charges	800
Development charges	2000
Field Training	10000
Total – B	83010

C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
Total – C	7000

Total fee payable at the time of admission – **Rs 92,960**

* Each student will be covered under an accident insurance policy for Rs 2 lakh

Note: Tuition fee for sponsored candidates will be 1.5 times that of non-sponsored candidates.

M B A (Infrastructure)

A. One-time payment (in rupees)

Admission fee	1000
Grade card	150
Provisional certificate	100
Student welfare fund	200
Alumni fee	500
Identity card	100
Modernization fees	1000
Project fee	400
Dissertation fee	1200
Student activity fund	10000
Total – A	14650

B. Semester-wise fee (in rupees)

Tuition fees	175000
Registration/enrolment	1000
Examination fees	2000
Internet and computer	2000
Social charges	800
Development charges	2000
Field Training	10000
Total – B	192800

C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
Total – C	7000

Total fee payable at the time of admission – **Rs 2,14,450/-**

Note: Tuition fee for sponsored candidates will be 1.5 times that of non-sponsored candidates.

M B A (Business Sustainability)

A. One-time payment (in rupees)

Admission fee	1000
Grade card	150
Provisional certificate	100
Student welfare fund	200
Alumni fee	500
Identity card	100
Modernization fees	1000
Project fee	400
Dissertation fee	1200
Student activity fund	10000
Total – A	14650

B. Semester-wise fee (in rupees)

Tuition fees	175000
Registration/enrolment	1000
Examination fees	2000
Internet and computer	2000
Social charges	800
Development charges	2000
Field Training	10000
Total – B	192800

C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
Total – C	7000

Total fee payable at the time of admission – **Rs 2,14,450/-**

Note: Tuition fee for sponsored candidates will be 1.5 times that of non-sponsored candidates.

MA (Sustainable Development Practice)

A. One-time payment (in rupees)

Admission fee	500
Grade card	150
Provisional certificate	100
Student welfare fund	200
Alumni fee	500
Identity card	100
Modernization fees	1000
Project fee	400
Total – A	2950

B. Semester-wise fee (in rupees)

Tuition fees	40000
Registration/enrolment	1000
Examination fees	2000
Field Training	10000
Internet and computer	2000
Social charges	800
Development charges	2000
Total – B	57800

C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
Total – C	7000

Total fee payable at the time of admission Rs **67,750/-**

Note: Tuition fee for sponsored candidates will be 1.5 times that for non-sponsored candidates.

MA (Public Policy and Sustainable Development)

A. One-time payment (in rupees)

Admission fee	500
Grade card	150
Provisional certificate	100
Student welfare fund	200
Alumni fee	500
Identity card	100
Modernization fees	1000
Project fee	400
Total – A	2950

B. Semester-wise fee (in rupees)

Tuition fees	40000
Registration/enrolment	1000
Examination fees	2000
Internet and computer	2000
Social charges	800
Development charges	2000
Field Training	10000
Total – B	57800

C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
Total – C	7000

Total fee payable at the time of admission Rs **67,750/-**

Note: Tuition fee for sponsored candidates will be 1.5 times that for non-sponsored candidates.

Diploma Water Science & Governance

A. One-time payment (in rupees)

Admission fee	500
Grade card	150
Provisional certificate	100
Student welfare fund	200
Alumni fee	500
Identity card	100
Modernization fees	1000
Project fee	400
Total – A	2950

B. Semester-wise fee (in rupees)

Tuition fees	26000
Registration/enrolment	1000
Examination fees	2000
IT and postal charges	2000
Development charges	2000
Total – B	33000

Total fee payable at the time of admission – **Rs 35,950/-**

Note: Tuition fee for sponsored candidates will be 1.5 times that for non-sponsored candidates.

Advanced PG Diploma in Renewable Energy (through distance learning)

The fee for the entire two year programme is Rs. 70,000

Rs. 35,000 has to be paid at the time of registration/admission

Remaining Rs. 35,000 has to be paid within a year from registration

PG Diploma in Renewable Energy (through distance learning)

The fee for the entire one year programme is Rs. 35,000 to be paid at the time of registration/admission.

Certificate Course in Energy Infrastructure & Efficiencies (CEIE) (through distance learning)

The fee for the entire semester is Rs. 20,000 to be paid at the time of registration/admission.

Certificate Course in Renewable Energy (CRE) (through distance learning)

The fee for the entire semester is Rs. 20,000 to be paid at the time of registration/admission.

Certificate Course in Renewables Energy Resources and Policies (CRERP) (through distance learning)

The fee for the entire semester is Rs. 20,000 to be paid at the time of registration/admission.

Certificate Course in Software Tools for Energy Analysis (CSTEA) (through distance learning)

The fee for the entire semester is Rs. 20,000 to be paid at the time of registration/admission.

27 Fee for foreign students

Foreign students will be required to pay a fee as per the table below per semester.

Course	Tuition fees		Other charges	Total	Total
	US\$	US\$	INR	US\$	US\$
	Developing countries	Developed countries	Flat Rate	Developing Countries	Developed Countries
Ph D	500	1000	6210	615	1115
M Sc (CSP, ESRM, Eco)	2000	4000	8010	2148	4148
M Sc (Geo, PBT, WSG)	2000	4000	18010	2334	4334
MA (SDP)	1600	3200	17800	1930	3530
MA (PP&SD)	1600	3200	7800	1744	3344
M Tech (REEM, UDM), (WSG)	2000	4000	18010	2334	4334
MBA (Infra and BS)	5000	10000	7800	5144	10144
PG Diploma (WSG)	1000	2000	6210	2200	4200
Advanced PG Diploma Renewable energy	1400	2800	--	2800	5600
Diploma in Renewable Energy	700	1400	--	700	1400
Certificate courses	400	800	--	400	800

In addition, a fee of INR 10,000 per semester cost for Field Training will be required to be paid in rupees.

28 Refund of fee

The fee/other charges deposited by the students against the first semester programme fee will be refundable after deduction of Rs. 1000/- if the student applies for cancellation of his/her allotted seat on or before 15 days of the commencement of the respective programme (i.e. latest by 4.30 PM on 13 July 2014). No request for the refund of fees will be entertained after commencement of the respective programme except refund pertaining to security deposit.

For more details, contact:

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