

# **Information Brochure**

**2012/13**

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

## Index

	Page No.
Important dates	6
Centre(s) for online test/interviews	6-7
1 Programmes offered by the University	7
2 Doctoral programmes (Ph D)	7
2.1 Categories of admission	7
2.2 Minimum qualification for admission	8
2.3 Additional requirements for full-time sponsored candidates	8
2.4 Additional requirements for part-time (sponsored and non-sponsored) candidates	8
2.5 Pre-Ph D course requirements	9
2.6 CGPA (Cumulative Grade Point Average) requirements	9
2.7 Comprehensive examination	9
2.8 Time limit for Ph D work	10
2.9 Grant of leave to Ph D students	10
2.10 Attendance requirements for Ph D students	11
2.11 Financial assistance to Ph D students	11
2.12 Attendance requirement for assistantship	11
3 M Sc (Climate Science and Policy) M Sc (Environmental Studies and Resource Management)	12
3.1 Programme details	12
3.2 Eligibility criteria	12
3.3 Selection procedure	12
3.4 Sponsored candidates	13
3.5 Programme outline	13
3.6 Pedagogical tools	13
3.7 Course details - M Sc (Environmental Studies & Resource Management)	13-15
3.8 Course details – M Sc (Climate Science and Policy)	15-16
3.9 General guidelines	16
4 M Sc (Geoinformatics)	17
4.1 Programme details	17
4.2 Eligibility criteria	17
4.3 Selection procedure	17
4.4 Sponsored candidates	18
4.5 Programme outline	18
4.6 Pedagogical tools	18
4.7 Course details	18-19
4.8 General guidelines	20

5	M Sc (Plant Biotechnology)	21
	5.1 Programme details	21
	5.2 Eligibility criteria	21
	5.3 Selection procedure	21
	5.4 Sponsored candidates	21
	5.5 Programme outline	22
	5.6 Pedagogical tools	22
	5.7 General guidelines	22
	5.8 Course details	23
6	M B A (Infrastructure)	24
	6.1 Programme details	24
	6.2 Eligibility	24
	6.3 Selection procedure	24
	6.4 Sponsored candidates	25
	6.5 Programme outline	25
	6.6 Pedagogical tools	25
	6.7 Course details	25-27
7	M B A (Business Sustainability)	28
	7.1 Programme details	28
	7.2 Eligibility	29
	7.3 Selection procedure	29
	7.4 Sponsored candidates	29
	7.5 Programme outline	29
	7.6 Pedagogical tools	30
	7.7 Course details	30-31
8	M B A (Urban Management)	32
	8.1 Programme details	32
	8.2 Eligibility	32
	8.3 Selection procedure	32
	8.4 Sponsored candidates	32
	8.5 Programme outline	33
	8.6 Pedagogical tools	33
	8.7 Course details	33-34
9	Master's in Sustainable Development Practice	35
	9.1 Programme details	35

9.2	Scholarships	35
9.3	Eligibility criteria	35
9.4	Selection procedure	36
9.5	Sponsored candidates	36
9.6	Programme outline	36
9.7	Course details	37-38
10	M Tech (Renewable Energy Engineering and Management)	39
10.1	Programme details	39
10.2	Eligibility criteria	39
10.3	Selection procedure	39
10.4	Sponsored candidates	39
10.5	Programme outline	39
10.6	Pedagogical tools	40
10.7	Course details	40
11	M Sc (Economics) – with a specialization in Environmental & Resource Economics	41
11.1	Programme details	41
11.2	Eligibility criteria	41
11.3	Selection procedure	41
11.4	Sponsored candidates	42
11.5	Programme outline	42
11.6	Pedagogical tools	43
11.7	Course details	43-44
12	Advanced PG Diploma by distance learning (Renewable Energy programme)	45
12.1	Programme details	45
12.2	Eligibility criteria	45
12.3	Sponsored candidates	45
12.4	Programme outline	45-46
12.5	Pedagogical tools	46
12.6	Face-to-Face Module	46
13	Advanced PG Diploma (Geoinformatics)	47
13.1	Programme details	47
13.2	Eligibility criteria	47
13.3	Selection Process	47
13.4	Sponsored candidates	48
13.5	Programme outline	48
13.6	Pedagogical tools	48
13.7	Course details	48-49

14	Application procedure	50
15	Registration for courses	50
	15.1 Renewal of registration	50
	15.2 Late registration	51
16	Credit system	51
17	Placements	51
	17.1 Organizations our students have been associated with for major project/final placement	51
18	Conduct and discipline	52
19	Hostel accommodation	52
20	Fee and payments	53-60
21	Fee for foreign students	60
22	Refund of fee	61

### Important dates

(i)	Issue of application form starts on	01 February 2012
(ii)	Last date of issue of application form	
	(a) By post	20 April 2012
	(b) At the counter, TERI University	27 April 2012
(iii)	Last date of receipt of application forms	27 April 2012
	Shortlisting of candidates for MBA programmes	3 May 2012
(iv)	Date of online test* for shortlisted M Sc, MA, M.Tech candidates	26 May 2012
(v)	Declaration of shortlists	7 June 2012
(vi)	Interviews for M Sc (Economics), M Sc (Plant Biotechnology), M Sc (Geoinformatics), MA (Sustainable Development Practice) and M. Tech (Renewable Energy Engineering and Management)	17 – 20 June 2012
(vii)	Group discussions/interviews for MBA programmes	23-24 May 2012
(viii)	Declaration of results of GD/interviews of MBA programmes	30 May 2012
(ix)	Interviews for sponsored candidates	22-26 June 2012
(x)	Last date for payment of fees – M Sc, MA (SDP) and M Tech	29 June 2012
(xi)	Last date for payment of fees – MBA	08 June 2012
(xii)	Activation of wait-lists	06 July 2012
(xiii)	Orientation and registration	23 July 2012
(xiv)	Commencement of classes	24 July 2012

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### PLEASE NOTE

Applications can be submitted on-line at <[www.teriuniversity.ac.in](http://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

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

Location of the centre	Centre code	Location of the centre	Centre code	Location of the centre	Centre code
New Delhi	001	Bhubaneshwar	017	Coimbatore	033
Gurgaon	002	Cuttack	018	Agra	034
Noida	003	Amritsar	019	Kanpur	035
Faridabad	004	Chandigarh	020	Lucknow	036

Location of the centre	Centre code	Location of the centre	Centre code	Location of the centre	Centre code
Hyderabad	005	Ludhiana	021	Varanasi	037
Vishakhapatnam	006	Jaipur	022	Dehradun	038
Guwahati	007	Shimla	023	Kolkatta	039
Patna	008	Srinagar	024	Jodhpur	040
Raipur	009	Ranchi	025	Jamshedpur	041
Panaji	010	Bangalore	026	Indore	042
Ahmedabad	011	Mysore	027	Haridwar	043
Baroda	012	Cochin	028	Allahabad	044
Hisar	013	Thiruvananthapuram	029	Dharwad	045
Mumbai	014	Bhopal	030	Jabalpur	046
Nagpur	015	Gwalior	031		
Pune	016	Chennai	032		

\* 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 B A (Urban Management)
- M Tech (Renewable Energy Engineering and Management)
- MA(Sustainable Development Practice)
- Advanced PG Diploma (Renewable Energy) distance learning programme
- Advanced PG Diploma (Geoinformatics)

## 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/centre 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/Commerce/Economics/Mathematics/Statistics/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 (of all the years/ semesters of the qualifying examinations), wherever marks are awarded. For candidates with a bachelor's degree in Economics/Commerce/Geography, a relaxation of 5% or 0.75 CGPA 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*
<b>First year</b>			
1 <sup>st</sup> semester	7 core courses of 2-4 credits each	24	15 weeks
2 <sup>nd</sup> semester	6 core courses of 3-4 credits each	20	15 weeks
Summer	Minor project	3	8 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	1 core course of 2 credits and minimum 4 electives of 4 credits each	18	15 weeks
4 <sup>th</sup> 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)

Note : For students who have not done courses in mathematics at 10+2/Bachelor's level, a boot camp of 2 weeks will be held from 9 July to 21 July 2012. Passing in this boot camp will be mandatory requirement for such candidates, prior to registration for the programme.

**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 Communication skills
- 2 Ecology
- 3 Environmental chemistry
- 4 Environmental geosciences
- 5 Environmental statistics and data analysis
- 6 Environmental law and policy
- 7 Introduction to sustainable development
- 8 Environmental monitoring laboratory

#### Semester 2

##### Core courses

- 1 Principles of geoinformatics
- 2 Basic course in environmental and resource economics

##### Elective course

- 1 Biodiversity conservation and governance
- 2 Hydrology
- 3 Advanced statistical techniques
- 4 Solid and hazardous waste management
- 5 Air quality management
- 6 Water quality management
- 7 Environmental pollution and control
- 8 Biodiversity assessment and conservation

#### Summer Semester

##### Minor Project

#### Semester 3

##### Core courses

- 1 Research methodology

##### Elective courses

- 1 Integrated impact assessment  
Environmental economics
- 2 Environmental modelling
- 3 Cultural ecology and development
- 4 Governance and management of natural resources
- 5 Environmental management systems
- 6 Integrated watershed management
- 7 Geoinformatics for natural resource management
- 8 Science and policy of climate change
- 9 Landscape ecology
- 10 Wildlife conservation and management

- 11 Economics of climate change
- 12 Climate modelling
- 13 Energy and the environment
- 14 Independent study
- 15 Geoinformatics for water resource management
- 16 Ground water hydrology and management
- 17 Water and wastewater treatment processes and design
- 18 Water resources optimization and water quality modeling
- 19 Glacier hydrology
- 20 Governance of climate change
- 21 Sustainable urban habitat and climate change
- 22 Forest management
- 23 Vegetation science and site classification
- 24 Environmental biotechnology and society
- 25 Ecosystem dynamics and climate change
- 26 Spatiotemporal data analysis

Semester 4

Major Project

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

Semester 1

- 1 Environmental Geosciences
- 2 Environment and Climate: Law & Policy
- 3 Applied Mathematics
- 4 Climate Change and Development
- 5 Fundamentals of Energy and Environment
- 6 Basics of Climate Science
- 7 Communication Skills

Semester 2

- 1 Climate Change Impacts and Adaptation Options
- 2 Statistical Techniques
- 3 Basic course in Environmental and Resource Economics
- 4 Principles of Geoinformatics
- 5 Air Pollution and Climate Change
- 6 Mitigation of Climate Change

Semester 3

Core course

## Research Methodology

### Electives

- 1 Climate Economics
- 2 Climate Modelling
- 3 Integrated Risk Assessment
- 4 Climate Change and Water Resources
- 5 Energy Conservation and Management
- 6 Climate Change and bioresources
- 7 Green Building /Energy Efficient Infrastructure
- 8 Climate Health and Safety Planning
- 9 Climate Change Governance
- 10 Independent Study
- 11 Aerosol Science

Note: Students can choose electives from other programmes also

### 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 23 July 2012



## **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/Statistics/ 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 (of all the years/ semesters of the qualifying examinations), wherever marks are awarded. For candidates with a bachelor's degree in Economics/Commerce/Geography, a relaxation of 5% or 0.75 CGPA 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*
<b>First year</b>			
1 <sup>st</sup> semester	6 core courses of 4 credits each	24	15 weeks
2 <sup>nd</sup> semester	6 core courses of 4 credits each	24	15 weeks
Summer	Minor project	4	
<b>Second year</b>			
3 <sup>rd</sup> semester	4 core and 2 elective courses of 6 credits each	24	15 weeks
4 <sup>th</sup> 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)

#### 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

Core courses

- 1 Applied mathematics (Audit)
- 2 Principles of cartography
- 3 Principles of remote sensing
- 4 Principles of GIS and GPS

- 5 Fundamentals of computers and programming
- 6 Project management

## Semester 2

### Core courses

- 1 Communication skills
- 2 Statistical techniques
- 3 Photogrammetry
- 4 Law and policy for maps and remote sensing
- 5 Digital image processing and information extraction
- 6 GIS - Spatial data modelling applications

## Summer Semester

### Minor Project

## Semester 3

### Core courses

- 1 Research methodology (audit)
- 2 Advances in remote sensing
- 3 Advances in GIS and current trends
- 4 Advanced statistics
- 5 Independent study (Pilot Project)

Any two courses (electives) from

- 1 Ecosystem dynamics and climate change
- 2 Energy and the environment
- 3 Environmental management system
- 4 Integrated impact assessment
- 5 Environmental modeling
- 6 Science and policy of climate change
- 7 Integrated watershed management
- 8 Ground water hydrology and management
- 9 Water resources optimization and water quality modeling
- 10 Water and wastewater treatment processes and design
- 11 Glacier hydrology
- 12 Climate modelling

## 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 23 July 2012.

## **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**

For the Masters programme in Plant Biotechnology the minimum eligibility is a Bachelor's degree in the Sciences, preferably the 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.

### **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, 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 27 July 2011.

## 5.8 Course details

### Semester 1

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

### Semester 2

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

### Semester 3

- 1 Plant biotechnology management and regulatory issues
- 2 Genomics and molecular genetics
- 3 Bioethics and public awareness
- 4 Bioinformatics and computational biology
- 5 Plant biotechnology laboratory – Part 3
- 6 Advanced statistical techniques

### 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: 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.

Stream II: Graduates with a minimum of two years experience in any of the following sectors namely government, regulatory bodies, industry, research/academic institutions, donor/consultant organizations.

Candidates in Stream I will do three semesters of course work and one semester of major project. Candidates in Stream II will do two semesters of course work and two semesters of major project (at their place of work).

### **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*
<b>First year (Common to both streams)</b>			
1 <sup>st</sup> semester	7 core courses	21	15 weeks
2 <sup>nd</sup> semester	11 core courses	34	15 weeks
<b>Second year (Stream I)</b>			
3 <sup>rd</sup> & 4 <sup>th</sup> semester	Core credits 11(4courses), functional elective credits 6 (3 courses), non credit electives 5 courses	21	15 weeks
4 <sup>th</sup> semester	Major project	20	At the location of the project
<b>Second year (Stream II)</b>			
3 <sup>rd</sup> & 4 <sup>th</sup> 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

Introductory and Basic Course in all streams

- 1 Business communication
- 2 Management functions and organizational behaviour
- 3 Marketing management
- 4 Managerial economics
- 5 Research methods in management I

- 6 Financial management
- 7 Infrastructure policies, reforms and law

#### Semester 2

- 1 Financial management – II
- 2 Economics of regulation: theory and evidence
- 3 Qualitative research methods in management
- 4 Research methods in management (operations research, econometric modelling) III
- 5 Production and operations management, including logistics management
- 6 Macroeconomics
- 7 Management information systems
- 8 Competition theory and policy

#### Semester 3

##### Infrastructure management issue, tools, and applications

- 1 Risk management
- 2 Sustainable business strategy and management
- 3 Managing negotiations/business negotiations
- 4 Professional ethics
- 5 Design and management of public-private partnerships
- 6 Project management
- 7 Network characteristics of infrastructure industries
- 8 Valuation and pricing

#### **Sectoral Electives**

##### **Transport**

- 1 Transport economics
- 2 Urban transport
- 3 Transport infrastructure

##### **Energy**

- 1 Oil and gas
- 2 Power systems
- 3 Energy policy and management

##### **Telecom**

- 1 Information technology project management
- 2 Software process and quality management

##### **Urban Infrastructure**

- 1 Urban infrastructure management
- 2 Real estate management

#### **Functional Electives**

**Marketing**

- 1 Brand management
- 2 Retail and distribution management
- 3 Marketing of services
- 4 Industrial marketing
- 5 Advertisement and promotion management
- 6 Customer relationship management
- 7 Rural marketing
- 8 Strategic marketing
- 9 Social marketing
- 10 Supply chain management

**Finance**

- 1 Derivatives and risk management
- 2 Project appraisal and finance
- 3 Equity research and security analysis
- 4 Investment and portfolio management
- 5 Management of financial services and institutions
- 6 Financial services regulation
- 7 Mergers and acquisitions
- 8 Infrastructure financing and management
- 9 Rural banking and alternative financing

Semester 4

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*
<b>Stream I</b>			
<b>First year</b>			
1 <sup>st</sup> semester	9 courses	26	15 weeks
2 <sup>nd</sup> semester	10 courses	29	15 weeks
<b>Second year</b>			
3 <sup>rd</sup> & 4 <sup>th</sup> semester	Core credits 12 (6 courses), functional elective credits 6 (3 courses), non credit elective (5 courses)	18	15 weeks
4 <sup>th</sup> semester	Major project	20	At the location of the project
<b>(Stream II)</b>			
<b>First year</b>			
1 <sup>st</sup> semester	9 courses	26	15 weeks
2 <sup>nd</sup> semester	10 courses	29	15 weeks
<b>Second year</b>			
3 <sup>rd</sup> & 4 <sup>th</sup> semester	Core credits 12 (6 courses), functional elective credits 6 (3 courses), non credit elective (5 courses)	18	15 weeks
4 <sup>th</sup> semester	Major project	40	At the participant's workplace

\* 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 Business communication
- 2 Management concepts and practices
- 3 Marketing management
- 4 Managerial economics
- 5 Quantitative research methods in management
- 6 Financial management – I
- 7 Principles and concepts of sustainability, including environmental economics and interdisciplinary issues in sustainability
- 8 Climate change and its implications

### Semester 2

- 1 Financial management – II
- 2 Institutional and regulatory frameworks
- 3 Qualitative research methods in management
- 4 Research methods in management (Operations research, econometrics modelling)
- 5 Production and operations management, including logistics management
- 6 Energy policy and management
- 7 Macroeconomics
- 8 Management information systems

### Semester 3

- 1 Global economics environment, policy and governance (Competition for resources, development challenges, Comparative regulations framework, WTO, Climate Change, Global public goods, GlobalBusiness Strategy)
2. Business and society (Triple bottom line, environmental and social impact assessment, CSR practices, business ethics, Corporate Governance, Management of Environmental Issues, Environmental Sustainability, RTI, Affirmative Action)
3. Sustainable business strategy and management contemporary issues in change management
4. Community relationship management (internal/external, clients, government)
5. Cross cultural management

## **Electives**

## **Marketing**

- 1 Brand management
- 2 Retail and distribution management
- 3 Marketing of services
- 4 Industrial marketing
- 5 Advertisement and promotion management
- 6 Customer relationship management
- 7 Rural marketing
- 8 Strategic marketing
- 9 Social marketing
- 10 Supply chain management

## **Technology and Innovations**

- 1 Information technology project management
- 2 Software process and quality management
- 3 E-commerce and management

## **Finance**

- 1 Derivatives and risk management
- 2 Project appraisal and finance
- 3 Equity research and security analysis
- 4 Investment and portfolio management
- 5 Management of financial services and institutions
- 6 Financial services regulation
- 7 Mergers and acquisitions
- 8 Infrastructure financing and management
- 9 Rural banking and alternative financing

## **Trade**

- 1 Commodity trading and price risk management
- 2 Environment management
- 3 Market access issues
- 4 International trade operations

## Semester 4

### Major project

- 1 Design and management of public-private partnerships
- 2 Managing negotiations/business negotiations professional ethics
- 3 Major research project, placed in industry

## **8 M B A (Urban Management)**

### **8.1 Programme details**

The complexities of managing sustainable development of urban areas in developing countries require experts who are able to bring unique knowledge and skills to analyse the underlying issues and challenges and develop sustainable and effective solutions. While, on the one hand, there is a severe shortage of professional managers required for these tasks, on the other hand, the requirement for the same has been 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 the capacity of institutions engaged in urban management and governance.

The MBA (Urban Management) is designed to build a trained manpower of professional managers for sustainable urban and real estate sector and equip them with such knowledge, skills and experiences that prepare for a successful career in:

- Public sector institutions and urban local bodies responsible for managing and governing the rapidly growing urban areas,
- Private sector organizations engaged in real estate and urban infrastructure development,
- Consultancy firms, NGOs and CBOs participating in urban development activities, and
- Institutions conducting urban research, training and capacity building activities.

The uniqueness of this programme at TERI University is in synergizing the knowledge of traditional business management disciplines such as marketing, finance and strategy with the domain knowledge of sustainable urban development.

### **8.2 Eligibility**

The candidates must possess a Bachelor's degree with at least 50 per cent aggregate marks or equivalent CGPA and English as a subject at least till 10+2 level. Candidates appearing for the final year of Bachelor's degree / awaiting results can also apply.

### **8.3 Selection procedure**

The candidates will be shortlisted based on CAT/GMAT/MAT scores and marks obtained in the qualifying degree. Selection from shortlisted candidates will be on the basis of group discussions and interviews conducted by TERI University at New Delhi.

### **8.4 Sponsored candidates**

Candidates working in the government and parastatals, consulting firms, financial institutions, research institutions, non-governmental organisations and public and private sector engaged with urban and real estate development, planning and management issues are encouraged to apply for the full-time MBA in Urban Management. Sponsored candidates are required to submit, at the time of interview, a sponsorship certificate from their employer, 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*
<b>First year</b>			
1 <sup>st</sup> semester	6 core courses	20	15 weeks
2 <sup>nd</sup> semester	9 core courses	22	15 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	6 core courses (14 credits), 2 elective courses (4 credits)	18	15 weeks
4 <sup>th</sup> semester	2 courses (5 credits) Major project (20 credits)	25	15 weeks

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

### 8.6 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 guest lectures by practitioners and experts, seminars and discussion forums, and role play.

In particular, case studies, drawing from real-world management challenges, will be designed and integrated into the curriculum. The faculty, along with professionals and development organizations will be encouraged to collaborate in the preparation of case studies. These case studies, along with the field exposure planned during the Summer Internship and the Major Research Project, would provide relevant context to the curriculum in this programme.

### 8.7 Course details

#### Semester 1

- 1 Managerial Economics
- 2 Corporate Accounting and Reporting
- 3 Management Functions and Organizational Behaviour
- 4 Research Methods in Management – I
- 5 Business Communication

## 6 Concepts of Sustainability in Urban Management

### Semester 2

- 1 Theory of Urbanization and Development
- 2 Urban Policies, Governance and Institutional Reforms
- 3 Urban Legislation
- 4 Urban Social Inclusion and Development
- 5 City and Regional Planning and Development Strategies
- 6 Provision of Sustainable Urban Services and Infrastructure
- 7 Urban Ecology and Environmental Management
- 8 Municipal Accounting and Financial Management
- 9 Summer Internship Project

### Semester 3

- 1 Quantitative Research Methods in Management – II
- 2 MIS and GIS for Urban Management
- 3 e-Governance in Urban Local Bodies
- 4 Project Development, Management and Financing
- 5 Costing and Pricing of Urban Services
- 6 Sustainable Regeneration and City Competitiveness

### Electives

- 1 Energy Policy and Management
- 2 Financial Intermediaries, Institutions & Regulations
- 3 Project Appraisal
- 4 Sustainable Business Strategy
- 5 Urban Transport Economics
- 6 Water Resources Management
- 7 Green Buildings
- 8 Solid Waste Management
- 9 Making Cities Climate Resilient

### Semester 4

- 1 Real Estate Development and Management
- 2 SEZ and Township Development
- 3 Major Research Project

## **9 MA (Sustainable Development Practice)**

### **9.1 Programme details**

The Master's in Sustainable Development Practice, seeks to address a critical gap in sustainable development education in a region where such capacity creation is most required. The programme is designed based upon 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. TERI University is one of the ten universities worldwide selected by the John D. and Catherine T. MacArthur Foundation, globally headquartered in Chicago, to receive seed funding to create a new master's degree programme in Sustainable Development Practice. The programme aims to provide rigorous post-graduate training for a new generation of development experts.

The Master's in Sustainable Development Practice 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. The programme has a strong cross-disciplinary cross-sectoral orientation and a practice focus. It draws on the teaching and research expertise of international leaders from numerous areas. It seeks to enhance knowledge and skills necessary to achieve the UN Millennium Development Goals and promote best practice in the development sector. The MA (SDP) offers 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.

### **9.2 Scholarships**

The MacArthur Foundation will provide 5 scholarships to eligible candidates.

The scholarships would only include waiver of tuition fee, Scholarship holders would be required to take care of their travel and lodging costs themselves.

### **9.3 Eligibility criteria**

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

- Bachelor's Degree in any discipline from a recognized university with 55 per cent marks.
- Where it is a grade point scale, it should be a minimum of 6.0 on a 10 point scale.
- Appropriate English language proficiency.

## 9.4 Selection procedure

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 interview.

Common Entrance Test	40 %
Personal Interview	60 %

Candidates selected on the basis of entrance test will be called for a personal interview in any time between 17 - 20 June 2012.

## 9.5 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.

## 9.6 Programme outline

Year	Courses	Credits	Duration*
<b>First year</b>			
1 <sup>st</sup> semester	6 core courses of 3 credits each Group Practicum of 3 credits	21	15 weeks
2 <sup>nd</sup> semester	6 core courses of 1.5-3 credits each Group Practicum 3 credits	15	15 weeks
Summer internship			
<b>Second year (Stream I)</b>			
3 <sup>rd</sup> semester	6 core courses of 1.5-3 credits each Group Practicum of 3 credits	15	15 weeks
4 <sup>th</sup> semester	3 electives of 3 credits each + 1 group practicum of 3 credits	12	15 weeks
Summer	Field research	22	12 weeks

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

A minimum of 88 credits must be earned to full fill the requirements of the degree.

## 9.7 Course details

### Semester I

- 1 Global classroom: integrated approaches to SD
- 2 Basics in environmental science I
- 3 Basics in environmental science II
- 4 Global health I
- 5 Economic and policy analysis
- 6 Science, technology and sustainable development
- 7 Workshop on qualitative research methods
- 8 Group practicum 1

### Semester 2

- 1 Global public health II
- 2 Macroeconomic policy and sustainable development
- 3 Cultural ecology and development
- 4 Public policy processes and institutions
- 5 Management functions and organizational behaviour
- 6 Foundations of finance
- 7 Group practicum 2  
Internship

### Semester 3

- 1 Methodology and epistemology
- 2 International development practice
- 3 Integrated impact assessment
- 4 Geo-informatics for natural resource management
- 5 Education and learning for sustainable development
- 6 Group practicum 3

### Semester 4

(3 electives from any one area of concentration)

#### Area of concentration: CLIMATE CHANGE

- 1 Science and policy of climate change
- 2 Economics of climate change
- 3 Carbon finance
- 4 Group practicum 4

#### Area of concentration: INFRASTRUCTURE

- 1 Impact Assessment of Infrastructure Development
- 2 Infrastructure Economics
- 3 Financing infrastructure projects
- 4 Group practicum 4

Area of concentration: URBAN GOVERNANCE

- 1 Urbanization and Development
- 2 Urban Infrastructure and Services
- 3 Urban Policies, Regulations, and Governance
- 4 Group practicum 4

Area of concentration: RENEWABLE ENERGY

- 1 Rural Energy
- 2 Distributed Power
- 3 Clean Development Mechanisms
- 4 Group practicum 4

Area of concentration: AGRICULTURE AND FOOD SECURITY

- 1 Sustainable agricultural production
- 2 Agricultural biotechnology I
- 3 Agricultural biotechnology II
- 4 Group practicum 4

FIELD RESEARCH

Pre-departure orientation and training: 0.5 month

On site – 2 months

Report preparation & presentation: 1 month

## 10 M Tech (Renewable Energy Engineering and Management)

### 10.1 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.

### 10.2 Eligibility criteria

A Bachelor's degree in any branch of engineering or M Sc in Physics 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 (of all the years/semesters of the qualifying examinations), wherever marks are awarded.

### 10.3 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.

### 10.4 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.

### 10.5 Programme outline

Year	Courses	Credits	Duration*
<b>First year</b>			
1 <sup>st</sup> semester	6 core and one audit	22	15 weeks
2 <sup>nd</sup> semester	7 courses	25	15 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	3 core courses and 3 elective courses	18	15 weeks
4 <sup>th</sup> semester	Major Project	18	15 weeks

## 10.6 Pedagogical tools

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

## 10.7 Course details

### Semester 1

- 1 Conventional energy infrastructure
- 2 Power systems engineering
- 3 Thermodynamics and combustion
- 4 Energy economics – Theory and Practice
- 5 Heat transfer
- 6 Research methodology
- 7 Technical writing

### Semester 2

- 1 Energy audit, conservation and efficiency
- 2 Renewable energy resource characteristics
- 3 Renewable energy conservation technology-I
- 4 Renewable energy conservation technology-II
- 5 Applied numerical methods
- 6 Statistics for engineers
- 7 Technical writing
- 8 Renewable energy laboratory – I
- 9 Renewable energy laboratory - II

### Semester 3

#### Elective courses

- 1 Renewable energy for heat applications (potential, economics, case studies, etc.)
- 2 Renewable energy for power generation (potential, economics, case studies, etc.)
- 3 Building energy and green buildings
- 4 Waste utilization
- 5 Rural energy
- 6 Wind power
- 7 Solar power
- 8 Decentralised and distributed power generation
- 9 Biofuels (potential, policies, case studies etc.)
- 10 Environmental implications of energy use (air, water and land) and climate change\*
- 11 Emerging technologies for climate change mitigation (carbon capture, algal conversion, electric vehicles, hydrogen etc.)
- 12 Project management\*

(\*Core courses)

### Semester 4

Thesis work



## **11 M Sc (Economics) – with a specialization in Environmental & Resource Economics**

### **11.1 Programme details**

The rapid structural economic changes in developed and developing countries in the second half of the 20<sup>th</sup> 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.

### **11.2 Eligibility criteria**

- (i) BA (Hons) Economics of the University of Delhi with 50% or more marks in aggregate OR
- (ii) BA (Hons)/BSc (Hons) Economics of any other Indian University recognized by the University of Delhi with 50% or more marks in the aggregate. In case of Universities where the BA/BSc (Hons) Economics degree includes courses other than Economics, the course shall be treated as honours course only if it contains at least 55% of the total marks in respect of papers in economics OR
- (iii) Bachelor degree in Business Economics/BCom/Mathematics/Physics/ Engineering with at least 60 marks

with Mathematics and English as compulsory courses till 10+2 or equivalent.

### **11.3 Selection procedure**

Selection of students will be based on the mark/grade obtained by the students in their last qualifying examination and along with an online entrance examination and interview.

Online entrance examination will be for one-hour long duration 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.

#### 11.4 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.

#### 11.5 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*
<b>First year</b>			
1 <sup>st</sup> semester	5 core courses of 4 credits	20	15 weeks
2 <sup>nd</sup> semester	5 core courses of 4 credits each + Communication skill	22	15 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	1 core course of 4 credits each + choice of 5 electives of 3 credit each + minor project of 4 credit	23	15 weeks
4 <sup>th</sup> semester	Major project	24	Depends on the location of project or requirement of organisation

## 11.6 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.

## 11.7 Course details

### Semester 1

- 1 Principles of economics
- 2 Micro economics
- 3 Constrained optimization and linear algebra
- 4 Quantitative methods (basics of statistics, and econometrics)
- 5 Macroeconomics
- 6 Environment and economic development
- 7 Communication skills

### Semester 2

- 1 Indian economics
- 2 Theory of environmental policy
- 3 Economics of natural resource
- 4 Econometrics
- 5 Trade and environment

### Semester 3

#### Core courses

- 1 Techniques of environmental valuation
- 2 Minor Project

#### Optional courses

From the below listed courses a student is free to choose a set of courses of his/her choice to earn at least 15 credits

- 1 Economics of Environmental Ethics
- 2 Risk Uncertainty and information
- 3 Collective action and environmental management
- 4 Society, business and environment
- 5 Economics of Climate Change
- 6 Energy Economics
- 7 Environmental Finance/Carbon finance
- 8 Institutional Economics and the Environment
- 9 Game theory and the Environment
- 10 Theory of Industrial Organizations

- 11 Contracts and the Environment
- 12 Environmental Law and Economics
- 13 Agricultural Economics
- 14 Advanced Macroeconomics

Semester 4

Major project

In semester 4, the students will be required to do a research project of 24 credits. The objective of the major project is to provide students experience in both theoretical and empirical research.

## 12 Advanced PG Diploma (Renewable Energy) Distance learning mode

### 12.1 Programme details

The Advanced PG Diploma programme is designed to provide postgraduate training in the area of Renewable Energy through distance learning mode. The programme is suitable for working professionals/ fresh graduates from a range of engineering and related disciplines. The programme has been specifically designed to meet the needs of an expanding Renewable and Sustainable Energy industry in India and abroad. A wide range of advanced topics are covered in the programme. The programme has been developed jointly by TERI University and the U K Open University with assistance from UKIERI.

Students can choose to exit the programme after one year. In such a case if the student has successfully completed the requirements of the first and second semesters, he/she will be awarded a PG Diploma in Renewable Energy.

### 12.2 Eligibility criteria

A degree in Mathematics/Physical Science/Technology or equivalent with minimum cumulative grade point average of 6.0 on a 10 point scale or equivalent as determined by TERI University, wherever letter grades are awarded, or 55% marks in aggregate (of all years/semesters of the qualifying examinations) wherever marks are awarded.

### 12.3 Sponsored candidates

Candidates working in the industry/government are encouraged to apply for the programme. An NOC (no objection certificate)/sponsorship letter from the employer will be required at the interview.

### 12.4 Programme outline

Modules	Credits*	Duration (in Weeks)
<b>First semester (July to December)</b>		
<b>Module -1</b> <u>Energy infrastructure</u>	11	11
<b>Module -2</b> <u>Introduction to Basic Engineering Principles</u>	7	7
<b>Module -3</b> Engines	2	2
<b>Second semester ( January to June)</b>		
<b>Module-4</b> Energy Conservation and Management	6	6
<b>Module-5</b> Renewable Energy Resources	6	6
<b>Module -6</b> Basics of Renewable Energy Technologies	9	9
<b>Module-7</b> Policies, Programs and Regulations	3	3

<b>Third semester (July to December)</b>		
<b>Module-8</b> Solar Thermal Technologies (Low temperature and Power generation)	4	4
<b>Module-9</b> Solar Power Generation through Photovoltaic route	4	4
<b>Module-10</b> Passive Solar Architecture	4	4
<b>Module-11</b> Wind Power Generating Technologies	3	3
<b>Module-12</b> Geothermal, tidal, wave and ocean energy technologies	2	2
<b>Module-13</b> Hydro Power Generation	1	1
<b>Module-14</b> Environmental and Health Impact of Energy Use	2	2
<b>Fourth semester ( January to June)</b>		
<b>Module-13</b> Thermo-chemical, Biochemical Conversion of Biomass and Liquid Fuels	10	10
<b>Module-15</b> Fossil Fuel Sustainability	2	2
<b>Module-16</b> Software Tools for Energy Analysis	4	4
<b>Module-17</b> Project Work	8	8

\* 1credit is equal to 28 hours of self-study per week

#### **Evaluation procedure**

Assignments	60%
Semester end exams	40%

#### **12.5 Pedagogical tools**

The pedagogical tools consist of lectures, tutorials through open-source software and face-to-face interactions, laboratory experiments and industry/field visits.

#### **12.6 Face-to-Face Modules**

The face to face (FTF) interaction sessions are planned for a week each in winter and summer(usually in December and June) at the designated study centers (Delhi, Bangalore and Pune). The activities during the sessions include:

Lectures on subjects learnt during the semester.

Visits to nearby energy related installations/industries.

Interaction with institutes/industry dealing with renewable energy.

End-semester exams

Note: - At least 80% attendance is mandatory during face to face session for appearing in the end semester exams. Students should refer to the student handbook for further details.

## **13 Advanced PG Diploma (Geoinformatics)**

### **13.1 Programme details**

Geoinformatics have great social and national relevance and can support preparing sustainable development strategies, enabling enterprises to manage business processes efficiently and bring geographical knowledge to citizens. Time needs a sound knowledge base in GIS technology and applications – not just for bringing benefits of information system to country but also help in formulating efficient national development efforts in cross-cutting issues of environment, climate change, infrastructure development and even in homeland security cooperation.

In light of such a requirement TERI University with Esri India Ltd. proposes *one year* full time **Advanced PG Diploma in Geoinformatics**. The course work will enable students to learn the techniques of creation, analysis and integration of various geo-tagged spatial and non-spatial data in a geographic unit. The advance diploma also deals with the platform of the Web to virtually connected servers, desktops and mobile devices.

The academic and research experiences of TERI University, available infrastructure and wide range of inter-disciplinary experiences along with industrial inputs from Esri India including latest tools and professional exposure will provide an unique blend to create a new cadre of geo-professionals ready for the market needs and customized research initiatives.

### **13.2 Eligibility criteria**

A Bachelor's degree in Science/Engineering/Mathematics/Computers/Statistics/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 (of all the years/semesters of the qualifying examinations), wherever marks are awarded. For candidates with a bachelor's degree in Geography, a relaxation of 5%/0.75 CGPA could be allowed.

### **13.3 Selection process**

Admission to the Advanced Diploma programme is made on the basis of a written test conducted by the University followed by Personal Interviews. Applications are invited from the candidates by advertising the programme on the university website and the Employment News/some leading newspapers in February/March every year. The written 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
- Mathematics

Wrong answers will invite negative marking.

### 13.4 Sponsored candidates

Candidates working in the Industry/Government are encouraged to apply for the full-time M.Sc. programmes. Upto five seats can be reserved in each programme for such candidates. All those who satisfy the minimum qualifications, mentioned in the above para may be admitted to the programme on the basis of an interview. These candidates are required to submit, at the time of interview, a sponsorship certificate from their employer on a proper letterhead, stating that for the period of his/her study at the University, the candidate will be treated as on duty with usual salary and allowances and that he/she will be fully relieved for the period of study for pursuing his/her studies.

### 13.5 Programme outline

Year	Courses	Credits	Duration*
1 <sup>st</sup> semester	Core course	30	15 weeks
2 <sup>nd</sup> Semester	Major Project (Internship)	20	15 weeks

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

### 13.6 Pedagogical tools

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

### 13.7 Course details

Topic	Credits	Time (Hrs)		
		L	T	P
<b>Semester 1</b>				
<b>Course 1 Principles of Spatial Data</b>	<b>5</b>	<b>38</b>	<b>0</b>	<b>64</b>
Module 1: Spatial Data Concepts & Models (7 days)		20		28
Module 2 : Spatial Data Creation & Linking (3 days)		9		16
Module 3 : Data Analysis (3 days)		9		20
<b>Course 2 Remotely Sensed Spatial Data</b>	<b>4</b>	<b>32</b>	<b>4</b>	<b>40</b>
Module 4 : Photogrammetry (2 days)		8	1	12
Module 5 : Projections & Georeferencing (1.5 days)		6	1	6
Module 6 : Remote Sensing & Integrated Image Processing (5 days)		18	2	22
<b>Course 3 Geodatabase and Geometric Network</b>	<b>7</b>	<b>48</b>	<b>2</b>	<b>96</b>



Topic	Credits	Time (Hrs)		
		L	T	P
Module 7 : Geodatabases - Concepts & Management (8 days)		32	1	56
Module 8 : Geometric Network & Routing (5 days)		16	1	40
<b>Course 4 Spatial Modeling</b>	<b>6</b>	<b>41</b>	<b>0</b>	<b>86</b>
Module 9 : Spatial Analysis (8 days)		27		50
Module 10: 3D/Terrain Modeling (5 days)		14		36
<b>Course 5 Advances in GIS &amp; GIS Customization</b>	<b>5</b>	<b>34</b>	<b>8</b>	<b>56</b>
Module 11 Customizing GIS Interface (3 days)		8	4	20
Module 12 Web GIS (4 days)		12	2	20
Module 13 Mobile GIS (3 days)		10		16
Module 14 Future Trends & Success Factors (1 day)		4	2	
<b>Course 6 Project Work</b>	<b>3</b>			
Module 15 Project/Case Study (20 days)				
Sub Total	<b>30</b>			
<b>Semester 2</b>				
Major Project (internship) – One semester	<b>20</b>			
<b>Total</b>	<b>50</b>			

## **General Guidelines**

### **14 Application procedure**

It is recommended that applications be made online. Applications can be made on-line at <[www.teriuniversity.ac.in](http://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 27 April 2012.

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 27 April 2012.

Application forms may also be downloaded from the University’s web site <[www.teriuniversity.ac.in](http://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.

### **15 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.

#### **15.1 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.

## **15.2 Late registration**

Late registration of students, due to reasons beyond their control, could be permitted if so recommended by the concerned head of the department/centre and on payment of a late registration fee of Rs 1000/-.

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.

## **16 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.

## **17 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.

### **17.1 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.

## **18 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.

## **19 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.

## 20 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
<b>Total – A</b>	<b>3400</b>

##### B. Semester-wise fees (in rupees)

Tuition fees	12000
Registration/enrolment	300
Examination fees	300
Internet and computer	1000
Accidental insurance*	105
Social charges	400
Development charges	1000
<b>Total – B</b>	<b>15105</b>

##### C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
<b>Total – C</b>	<b>7000</b>

Total fee payable at the time of admission – Rs 25,505/-

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

Note: Tuition fee for sponsored candidates will be 2.5 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
<b>Total – A</b>	<b>2950</b>

### C. Semester-wise fees (in rupees)

Tuition fees	40000
Registration/enrolment	500
Examination fees	1000
Internet and computer	1000
Accidental insurance	105
Social charges	400
Development charges	1000
<b>Total – B</b>	<b>44005</b>

### C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
<b>Total – C</b>	<b>7000</b>

Total fee payable at the time of admission – Rs 53,955/-

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

Note: Tuition fee for sponsored candidates will be 2.5 times that of non-sponsored candidates.

**M Sc (Geoinformatics), M Sc (Plant Biotechnology), M Tech (Renewable Energy Engineering and Management) and PG Diploma (Geoinformatics)**

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
<b>Total – A</b>	<b>2950</b>

B. Semester-wise fee (in rupees)

Tuition fees	40000
Registration/enrolment	500
Examination fees	1000
Internet and computer	1000
Lab fees	10000
Accidental insurance	105
Social charges	400
Development charges	1000
<b>Total – B</b>	<b>54005</b>

C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
<b>Total – C</b>	<b>7000</b>

Total fee payable at the time of admission – Rs 63,955/-

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

Note: Tuition fee for sponsored candidates will be 2.5 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
<b>Total – A</b>	<b>14650</b>

### B. Semester-wise fee (in rupees)

Tuition fees	125000
Registration/enrolment	500
Examination fees	1000
Internet and computer	1000
Social charges	400
Development charges	1000
<b>Total – B</b>	<b>128900</b>

### C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
<b>Total – C</b>	<b>7000</b>

Total fee payable at the time of admission – Rs 150550/-

Note: Tuition fee for sponsored candidates will be 2.5 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
<b>Total – A</b>	<b>14650</b>

### B. Semester-wise fee (in rupees)

Tuition fees	125000
Registration/enrolment	500
Examination fees	1000
Internet and computer	1000
Social charges	400
Development charges	1000
<b>Total – B</b>	<b>128900</b>

### C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
<b>Total – C</b>	<b>7000</b>

Total fee payable at the time of admission – Rs 1,50,550/-

Note: Tuition fee for sponsored candidates will be 2.5 times that of non-sponsored candidates.

## M B A (Urban Management)

### 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
<b>Total – A</b>	<b>14650</b>

### B. Semester-wise fee (in rupees)

Tuition fees	125000
Registration/enrolment	500
Examination fees	1000
Internet and computer	1000
Social charges	400
Development charges	1000
<b>Total – B</b>	<b>128900</b>

### C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
<b>Total – C</b>	<b>7000</b>

Total fee payable at the time of admission – Rs 1,50,550/-

Note: Tuition fee for sponsored candidates will be 2.5 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
<b>Total – A</b>	<b>2950</b>

### B. Semester-wise fee (in rupees)

Tuition fees	58600
Registration/enrolment	500
Examination fees	1000
Field Training	10000
Internet and computer	1000
Social charges	400
Development charges	1000
<b>Total – B</b>	<b>72500</b>

### C. Deposits (refundable) (in rupees)

Institute deposit	2000
Library deposit	5000
<b>Total – C</b>	<b>7000</b>

Total fee payable at the time of admission Rs 82,450/-

Note: Tuition fee for sponsored candidates will be 2.5 times that for non-sponsored candidates.

## Advanced PG Diploma (Renewable Energy) - distance learning programme

### 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
<b>Total – A</b>	<b>2950</b>

### B. Semester-wise fee (in rupees)

Tuition fees	20000
Registration/enrolment	500
Examination fees	1000
IT and postal charges	1000
Development charges	1000
<b>Total – B</b>	<b>23500</b>

Total fee payable at the time of admission – Rs 26,450/-

## 21 Fee for foreign students

Foreign students will be required to pay a fee of US \$3000 per semester. In addition, a one-time fee as per the table below and a refundable deposit of Rs 7000/- will be required to be paid in rupees.

### One-time fee (in rupees)

Ph D	3400/-
M Sc and MA programmes	7950/-
M B A programmes	9650/-

Up to 50% of the fees (excluding the one-time fee and deposits) may be waived by the Vice-chancellor on an individual, case-to-case basis.

## **22 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 08 July 2012). 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:

Registrar

T E R I University

10, Institutional Area

Vasant Kunj

New Delhi – 110 070

India

Tel. 2612 2222

Fax 2612 2874

India + 91 Delhi (0) 11

E-mail registrar@teri.res.in

Website www.teriuniversity.ac.in