

# **Information Brochure**

**2018/19**

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

## Index

	Page No.
Important dates	7
Centre(s) for online test/interviews	7-8
1 Programmes offered by the Deemed University	8
2 Doctoral programmes (Ph D)	8
2.1 Categories of admission	8
2.2 Minimum qualification for admission	9
2.3 Additional requirements for full-time sponsored candidates	9
2.4 Additional requirements for part-time (sponsored and non-sponsored) candidates	9
2.5 Pre-Ph D course requirements	10
2.6 CGPA (Cumulative Grade Point Average) requirements	10
2.7 Comprehensive examination	11
2.8 Time limit for Ph D work	11
2.9 Grant of leave to Ph D students	12
2.10 Attendance requirements for Ph D students	13
2.11 Financial assistance to Ph D students	13
2.12 Attendance requirement for assistantship	13
2.13 Further regulations governing Ph.D students	14-17
3 M Sc (Climate Science and Policy)	18
M Sc (Environmental Studies and Resource Management)	
3.1 Programme details	18
3.2 Eligibility criteria	18
3.3 Selection procedure	18
3.4 Sponsored candidates	19
3.5 Programme outline	19
3.6 Pedagogical tools	19
3.7 Course details - M Sc (Environmental Studies & Resource Management)	19-22
3.8 Course details – M Sc (Climate Science and Policy)	19-22
3.9 General guidelines	22
4 M Sc (Geoinformatics)	23
4.1 Programme details	23
4.2 Eligibility criteria	23
4.3 Selection procedure	23
4.4 Sponsored candidates	24
4.5 Programme outline	24
4.6 Pedagogical tools	24
4.7 Course details	24-25

4.8	General guidelines	26
5	M Sc (Plant Biotechnology)	27
5.1	Programme details	27
5.2	Eligibility criteria	27
5.3	Selection procedure	27
5.4	Sponsored candidates	27
5.5	Programme outline	28
5.6	Pedagogical tools	29
5.7	General guidelines	29
5.8	Course details	29
6	M B A (Infrastructure)	30
6.1	Programme details	30
6.2	Eligibility	30
6.3	Selection procedure	30
6.4	Sponsored candidates	31
6.5	Programme outline	31
6.6	Pedagogical tools	31
6.7	Course details	31-32
7	M B A (Business Sustainability)	33
7.1	Programme details	33
7.2	Eligibility	34
7.3	Selection procedure	34
7.4	Sponsored candidates	34
7.5	Programme outline	34
7.6	Pedagogical tools	34
7.7	Course details	35-36
8	Master's in Sustainable Development Practice	37
8.1	Programme details	37
8.2	Eligibility criteria	37
8.3	Selection procedure	38
8.4	Sponsored candidates	38
8.5	Programme outline	38
8.6	Course details	39
9	M Tech (Renewable Energy Engineering and Management)	40
9.1	Programme details	40
9.2	Eligibility criteria	40

9.3	Selection procedure	40
9.4	Sponsored candidates	40
9.5	Programme outline	40
9.6	Pedagogical tools	40
9.7	Course details	41
10	M Tech (Urban Development and Management)	42
10.1	Programme details	44
10.2	Eligibility criteria	42
10.3	Selection procedure	43
10.4	Sponsored candidates	43
10.5	Programme outline	43
10.6	Pedagogical tools	43
10.7	Course details	43-44
11	M Sc Water Science and Governance, PG Diploma, Certificate and (M.Tech. Water Resources Engineering and Management) and	45
11.1	Programme details	45
11.2	Eligibility criteria	45
11.3	Selection procedure	46
11.4	Sponsored candidates	46
11.5	Programme outline	46
11.6	Pedagogical tools	46
11.7	Course details	46-47
12	M Sc (Economics) – with a specialization in Environmental & Resource Economics	48
12.1	Programme details	48
12.2	Eligibility criteria	48
12.3	Selection procedure	48
12.4	Sponsored candidates	48
12.5	Programme outline	49
12.6	Pedagogical tools	49
12.7	Course details	50
13	LLM programme with specialization in Environment and Natural Resource Law and Infrastructure and Business Law	51
13.1	Programme details	51
13.2	Eligibility criteria	51
13.3	Selection procedure	51
13.4	Programme outline	52
13.5	Course details	52-53

14	MA (Public Policy and Sustainable Development)	62
	14.1 Programme details	62
	14.2 Eligibility criteria	62
	14.3 Selection process	63
	14.4 Programme outline	63
	14.5 Pedagogical tools	63
	14.6 Course details	63-64
15	Advanced PG Diploma by distance learning (Renewable Energy programme)	54
	15.1 Programme details	54
	15.2 Eligibility criteria	54
	15.3 Sponsored candidates	54
	15.4 Programme outline	54-55
	15.5 Pedagogical tools	55
	15.6 Webinar	55
16	PG Diploma (Renewable Energy) Distance Learning mode	56
	16.1 Programme details	56
	16.2 Eligibility criteria	56
	16.3 Sponsored candidates	56
	16.4 Programme outline	56
	16.5 Pedagogical tools	57
	16.6 Webinar	57
17	Certificate course in Energy Infrastructure & Efficiencies (CEIE)	58
	17.1 Programme details	58
	17.2 Eligibility criteria	58
	17.3 Sponsored candidates	58
	17.4 Programme outline	58
	17.5 Pedagogical tools	58
	17.6 Webinar	58
18	Certificate course in in Renewable Energy (CRE)	59
	18.1 Programme details	59
	18.2 Eligibility criteria	59
	18.3 Sponsored candidates	59
	18.4 Programme outline	59
	18.5 Pedagogical tools	59
	18.6 Webinar	59

19	Certificate course in Renewable Energy Resources and Policies (CRERP)	60
	19.1 Programme details	60
	19.2 Eligibility criteria	60
	19.3 Sponsored candidates	60
	19.4 Programme outline	60
	19.5 Pedagogical tools	60
	19.6 Webinar	60
20	Certificate course in Software Tools for Energy Analysis	61
	20.1 Programme details	61
	20.2 Eligibility criteria	61
	20.3 Sponsored candidates	61
	20.4 Programme outline	61
	20.5 Pedagogical tools	61
	20.6 Webinar	61
21	Application procedure	65
22	Faculty	65
23	Registration for courses	65
	23.1 Renewal of registration	65
	23.2 Late registration	66
24	Credit system	66
25	Placements	66
	25.1 Organizations our students have been associated with for major project/final placement	67
26	Conduct and discipline	67
27	Hostel accommodation	67
28	Fee and payments	68-78
29	Fee for foreign students	79
30	Refund of fee	79

### **Important dates**

- |     |  |                     |
|-----|--|---------------------|
| 1.  | Issue of application form starts on  | 1 December 2017     |
| 2.  | Last date of issue of application form   |                     |
| 3.  | (a) Last date of receipt of application forms  | 11 May 2018         |
|     | (b) Last date for receipt of application forms for APGDRE/distance learning programmes | 30 June 2018        |
| 4.  | Shortlisting of candidates for MBA programmes  | 14 May 2018         |
| 5.  | Date of online test for eligible M Sc, MA, M.Tech candidates                           | 26-27 May 2018      |
| 6.  | Group discussions/interviews for MBA programmes  | 7-8 June 2018       |
| 7.  | (a) Declaration of shortlists (other than MBA and APGDRE)                              | 4 June 2018         |
|     | (b) Declaration of results of GD/interviews of MBA programmes                          | 11 June 2018        |
|     | (c) Declaration of shortlist (APGDRE)  | 8 July 2018         |
| 8.  | Scrutiny and shortlisting of Ph.D applications by Dept                                 | 11-15 June 2018     |
| 9.  | Interviews for all programmes (other than MBA)   | 12-15 July 2018     |
| 10. | Interviews for sponsored candidates  | 18-22 June 2018     |
| 11. | Ph.D common admission test (RAT)   | 18 June 2018        |
| 12. | Ph.D interviews  | 18-19 June 2018     |
| 13. | Last date for payment of fees (for MBA)  | 29 June 2018        |
| 14. | Declaration of final list and wait list (other than MBA)                               | 20 June 2018        |
| 15. | Last date for payment of fees (other than MBA and APGDRE)                              | 6 July 2018         |
| 16. | Activation of wait-lists   | 11 July 2018        |
| 17. | Orientation and registration   | 23 July 2018        |
| 18. | Commencement of classes  | 24 July 2018        |
| 19. | Last date for payment of fees (for APGDRE)   | 30 July 2018        |
| 20. | Commencement of APGDRE programme   | 16 August 2018      |
| 21. | Last date for payment of fees (for APGDRE with late fees of Rs.2000/-)                 | 28 August 2018      |
| 22. | Scrutiny and shortlisting of Ph.D applications by Dept.                                | 23 November 2018    |
| 23. | Ph.D common admission test (RAT)   | 13 December 2018    |
| 24. | Ph.D Interviews  | 13-14 December 2018 |

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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 School of Advanced Studies, 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
- (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
<b>New Delhi</b>	001	<b>Jaipur</b>	011
<b>Hyderabad</b>	002	<b>Ranchi</b>	012
<b>Vishakhapatnam</b>	003	<b>Bangalore</b>	013
<b>Guwahati</b>	004	<b>Cochin</b>	014
<b>Patna</b>	005	<b>Bhopal</b>	015
<b>Ahmedabad</b>	006	<b>Chennai</b>	016
<b>Mumbai</b>	007	<b>Agra</b>	017
<b>Pune</b>	008	<b>Lucknow</b>	018
<b>Bhubaneshwar</b>	009	<b>Kolkata</b>	019
<b>Chandigarh</b>	010		

\* 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 Deemed 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 Sc (Water Science & Governance)
- M B A (Infrastructure)
- M B A (Business Sustainability)
- M Tech (Renewable Energy Engineering and Management)
- M.Tech (Urban Development and Management)
- M Tech (Water Resources Engineering and Management)
- MA (Sustainable Development Practice)
- Advanced PG Diploma (Renewable Energy) distance learning programme
- Diploma in Renewable Energy
- Certificate courses
- MA (Public Policy and Sustainable Development)
- LLM programme with specialization in Environment and Natural Resources law and Infrastructure and Business Law

## 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 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 concerned will be sent call letters for interviews.

## **2.2 Minimum qualification for admission**

- a. M.Sc/MA/M Phil in a relevant field or equivalent
- b. In extremely exceptional cases the admission committee may consider an application from a candidate who possess a B.Tech in a relevant field or equivalent. Only those who have a minimum CGPA of 8.0 on a 10 point scale or 75% marks should consider applying in this category. It may be noted that consideration under this category would be evaluated extremely strictly by an evaluation and admissions committee and admissions would only be in extremely exceptional cases, and would entail extended pre-Ph.D course work requirement.

## **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 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 Deemed University as required by the Deemed 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.

The PhD degree is awarded by the Deemed University in recognition of high quality independent research, and application of scientific knowledge to the solution of technical, scientific, and societal problems. Creative and productive inquiry should qualify the research work.

## **2.5. Pre-PhD course requirements**

In order to overcome any deficiency in the breadth of fundamental training for advanced work, several courses are offered across disciplines taught at the Deemed University. Such courses would include those at Masters level or could be special ones created only for the doctoral student/s. The courses will be offered either by Deemed University faculty members or by guest faculty and specialists. Students possessing a BTech/MSc/MA or equivalent degree are required to complete a minimum of 10 course credits. MTech or equivalent degree holders are required to complete a minimum of five credits. Relaxation up to six credits (from 10 credits) in the course work may be considered for those with an M Phil degree as well as those with a BTech/MSc/MA or equivalent degree, provided they have a minimum of five years of experience in the relevant field. The course requirement will be determined by the DRC (Department Research Committee)/CRC (Centre Research Committee) on the recommendations of the SRC (Student Research Committee) after considering the student's background in relation to the proposed topic of research.

Pre-PhD students are required to pass three compulsory audit courses and one compulsory credit course. The audit courses include: (i) a course related to communication skills/technical writing and; (ii) a course related to statistical analysis. These two audit courses should be cleared within two attempts. The compulsory 2 credit course is on research methodology. These courses are to be taken by all PhD students. Any exemption in the above course requirement will be determined by the DRC/CRC on the recommendations of the SRC based on the evidence of student's in-depth knowledge relating to the courses.

## **2.6 Cumulative Grade Point Average requirements**

The minimum CGPA requirement for completion of the Pre-PhD coursework for being eligible to continue with PhD research work is 7.50. If the SGPA at the end of Semester 1 is above 7 but less than 7.50, the student may be given the option to take more courses in order to make up the required CGPA based on the SRC's recommendation and as approved by the DRC. If the SGPA at the end of Semester 1 and the CGPA at the end of any subsequent semester are below 7, the student will be asked to withdraw from the doctoral programme. The pre-PhD course work must be completed within the first two semesters and the first three semesters of joining the programme by full-time and part-time students, respectively.

## **2.7 Comprehensive examination**

A student shall be formally registered/ admitted to a PhD programme only after s/he has cleared the comprehensive examination. Students will be permitted to take the comprehensive examination only after they have completed the pre-PhD course work including the compulsory audit and credit courses as decided by the SRC. 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. Every student, after having completed the comprehensive examination, must formally register for the PhD programme.

As part of the comprehensive examination the student shall submit a PhD research proposal document, prepared in consultation with the supervisor. The same should be submitted to the examination panel members at least one week in advance of the comprehensive examination. An external examiner may be part of the comprehensive examination panel if suggested by the SRC. The student's evaluation will be based on an oral presentation and the accompanying write-up of the research proposal that should include its proposed title, introduction and literature review, rationale for research, aim, research objectives/questions, broad framework/tentative methodology, expected outcomes and proposed timeline. The presentation should also list the pre-PhD courses attended, grades scored and any other research-related activity undertaken. There shall be a repeat of comprehensive examination decided by the SRC, in case of failure in 1<sup>st</sup> attempt or major change in focus of proposed research.

## **2.8 Time limits for PhD programme**

### *Minimum time limit for PhD research work*

The minimum time limit for completion of PhD programme in terms of final submission of the thesis is two years after the date of clearing the comprehensive examination. This may be waived by the Academic Council only in extremely exceptional cases when recommended by the Department Research Committee.

### *Maximum time limit for PhD research work*

A student shall submit his/her thesis within 4 years from the date of clearing the comprehensive examination.

### *Extension criteria*

This maximum time limit for submission of thesis may be extended by the Academic Council based on the recommendation of DRC as a special case for a period of 1 year (on a maximum of 2 occasions), after which the registration will stand cancelled. While recommending to the Academic Council, the DRC may consider one or more of the following criteria as accentuating circumstances (based on the evidence produced by the candidate):

- Medical exigency
- Forced break due to employment requirement (in case of part time candidates only)
- Discontinuity in supervision (due to non-availability of supervisor)
- Change in focus of research due to emergence of any new/unforeseen challenges in conducting research (e.g. security threat)
- Candidate at an advanced stage of research requiring a defined time only after approval from DRC and SRC. In such case specific research output achieved such as publication(s) shall be considered by the DRC.

Full/Part time candidate may be allowed to convert his/her registration into Part/Full time on the recommendation of the SRC/DRC. This change will be allowed only once.

## **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 Deemed 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 Deemed 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 Ab. Grade.

### **2.11 Financial assistance to PhD students**

The Deemed University awards some PhD scholarships and few assistantships through TERI's research projects.

- Students who wish to be considered for the award of PhD scholarship and assistantship must specify this in the admissions form.
- The award of PhD scholarships will follow the guidelines laid down for that scholarship.
- Students, who accept these scholarships are required to provide project assistance (after clearing the comprehensive examination) for a minimum of six hours per week throughout the PhD programme. They can opt to work for a maximum of 12 hours per week with approval from SRC, in order to receive enhanced scholarship.
- In case of project assistantships, the amount of assistantship and working hours will be governed by the terms and conditions of the project.
- It is to be noted that admission to the PhD programme and award of assistantship are not linked.
- Students who are not awarded assistantships can continue with the programme as self-financing students.
- Only one source of scholarship/financial support can be availed by the students
- Failure to fulfill above requirements may lead to termination of the financial assistance/deregistration from the PhD programme. SRC to monitor and approve student's research outputs

### **2.12 Attendance requirement for PhD students with assistantship/scholarship**

If a PhD student's attendance falls below 75% in any taught course(s) during a month, s/he will not be paid assistantship/scholarship 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/scholarship will be terminated. A research scholar, after having completed the course work, must attend to his/her research work on all the working days and mark attendance except when s/he has been 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.

For the above purpose, if 75% works out to be a number that is not a whole number, the immediate lower whole number will be treated as the attendance.

### **2.13 Further regulations governing PhD students**

The PhD degree of the Deemed University may be conferred on a student who fulfils all the requirements detailed in the rules approved by the Academic Council. Some of the important regulations are given below.

1. Applications for PhD registration, that is, for entry to a course of study and research leading to a PhD degree, must be made to the Deemed University on the approved form. The date of registration is the date when candidate registers for Pre-PhD courses. However, in exceptional cases, the date of registration may be advanced by a maximum of six months by the Academic Council if it is convinced that the student has spent enough time on the research earlier.
2. The academic programme of all the PhD students in a Department will be coordinated by the DRC/CRC as per the rules and regulations of the Deemed University upon recommendation of the SRC.
3. The supervisor shall be a full-time member of the TERI SAS academic staff or an adjunct faculty member with a PhD. S/he shall have peer reviewed publications. S/he shall be appointed during the first semester. If desirable, the DRC/CRC, based on the recommendation of the SRC, may appoint joint supervisor(s) (not exceeding two) from within or outside the Deemed University. Appointment of any joint supervisor would not be permitted after the comprehensive examination of the student, except in cases where none of the supervisors is available to supervise for a year or more at a stretch.
4. In the event of the supervisor being unavailable for supervision the SRC will recommend to the DRC that another faculty member be appointed as supervisor from within or outside the SRC.

The progress of each student will be monitored by the SRC and the DRC/CRC. For this purpose, the following procedures will be followed.

5. PhD research work will be given a course number as is done for other courses.
6. The DRC/CRC Secretary/PhD Coordinator will coordinate the collection of progress reports, written and signed by the scholar and forwarded by the supervisor every semester.
7. An 'X' grade will be awarded along with comments for that semester if the progress is 'satisfactory'.
8. If the progress is 'unsatisfactory', a 'U' grade will be awarded along with comments. When a 'U' grade is awarded for the first time, a warning will be issued to the student by the Chairman, Academic Council. If his/her performance does not improve after the warning, the fellowship/assistantship may be withheld.
9. If there are two consecutive 'U' grades, the student will have to withdraw from the doctoral programme and his/her studentship will be terminated.
10. The progress of PhD research work will be discussed in the DRC/CRC as per the semester schedule.
11. The above process will continue until the thesis is submitted.
12. The student may submit his/her thesis at any time provided that s/he has completed the minimum period of registration and
  - S/he has completed the course work requirement as prescribed by the DRC/CRC/SRC with a CGPA not below 7.50 and has also cleared the comprehensive examination, and
  - S/he has submitted, at least two months earlier, the title and a synopsis of the thesis.
13. Synopsis submission: On evaluating PhD work, SRC shall approve the Synopsis for submission to DRC.
14. Pre-submission defence: DRC shall call the student to present his/her PhD work through an oral presentation made to all faculty members and PhD students.
15. Examiners: The DRC shall evaluate and recommend the list of potential Indian and Foreign examiners to the Chairman, Academic Council.
16. The thesis shall be written in English in the specified format and shall contain a critical account of the student's research. It should be characterized

by discovery of facts or a fresh approach towards the interpretation of facts and theories or a significant contribution to the knowledge of design or development, or a combination of them. It should bear evidence of the student's capacity for analysis and judgment, and also his/her ability to carry out independent investigation, design, or development. A thesis submission shall be accepted only along with published work to include at least one peer-reviewed publication (accepted) relating to the doctoral research, as a first author, and as may be decided by the supervisor/DRC/CRC. No part of the thesis, or supplementary published work, shall have been submitted for the award of any other degree. Three copies of thesis in soft cover have to be submitted in the format prescribed by the Deemed University. In case of joint supervision, four copies of the thesis are required to be submitted. Additionally a soft copy of the thesis shall be submitted for the required plagiarism check. The DRC/CRC/SRC shall deal appropriately with any case of plagiarism as per the Deemed University guidelines.

17. On receipt of the title and synopsis of the thesis, the Chairman, Academic Council, will appoint a Board of Examiners for each student. The Board will consist of at least one internal examiner, members from the SRC and two external examiners, one from within India and one from abroad, who shall be an expert in the subject of the thesis. These external examiners shall be selected from a list of six to eight examiners to be recommended by the supervisor(s) through the DRC/CRC while forwarding the title and synopsis of the thesis. The student will be required to submit an updated synopsis, if more than nine months have passed before the submission of the thesis.
18. Each examiner will submit a detailed assessment report recommending to the Chairman, Academic Council, one of the following courses of action.
  - That the thesis be deemed satisfactory and that the student may defend his/her thesis orally before a committee constituted for the purpose and any members of the faculty and research students who wish to be present.
  - That the student may submit a revised thesis after the expiry of a specific period. In normal circumstances, s/he may submit the revised thesis within a period of one year from the date of communication in this regard from the Chairman, Academic Council. However, in exceptional circumstances, this period may be extended by the Chairman by another one year; the total revision time, irrespective of the number of revisions allowed, will not exceed a period of two years.
  - That the thesis be rejected outright.

In the event of disagreement between the external examiners, the Chairman, Academic Council, may, as a special case, appoint another external examiner, if the



merit of the case so demands. The examiner will report independently to the Chairman, Academic Council.

19. The oral defence of the thesis shall be conducted by a committee consisting of the internal examiner(s) and one external examiner. If for some reasons, the external examiner for the oral examination is not available for the conduct of the oral defence, an alternative external examiner shall be appointed by the Chairman, Academic Council. It is recommended that the Pre-submission defence seminar is made at least 2 weeks before the oral defence by each doctoral candidate to all faculty members and PhD students.

20. On completion of all stages of the examination, the Oral Defence Committee shall recommend to the Chairman, Academic Council, one of the following courses of action.

- a) That the degree be awarded.
- b) That the student should be examined further on another occasion in a manner they shall prescribe.
- c) That the degree shall not be awarded.

In case of (b), the Oral Defence Committee shall also provide the student a list of all corrections and modifications, if any, suggested by the examiners.

The degree shall be awarded by the Academic Council, provided that

- d) the Oral Defence Committee, through the Academic Council, so recommends;
- e) the student produces a 'no dues certificate' from all concerned in the prescribed form and gets it forwarded by the supervisor along with the report of the Oral Defence Committee; and
- f) The student has submitted three hard-bound copies of the thesis, after incorporating all necessary corrections and modifications in the version submitted earlier. The hard-bound copies of the PhD thesis, submitted after the viva voce examination, must contain the following copyright certificate in the beginning of the thesis, on a separate page on the left side.

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- g) One of these copies is for the Department's or library and the other is for the TERI/TERI SAS library.
- h) Candidates will be awarded PhD degree with the title of dissertation irrespective of the discipline or department of graduation.
- i) A member of the non-academic staff of the Deemed University, who satisfies the eligibility criteria, may be considered for admission to the degree as a part-time student, provided his/her application is duly approved by the Vice-Chancellor of the Deemed University.

### **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 SAS offers programmes leading to the award of M Sc in Climate Science and Policy and Environmental Studies and Resources Management.

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

#### **3.2 Eligibility criteria**

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

#### **3.3 Selection procedure**

Admission to the M Sc programmes is made on the basis of an online test and interview conducted by the Deemed 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 Deemed 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	8 core courses of 1-3 credits each	21	15 weeks
2 <sup>nd</sup> semester	3 core courses and minimum 3 electives of 3 credits each	17	15 weeks
Summer	Minor project	2	8 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	Minimum 4 electives of 3-4 credits each	15	15 weeks
4 <sup>th</sup> semester	Major project	15	At the location of the project

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

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

### 3.6 Pedagogical tools

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

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

Semester 1

Core courses

- 1 Ecology
- 2 Environmental Chemistry and microbiology

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

#### Semester 2

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

#### Summer Semester

##### Minor Project

#### Semester 3

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

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

Semester 4

Major Project

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

Semester 1

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

Semester 2

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

Semester 3

- 1 Urban ecosystems and sustainable cities
- 2 Cultural ecology and development

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

Semester 4

Major project

### **3.9 General guidelines**

The minimum eligibility clause is only an enabling one. The Deemed 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 2018.

## **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 SAS 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/B. Arch/ Economics/Mathematics/Statistics / Geology.

### **4.3 Selection procedure**

Admission to the M Sc programmes is made on the basis of an online test conducted by the Deemed 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 Deemed 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	7 core courses of 3-4 credits each	21	15 weeks
2 <sup>nd</sup> semester	7 core courses of 2-4 credits each	17	15 weeks
Summer	Minor project	2	
<b>Second year</b>			
3 <sup>rd</sup> semester	3 core and 4 elective courses of 3-4 credit each	15	15 weeks
4 <sup>th</sup> semester	Major project	15	At the location of the project

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

#### 4.6 Pedagogical tools

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

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

#### 4.7 Course details

Semester 1

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

## Semester 2

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

## Summer Semester

### Minor Project

## Semester 3

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

## Semester 4

### Major Project

#### **4.8 General guidelines**

The minimum eligibility clause is only an enabling one. The Deemed 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 2018.

## **5 M Sc (Plant Biotechnology)**

### **5.1 Programme details**

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

### **5.2 Eligibility criteria**

A Bachelor's degree in Sciences /Engineering/Technology.

### **5.3 Selection procedure**

Admission to the M Sc programmes is made on the basis of an online test conducted by the Deemed 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 Deemed 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.

<b>Year</b>	<b>Courses</b>	<b>Credits</b>	<b>Duration*</b>
<b>First year</b>			
1 <sup>st</sup> semester	5 core courses of 2-7 credits and 2 Audit courses	21	15 weeks
2 <sup>nd</sup> semester	7 core courses of 2-7 credits each	25	15 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	6 core courses of 1-7 credits and 1 audit course	22	15 weeks
4 <sup>th</sup> semester	Major project	24	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)

## **5.6 Pedagogical tools**

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

## **5.7 General guidelines**

The minimum eligibility clause is only an enabling one. The Deemed 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 2018.

## **5.8 Course details**

### Semester 1

Bioanalytical techniques

Plant biotechnology and crop improvement

Technical Writing (Communication skills and technical writing)

Principles of genetic engineering and recombinant DNA technology

Plant biotechnology laboratory - Part 1

Conceptual foundations of molecular biology

Concepts in biochemistry

### Semester 2

Statistical techniques

Plant biotechnology laboratory - Part 2

Immunochemistry

Molecular markers and breeding

Molecular and cell biology - Part 2

### Semester 3

Bioethics and public awareness

Plant biotechnology laboratory - Part 3

Plant biotechnology management and regulatory issues

Genomics and molecular genetics

Multivariate data analysis

Bioinformatics and computational biology

### Semester 4

Major project

## **6 MBA (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 SAS 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**

1. Bachelor's degree in any discipline with English at 10+2 level
2. The candidate will be shortlisted based on CAT/MAT/GMAT/CMAT/XAT scores. Candidates who have not appeared for the above exams can take the TERI SAS common entrance test.
3. Candidates with more than 2 years of relevant work experience may be exempted from requirement (2) above depending on the discretion of the selection committee.

### **6.3 Selection procedure**

Candidates will be shortlisted based on the basis of CAT/GMAT/MAT/CMAT/XAT/TERI SAS entrance exam score (Candidates with more than 2 years of relevant work experience may be exempted from this requirement), depending on the discretion of the selection committee. Selection from shortlisted candidates will be on the basis of group discussions and interviews to be conducted by the Deemed 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 deemed 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</b>			
1 <sup>st</sup> semester	Part I – Courses on “Strategy & Risk	13	8 weeks
1 <sup>st</sup> semester	Part II – Courses on Law & Policy	9	8 weeks
	Aspects of Infrastructure		
2 <sup>nd</sup> semester	Part I – Courses on Finance and	11	8 weeks
	Economics for Infrastructure		
2 <sup>nd</sup> semester	Part II – Courses on Operational	12	8 weeks
	aspects of Infrastructure		
<b>Second year</b>			
3 <sup>rd</sup> semester	Project	10	15 weeks
4 <sup>th</sup> semester	Project	10	15 Weeks

\* 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

### Part I

Introduction to Infrastructure Business

Business Ethics

Strategic planning

Integrated Impact Assessment

Risk analysis and Implementation Management



Project planning and management  
Bidding System Management

Part II

Legal & Regulatory aspects of infrastructure  
Business Laws and infrastructure projects  
Contracts Law and Management (negotiation, management and conflict resolution)  
Public Private Partnership - Challenges and Opportunities  
Environmental and Social Laws

Semester 2

Part I

Macro-economic environment  
Infrastructure Project finance  
Pricing and economics  
Corporate Accounting  
Corporate Finance

Part II

Management Information Systems  
Infrastructure organization and HR  
Logistics and Supply Chain Management  
Strategic communication and stakeholder engagement  
Innovation and change management for Infrastructure projects  
Quality Management

Semester 3

Project 1

Semester 4

Project 2

## **7 MBA (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 SAS 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

1. Bachelor's degree in any discipline with English at 10+2 level
2. The candidate will be shortlisted based on CAT/MAT/GMAT/CMAT/XAT scores. Candidates who have not appeared for the above exams can take the TERI SAS common entrance test.
3. Candidates with more than 2 years of relevant work experience may be exempted from requirement (2) above depending on the discretion of the selection committee.

## 7.3 Selection procedure

Candidates will be shortlisted based on the basis of CAT/GMAT/MAT/CMAT/XAT/TERI SAS entrance exam score (Candidates with more than 2 years of relevant work experience may be exempted from this requirement), depending on the discretion of the selection committee. Selection from shortlisted candidates will be on the basis of group discussions and interviews to be conducted by the Deemed 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 Deemed 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>First year</b>			
1 <sup>st</sup> semester	10 core courses	26	15 weeks
2 <sup>nd</sup> semester	10 core courses	26	15 weeks
2 <sup>nd</sup> semester	Minor Project	6	
<b>Second year</b>			
3 <sup>rd</sup> semester	7 core courses	14	15 weeks
4 <sup>th</sup> semester	3 core courses	6	Around 10 weeks at
4 <sup>th</sup> semester	Major project	14	location of the project

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

\*\* In 3<sup>rd</sup> and 4<sup>th</sup> semester we offer a basket of 10 elective courses out of which each student has to be take at least 3.

## **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

Business communications  
Principles and concepts of sustainability  
Management functions and organizational behaviour  
Climate change and development  
Sustainability Reporting and CSR  
Managerial economics - 1  
Energy policy and management  
Corporate accounting and reporting  
Quantitative methods in management  
Marketing management 1

### Semester 2

Infrastructure policies reforms and law  
Management information system  
Production and operations management  
Qualitative research methods in management  
Sustainable business strategy  
International Business  
Environmental economics  
Cross cultural management  
Corporate finance  
Quantitative methods in management - 2  
Managerial economics - 2  
Legal aspect of business

### Semester 3

Marketing management - II  
Minor Project  
Business ethics  
Corporate governance - challenges, evolution and future direction  
International financial management  
Marketing of services

Financial intermediaries, institutions and regulations  
Consumer behaviour  
Business to business marketing

#### Semester 4

Contemporary issues in change management  
Community relationship  
Major project  
Supply chain management  
Customer relationship management

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

### **8.1 Programme details**

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

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

#### Highlights of the M.A. (SDP) Programme

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

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

### **8.2 Eligibility criteria**

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

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

### 8.3 Selection procedure

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

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

### 8.4 Sponsored candidates

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

These candidates are required to submit, at the time of interview, a sponsorship certificate from their employer on a proper letterhead, stating that for the period of his/her study at the Deemed 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	7 core courses	20	15 weeks
2 <sup>nd</sup> semester	7 core courses	20	15 weeks
Summer internship			8 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	3 core courses + 3 electives	19	15 weeks
4 <sup>th</sup> semester	Final Project	16	15 weeks

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

## 8.6 Course details

### Semester 1

Social research methods  
Quantitative analysis for development practice  
Integrated approaches to sustainable development practice  
Organizational behaviour and human resource management for non-profit organizations  
Application of environmental science  
Perspectives on development  
Principles of economics

### Semester 2

Key concepts of cultural and political ecology  
Law, society and sustainable development  
Integrated impact assessment  
Development economics  
Population and health: Techniques of analysis policy perspectives  
Management of development organizations  
Principles of geoinformatics

### Semester 3

Public policy processes and institutions  
Group practicum 2  
Project design and management for sustainable development practice  
Public health and development: Issues and methods  
Environmental law and policy  
Ecological Economics  
Economics of climate change  
Food security and agriculture  
Environmental implications of energy use  
Governance and management of natural resources  
Environmental economics  
ICT for sustainable development  
Geoinformatics for resource management  
Urban Development Policies and Programmes

### Semester 4

Final project



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

### 9.1 Programme details

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

### 9.2 Eligibility criteria

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

### 9.3 Selection procedure

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

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

The questions will be divided into three sections:

- Proficiency in English
- Analytical reasoning
- Quantitative ability

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

### 9.4 Sponsored candidates

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

### 9.5 Programme outline

Year	Courses	Credits	Duration*
<b>First year</b>			
1 <sup>st</sup> semester	9 core courses	22	15 weeks
2 <sup>nd</sup> semester	8 core courses + 2 electives	22	15 weeks
Summer	Minor Project	2	6 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	2 core courses and 3 elective courses	15	15 weeks
4 <sup>th</sup> semester	Major Project	17	15 weeks

### 9.6 Pedagogical tools

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

## 9.7 Course details

### Semester 1

Conventional energy infrastructure  
Power systems engineering  
Renewable energy resource characteristics  
Statistics for engineers  
Technical Writing (Communication skills and technical writing)  
Heat and mass transfer  
Heat transfer lab  
Power system lab

### Semester 2

Thermodynamics  
Field visits / exposure to RE plants  
Introduction to Management Techniques  
Energy auditing, energy efficiency and energy conservation  
Renewable energy conversion technologies - I  
Renewable energy conversion technologies - II  
Applied numerical methods (thru MATLAB)

### Semester 3

Project management  
Introduction to Management II  
Energy economics  
Energy policy and regulations  
Summer internship  
Issues in grid integration of power from renewable energy sources  
Advanced technologies for environmental protection and climate change  
Smart grids  
Wind power generation  
Building energy and green building  
Biofuels and Decentralized Energy Systems  
Solar thermal and solar photovoltaic power generation  
Waste utilisation  
Renewable energy and fossil fuel based thermal power generation

### Semester 4

Major project

## **10 M Tech (Urban Development and Management)**

### **10.1 Programme details**

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

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

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

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

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

### **10.2 Eligibility criteria**

A Bachelor's degree B.E./B.Tech in any branch/discipline, B.Arch., B.Planning, OR Masters or equivalent degree in Science.

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

### 10.3 Selection procedure

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

### 10.4 Sponsored candidates

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

### 10.5 Programme outline

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

### 10.6 Pedagogical tools

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

### 10.7 Course details

Semester 1

Technical Writing (Communication skills and technical writing)

Theories of Urbanization

Urban Governance

Project Development and Management

Sustainable Provision and Management of Urban Services

Urban Finance

Urban Development Policies and Programmes

Stochastic Modelling For Urban Development

Semester 2

Urban Ecology and Environment

City and Regional Planning and Management

Geoinformatics for Urban Development  
Real Estate Development  
Regeneration and City Competitiveness  
Research Methodology  
Sustainable Urban Transport  
Urban Disaster Management and Climate Resilient Cities  
Urban water supply and waste water  
Energy efficient buildings

Semester 3

Major Project Part 1

Semester 4

Major Project Part 2

## **11 M Sc in Water science and governance, PG Diploma and Certificate, M.Tech. Water Resources Engineering and Management, )**

### **11.1 Programme details**

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

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

### **11.2 Eligibility criteria**

#### **M.Tech Programme**

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

Environmental Science, Physics, Mathematics, Statistics, Chemistry, Geology, Atmospheric Science, Economics, Geography, Agricultural Science with mathematics at 10+2 level.

#### **M.Sc Programme/PG Diploma/Certificate**

Graduate (B.Sc/B.A), or equivalent in any branch of engineering or in any of the following disciplines or equivalent:

Environmental Science, Physics, Mathematics, Statistics, Chemistry, Geology, Atmospheric Science, Economics, Geography, Zoology, Botany, Anthropology, Agricultural Science.

### 11.3 Selection procedure

Admissions will be based on an online test and interview.

### 11.4 Sponsored candidates

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

### 11.5 Programme outline

Year	Courses	Credits	Duration*
<b>First year</b>			
1 <sup>st</sup> semester (All Prog.)	10 courses	31	15 weeks
2 <sup>nd</sup> semester (M Sc Prog.)	8 courses	23	15 weeks
2 <sup>nd</sup> semester (M Tech Prog.)	8 courses	26	15 weeks
2 <sup>nd</sup> semester (PG Diploma)	8 courses	23	15 weeks
<b>Second year</b> (For M.Tech/M Sc)			
3 <sup>rd</sup> semester	1 core course+2 electives+Project 1	15	15 weeks
4 <sup>th</sup> semester	Project 2	16	15 weeks

### 11.6 Pedagogical tools

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

### 11.7 Course details

#### Semester 1

Water and sustainability science

Water quality monitoring and assessment

Gender, rights and equity perspective for sustainable water management

Statistical methods in water resources

Water resources - Institutions and governance

Water resource systems and interactions

Water planning and management

#### Semester 2

Traditional knowledge and water management

Water economics and financial management

Water disasters: Management and planning

Water security and conflict management

Applied hydrology  
Geoinformatics for water resources  
Optimization techniques for water demand management  
Water supply and sanitation  
Water quality modelling and applications  
Industrial pollution control  
Glacier hydrology  
Integrated watershed and river basin management  
Irrigation water management  
Water audit and demand management  
Wetland conservation and management

Semester 3

Water law  
Climate change water resources and agriculture  
Industrial pollution control  
Integrated impact assessment  
Project 1

Semester 4

Project 2



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

### **12.1 Programme details**

The rapid structural economic changes in developed and developing countries in the second half of the 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.

### **12.2 Eligibility criteria**

B.A. (Hons.) / B.Sc. (Hons.) in Economics with 50 % or more marks in aggregate (CGPA of 5.65).

OR

Bachelor degree in any other discipline with at least 60% marks in aggregate (CGPA of 6.75). The applicant must have studied mathematics either at 10+2 level or at Bachelor's level, either as subsidiary or as honours.

### **12.3 Selection procedure**

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

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

The questions will be divided into three sections:

\* Proficiency in English

- \* Analytical reasoning
- \* Quantitative ability

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

## 12.4 Sponsored candidates

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

## 12.5 Programme outline

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

Year	Courses	Credits	Duration*
<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	20	15 weeks
<b>Second year</b>			
3 <sup>rd</sup> semester	1 core course of 4 credits each + choice of 4 electives of 3 credit each + thesis proposal of 4 credit	20	15 weeks
4 <sup>th</sup> semester	Major project + 2 electives of 3 credits	26	Depends on the location of project or requirement of organization

## **12.6 Pedagogical tools**

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

## **12.7 Course details**

### Semester 1

Quantitative methods  
Macro economics  
Environment and economic development  
Microeconomics  
Constrained optimization and linear Algebra

### Semester 2

Econometrics  
Economics of natural resources  
Indian economics and development  
Theory of environmental policy  
Game theory

### Semester 3

Thesis proposal  
Techniques of environmental valuation  
Energy Economics  
Time series and regression analysis  
Microeconomics II  
Advanced econometric  
Trade and the environment

### Semester 4

Law and economics  
Collective action and environmental management  
Theory of finance  
Indian agriculture in a global setting

## **13. LLM programme with specialization in Environment and Natural Resources Law and Infrastructure and Business Law**

### **13.1 Programme details**

Environmental laws and Infrastructure laws are two emerging fields in legal practice. There is a dearth of qualified legal professionals in both these fields. It is in this context that TERI SAS offers a one year LL.M. programme with specialisation in *Environment and Natural Resources Law* and *Infrastructure and Business Law*.

#### **Environment and Natural Resources Law**

A developing country like India with a large population needs to protect the environment in its process of development. While development remains a priority to improve the standard of living, it cannot ignore environmental concerns in the process. The environmental concerns need to be integrated into all economic policies and implementation decisions. A specialisation in *Environment and Natural Resources Law* therefore assumes great significance.

The primary focus of this specialisation stream is to understand how the legal framework can reorient economic activity toward sustainability. This reorientation can happen in different ways like prohibiting or regulating environmentally damaging activities, assigning liability for environmental harms and providing adequate incentives for benign environmental activities. The course will also address the principles of allocation of natural resources according to the concepts of due process of law and equity.

#### **Infrastructure and Business Law**

An adequate and robust infrastructure is necessary to promote and sustain economic development. India's infrastructure development is inadequate and there is a need for massive investment in different infrastructure sectors to meet the demands of economic growth. However, given the fiscal constraints, the investment needs of infrastructure cannot be met by the public sector alone and would require private investment, both foreign and domestic. Attracting private investment will be feasible only if there is a conducive and predictable legal regime.

This specialisation stream will address the policies and laws relating to major sectors viz., transport, energy, telecommunications, urban infrastructure and water. The purpose of this specialisation stream is to provide an insight into the fundamental legal concepts relating to business in general and various infrastructure sectors in particular including the issues involved in the development, financing and management of projects. The programme will address issues relating to public private participation in detail.

### **13.2 Eligibility criteria**

A candidate having an LL.B. / B.L. Degree from a recognised University / Institution.

### **13.3 Selection procedure**

Admission to the LL.M. programme is made on the basis of an all-India online test and interview conducted by the Deemed University. 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. The online test would be followed by a written test and an interview of short listed candidates.

The written test will be on legal reasoning and basic legal knowledge.

### 13.4 Programme outline

First Year	Courses	Credits	Duration
1 <sup>st</sup> Semester	7 common courses	16	18 weeks
2 <sup>nd</sup> semester	2 common courses and 4 specialization Based core courses and 2 electives	16	18 weeks

### 13.5 Course details

#### Semester 1

Research Methods and Legal Writing  
Comparative public law/systems of governance  
Law and Justice in a globalizing world  
Economic Foundations of environmental and infrastructure Law  
Environmental Law and Policy  
Infrastructure Law and Policy  
Dissertation  
Seminar/clinic on contemporary issues in infrastructure and environment

#### Semester 2 (Common for both streams)

Dissertation  
(Weekly) Seminar on contemporary issues in infrastructure and environmental laws

#### For Environment and Natural Resources Law

International Environmental Law  
Mining and mineral laws  
Environmental aspects of business transactions  
Forest Law and Policy  
Energy law  
Water Resources law  
Climate Change and Law  
Hazardous waste law  
Biotechnology law  
Air and Water Law

**For Infrastructure and Business Law**

Business and taxation laws in infrastructure projects

Contracts Law and Management (negotiation, management and conflict resolution)

Infrastructure Project finance law

Legal Aspects of Bidding and Public Private Partnership

Energy law

Urban infrastructure law

Transport law (Railways, Roads, Airports, Inland and shipping)

Water Resources law

Telecommunication law

Electricity Law, Reforms and Practice

## 14 MA (Public Policy and Sustainable Development)

### 14.1 Programme details

Policy decisions by government officials at all levels are required to be increasingly multifaceted especially in the light of economic reforms and the need to ensure that decision-making contributes to sustainability in the development process. Private not-for-profit and for-profit business entities also have a bearing on development-related policy decisions. To respond effectively to these issues, civil servants and those engaged in the non-governmental sectors, need to (1) be trained in the politics and economics of public policy and in sophisticated methods and tools of analysis, and (2) refresh their knowledge of the substantive development issues at hand.

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

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

### 14.2 Eligibility criteria

I DoPT sponsored Government candidates

The programme is open to officers, of All India services, Central Services (organized & non-organized, technical & non-technical), faculty members of State Administrative Training Institutes and also officers of the State Civil Services (SCS) & Non-State Civil Services (Non-SCS) subject to the following eligibility conditions.

(i)	Length of service	Officers should have completed 5 years of Group 'A' service as on commencement of the programme.
(ii)	Age	The officers should have at least three years remaining service after completion of the programme.
(iii)	Earlier Training	The officers should not have undergone a training programme of 12-weeks or more duration in India during a period of 5 years preceding the date of commencement of this programme. Further the officers should not have undergone a programme of training abroad of more than 2-weeks in preceding 2-years, more than one month in preceding 3-years or more than six months in the preceding 5-years.

II Other candidates

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

### 14.3 Selection process

DoPT sponsored Government candidates

Selection of potential participants from the civil services consists of two stages. In the first, applications will be screened by the Department of Personnel and Training based on appropriate eligibility criteria as defined by the department.

In the second stage, a selection committee constituted according to the rules of the TERI SAS (including a nominee of the Department of Personnel and Training), will interview the short-listed candidates. The committee will select up to 30 candidates. The list of the selected candidates will then be forwarded to the Department for processing as necessary.

Other candidates

Applications will be screened, and the shortlisted candidates will be interviewed, by the TERI SAS. The total number of candidates for the programme would not exceed 40 in any batch.

### 14.4 Programme outline

Year	Courses	Credits	Duration
First semester	4 Core courses	16	18 weeks
Second semester	5 core courses (16 credits)	20	18 weeks
Summer semester	Select modules on public policy	4	6 weeks at deemed university/universities abroad
Third & Fourth semesters**	Major Project	30	About 3 weeks at the TERI SAS; the rest at the participants' workplace

\*\* The participants also have the option of exiting from the programme after one year, after completing the domestic and foreign components, in which case they would be awarded with a Post Graduate Diploma in Public Policy and Sustainability Development.

### 14.5 Pedagogical Tools

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

### 14.6 Course Details

Semester 1

Public policy processes and institutions

Methodologies I: Statistical analysis and econometrics

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

Normative ethics



## Semester 2

Organisational behaviour  
Methodologies - II  
Perspectives in Sustainability  
Society, Development and Social Policy  
Strategic communication  
Sustainable Urban Transport  
Economics of regulation: theory and evidence  
Integrated watershed and river basin management  
Integrated impact assessment  
Principles of geoinformatics  
Environmental economics  
Urban water supply and waste water  
Urban Disaster Management and Climate Resilient Cities  
Research Methodology  
Key concepts of cultural and political ecology  
Climate change: Vulnerability, Impacts Adaptation & Resilience  
Solid and hazardous waste management

## Semester 3

International exposure  
Summer project

## Semester 4

Major project

## **15 Advanced PG Diploma (Renewable Energy) Distance learning mode**

### **15.1 Programme details**

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

CEIE (Certificate course in Energy Infrastructure & Efficiencies)

CRERP (Certificate course in Renewables Energy Resources and Policies)

CRE (Certificate course in Renewable Energy)

CSTEA (Certificate course in Software Tools for Energy Analysis)

The fee for the entire two year program is Rs. 88,000

Rs. 44,000 has to be paid at the time of registration/admission

Remaining Rs. 44,000 has to be paid within a year from registration

### **15.2 Eligibility criteria**

A graduate in any stream. (However AGPDRE will not be awarded to those with diploma in engineering even if they complete all the 4 certificate programme successfully.)

### **15.3 Sponsored candidates**

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

### **15.4 Programme outline**

Complete all four certificate courses to get Advanced PG diploma

CEIE

Energy infrastructure

Energy conservation and management

Engines

Introduction to basic engineering principles

CRE

Solar thermal technologies

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

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

CSTE  
Software tools for energy analysis

### **15.5 Pedagogical tools**

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

### **15.6 Webinars**

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

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

## **16 PG Diploma (Renewable Energy) Distance learning mode**

### **16.1 Programme details**

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

CEIE (Certificate course in Energy Infrastructure & Efficiencies)

CRERP (Certificate course in Renewables Energy Resources and Policies)

CRE (Certificate course in Renewable Energy)

CSTEA (Certificate course in Software Tools for Energy Analysis)

The fee for the entire one year program is Rs. 44,000 to be paid at the time of registration/admission.

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

### **16.2 Eligibility criteria**

A graduate in any stream or a diploma in engineering (which is considered equivalent to graduation)

### **16.3 Sponsored candidates**

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

### **16.4 Programme outline**

Pick any two certificate course get a diploma

CEIE

Energy infrastructure

Energy conservation and management

Engines

Introduction to basic engineering principles

CRE

Solar thermal technologies

Solar Power Generation through Photovoltaic route

Passive solar architecture

Biomass to Energy

Wind Power Generating Technologies  
Hydro power generation  
Other Renewables

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

CSTEA  
Software tools for energy analysis

### **16.5 Pedagogical tools**

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

### **16.6 Webinars**

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

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

## **17 Certificate Course in Energy Infrastructure & Efficiencies (CEIE)**

### **17.1 Programme details**

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

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

### **17.2 Eligibility criteria**

A graduate in any stream or a diploma in engineering.

### **17.3 Sponsored candidates**

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

### **17.4 Programme outline**

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

### **17.5 Pedagogical tools**

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

### **17.6 Webinars**

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

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

## **18 Certificate Course in Renewable Energy (CRE)**

### **18.1 Programme details**

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

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

### **18.2 Eligibility criteria**

A graduate in any stream or a diploma in engineering.

### **18.3 Sponsored candidates**

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

### **18.4 Programme outline**

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

### **18.5 Pedagogical tools**

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

### **18.6 Webinars**

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

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

## **19 Certificate Course in Renewables Energy Resources and Policies (CRERP)**

### **19.1 Programme details**

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

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

### **19.2 Eligibility criteria**

A graduate in any stream or a diploma in engineering.

### **19.3 Sponsored candidates**

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

### **19.4 Programme outline**

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

### **19.5 Pedagogical tools**

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

### **19.6 Webinars**

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

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



## **20 Certificate Course in Software Tools for Energy Analysis (CSTEA)**

### **20.1 Programme details**

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

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

Software covered would be:

- \* RETscreen
- \* HOMER
- \* PVSyst

### **20.2 Eligibility criteria**

A graduate in any stream or a diploma in engineering.

### **20.3 Sponsored candidates**

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

### **20.4 Programme outline**

Software tools for energy analysis

### **20.5 Pedagogical tools**

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

### **20.6 Webinars**

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

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

## **General Guidelines**

### **21 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 10 May 2018.

Alternatively, the application forms and the information brochure can be obtained from Registrar, TERI SAS, 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 School of Advanced Studies' payable at New Delhi. The completed application forms must reach the Registrar by 5.00 p.m. on 10 May 2018.

Application forms may also be downloaded from the Deemed 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.

### **22 Faculty**

Details of teaching faculty including the education qualifications and experience are available on the TERI SAS website at [www.terisas.ac.in](http://www.terisas.ac.in). The TERI SAS follows the UGC norms for pay and allowances for its employees.

### **23 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 Deemed University in each programme are made known to the students at the orientation programme. Details may also be seen on the Deemed University web site.

#### **23.1 Renewal of registration**

Every student/candidate on the rolls of the Deemed 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 Deemed University.

### **23.2 Late registration**

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

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

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

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

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

### **24 Credit system**

Education at the TERI SAS 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 Deemed 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 Deemed University's web site.

### **25 Placements**

The Deemed 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.

### **25.1 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.

### **26 Conduct and discipline**

The student shall conduct himself/herself within and outside the precincts of the Deemed University, in a manner befitting the student of a deemed 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 Deemed University, good neighbourliness to his/her fellow students and respect to the teachers of the Deemed University and pay due attention and courtesy to visitors. Ragging in any form is banned in TERI SAS. The Deemed University treats ragging as a cognizable offence and stern action will be taken against offenders. The Deemed 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.

### **27 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.

## 28 Fee and payments

### Doctoral programmes (Ph D)

#### Fee chargeable from the students (non-sponsored)

- A. One-time payment (in Rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee)

<b>Total – A</b>	<b>10000</b>
------------------	--------------

- B. Semester-wise fees (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, accident insurance, social charges, development charges)

Tuition fees	15000
Other charges	8000
<b>Total – B</b>	<b>23000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission – **Rs 43000/-**

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

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

## M Sc (Economics)

- A. One-time payment (in Rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee)

<b>Total – A</b>	<b>10000</b>
------------------	--------------

- B. Semester-wise fees (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, accident insurance, social charges, development charges)

Tuition fees	65780
Other charges	13220
Field visit**	10000
<b>Total – B</b>	<b>89000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission – **Rs 1,09,000/-**

Total fee payable in the second semester – **Rs. 89,000/-**

Total fees payable in subsequent semesters - **Rs. 79,000/-**

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

\*\* Field visit charges of Rs. 10,000/- not applicable in 3 & 4 semesters

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

**M Sc (Climate Science and Policy) (Environmental Studies and Resource Management) (Geoinformatics), M Sc (Plant Biotechnology), (Water Science & Governance), M Tech (Renewable Energy Engineering and Management), (Urban Development Management) and (Water Resources Engineering & Management) programmes**

- A. One-time payment (in rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee)

<b>Total – A</b>	<b>10000</b>
------------------	--------------

- B. Semester-wise fee (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, Lab fees, accident insurance, social charges, development charges)

Tuition fees	69575
Other charges	25425
Field visit**	10000
<b>Total – B</b>	<b>1,05,000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission – **Rs 125,000/-**

Total fee payable in the second semester – **Rs. 105,000/-**

Total fees payable in subsequent semesters - **Rs. 95,000/-**

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

\*\* Field visit charges of Rs. 10,000/- not applicable in 3 & 4 semesters

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

### **M B A (Infrastructure)**

- A. One-time payment (in rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee, Project fee, student activity fund)

<b>Total – A</b>	<b>25000</b>
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- B. Semester-wise fee (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, accident insurance, social charges, development charges)

Tuition fees	231438
Other charges	13562
Field visit**	10000
<b>Total – B</b>	<b>255000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission – **Rs 2,90,000/-**

Total fee payable in the second semester – **Rs.2,55,000/-**

Total fees payable in subsequent semesters - **Rs.2,45,000/-**

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

\*\* Field visit charges of Rs. 10,000/- not applicable in 3 & 4 semesters

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



### M B A (Business Sustainability)

- A. One-time payment (in rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee, Project fee, student activity fund)

<b>Total – A</b>	<b>25000</b>
------------------	--------------

- B. Semester-wise fee (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, accident insurance, social charges, development charges)

Tuition fees	231438
Other charges	13562
Field visit**	10000
<b>Total – B</b>	<b>255000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission – **Rs 2,90,000/-**

Total fee payable in the second semester – **Rs.2,55,000/-**

Total fees payable in subsequent semesters - **Rs.2,45,000/-**

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

\*\* Field visit charges of Rs. 10,000/- not applicable in 3 & 4 semesters

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

### MA (Sustainable Development Practice)

- A. One-time payment (in rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee, Project fee, student activity fund)

<b>Total – A</b>	<b>10000</b>
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- B. Semester-wise fee (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, accident insurance, social charges, development charges)

Tuition fees	50600
Other charges	12400
Field visit**	10000
<b>Total – B</b>	<b>73000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission	Rs <b>93,000/-</b>
Total fee payable in the second semesters	Rs. <b>83,000/-</b>
Total fees payable in third & fourth semesters	Rs. <b>63,000/-</b>

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

\*\* Field visit charges of Rs 10,000/- is twice in second semester and not applicable in 3 & 4 semester

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

### MA (Public Policy and Sustainable Development)

- A. One-time payment (in rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee, Project fee, student activity fund)

<b>Total – A</b>	<b>10000</b>
------------------	--------------

- B. Semester-wise fee (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, accident insurance, social charges, development charges)

Tuition fees	50600
Other charges	12400
Field Visit**	10000
<b>Total – B</b>	<b>73000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission	Rs <b>93,000/-</b>
Total fee payable in the second semesters	Rs. <b>83,000/-</b>
Total fees payable in third & fourth semesters	Rs. <b>63,000/-</b>

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

\*\* Field visit charges of Rs 10,000/- is twice in second semester and not applicable in 3 & 4 semester

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

**LLM programme with specialization in Environment and Natural Resources Law and Infrastructure and Business Law**

- A. One-time payment (in rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee, Project fee, student activity fund)

<b>Total – A</b>	<b>10000</b>
------------------	--------------

- B. Semester-wise fee (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, accident insurance, social charges, development charges)

Tuition fees	50600
Other charges	12400
Field visit**	10000
<b>Total – B</b>	<b>73000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission   Rs **93,000/-**

Total fee payable in the second semester –   Rs. **63,000/-**

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

\*\* Not applicable in 2 semester

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

## Diploma Water Science & Governance

- A. One-time payment (in rupees)  
(includes admission fee, grade card, provisional certificate, student welfare fund, alumni fee, identity card, modernization fees, dissertation/thesis fee)

<b>Total – A</b>	<b>10000</b>
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- B. Semester-wise fee (in rupees)  
Other charges (includes registration/ enrolment, examination fee, internet and computer, accident insurance, social charges, development charges)

Tuition fees	69575
Other charges	25425
Field visit	10000
<b>Total – B</b>	<b>105000</b>

- C. Deposits (refundable) (in rupees)

Institute deposit	5000
Library deposit	5000
<b>Total – C</b>	<b>10000</b>

Total fee payable at the time of admission – **Rs 125,000/-**

Total fee payable in the second semester – **Rs. 105,000/-**

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

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

**Advanced PG Diploma in Renewable Energy (through distance learning)**

The fee for the entire two year programme is Rs. 88,000

Rs. 44,000 has to be paid at the time of registration/admission

Remaining Rs. 44,000 has to be paid within a year from registration

**PG Diploma in Renewable Energy (through distance learning)**

The fee for the entire one year programme is Rs. 44,000 to be paid at the time of registration/admission.

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

The fee for the entire semester is Rs. 25,000 to be paid at the time of registration/admission.

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

The fee for the entire semester is Rs. 25,000 to be paid at the time of registration/admission.

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

The fee for the entire semester is Rs. 25,000 to be paid at the time of registration/admission.

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

The fee for the entire semester is Rs. 25,000 to be paid at the time of registration/admission.

## 29 Fee for foreign students

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

Course	Tuition fees		Other charges	Total	Total
	US\$	US\$	INR	US\$	US\$
	Developing countries	Developed countries	Flat Rate	Developing Countries	Developed Countries
Ph D	500	1000	6210	615	1115
M Sc (CSP, ESRM, Eco)	2000	4000	8010	2148	4148
M Sc (Geo, PBT, WSG)	2000	4000	18010	2334	4334
MA (SDP)	1600	3200	17800	1930	3530
MA (PP&SD)	1600	3200	7800	1744	3344
M Tech (REEM, UDM), (WSG)	2000	4000	18010	2334	4334
MBA (Infra and BS)	5000	10000	7800	5144	10144
PG Diploma (WSG)	1000	2000	6210	2200	4200
LLM programme	1600	3200	7800	1750	3350
Advanced PG Diploma Renewable energy	1400	2800	--	2800	5600
Diploma in Renewable Energy	700	1400	--	700	1400
Certificate courses	400	800	--	400	800

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

## 30 Refund of fee

In case an admitted student does not join the institution within 7 days of opening of the Institution, the Institution shall refund:

- a. In case the student informs of his intention not to join the institution at least 7 days before the start of the academic session, then 100% of the fees collected minus the processing charges, which shall not be more than Rs. 10,000, or any other amount fixed

by UGC. The same shall be refunded within 15 days of receipt of information from the student.

- b. In case no such information is given by the student but the institution is able to fill up the seat so vacated, then 100% of the fees collected minus the processing charges, which shall not be more than Rs. 10000, or any other amount fixed by UGC. The same shall be refunded within 15 days of request of refund from the student or the expiry of 30 days after opening of academic session, whichever is later.
- c. In case no such information is given by the student and the Institution is not able to fill up the seat even by the end of 30 days after the opening of academic session, then 50% of the fees collected minus the processing charges, which shall not be more than Rs 10000, or any other amount fixed by UGC. The same shall be refunded within 15 days of request of refund from the student or the expiry of 30 days after opening of academic session, whichever is later.
- d. If a student join the Institution, and then leaves it in mid-session then the entire fees collected shall be forfeited.



For more details, contact:  
Registrar  
T E R I School of Advanced Studies  
10, Institutional Area  
Vasant Kunj  
New Delhi – 110 070  
India  
Tel. 71800222  
Fax 2612 2874  
India + 91 Delhi (0) 11  
E-mail registrar@teriuniveristy.ac.in  
Website www.teriuniversity.ac.in