

## EM: Course Content

This course provides an overview of the key concepts and principles in environmental management, areas of global and national environmental concern, and strategies and tools for effective environmental management. Attempt to understand the genesis of environmental problems; the concerns that lead to various international and national initiatives to tackle them have been made in this course. Various tools, which can be used to address environmental problems and the role that the professionals can play in managing environment in their respective areas would be discussed.

1. Principles of Environmental Management.
2. Principles of Ecology, Environment & Environmental Management.
3. Policies and Legal Aspect of Environmental Management.
4. Overview of Environmental Impact Assessment (EIA).
5. Preparation and Review of Environmental Impact Assessment Report.
6. Environmental Audit.
7. Life Cycle Assessment as EM Tool.
8. Environmental Management Systems Standards: ISO 14000 (EMS).
9. Related Issues in Environmental Management.
10. Environmental Design.
11. Environmental Economics.
12. Basics of Data base Management System (DBMS), Geographic Information System (GIS) and Remote Sensing.
13. Geographic Information System (GIS) and Remote Sensing in Environmental Management.
14. Carrying capacity assessment
15. Cumulative impact assessment

Each of the self-learning format versions of the course complies with high quality standards and includes a tutor's guide. A comprehensive list of references (and suggested reading) is provided at the end of each course to enable the learners to pursue relevant further reading. The methodology involved thorough course packaging (i.e., development, design and materials production).

---

**Procedure to apply:** The application procedure is outlined below.

1. Course: **Environmental Management**
2. Complete and return the prescribed registration form

**Applicants must also submit Curriculum Vitae (CV) along with the application form to the below mentioned address, which should include the description of current work, if employed or their area of work / specialization. An outline of individual project: especially skills likely to gain in the course and how it will be applied in a project that will be helpful in future career.**

---

**Send your registration form along with CV & DD to:**

### **The Officer-in-Charge**

[Course: Environment Management]  
Centre for Continuing Education,  
Indian Institute of Science  
Bengaluru - 560 012, Karnataka, INDIA  
**Phone:** 91 080 22932055/2491/2247,  
**E-mail:** [admin@cce.iisc.ernet.in](mailto:admin@cce.iisc.ernet.in),  
[office@cce.iisc.ernet.in](mailto:office@cce.iisc.ernet.in)

### **DEADLINES:**

**Last date for submission:** : 01.08.2017  
**Intimation of selection:** : 14.08.2017

---

**Accommodation:** Limited accommodation is available on the campus at Centenary Guest House, IISc, as per applicable tariff rates subject to availability of the accommodation.

The participants have to request in advance along with the registration form for accommodation (and send advance money for room rent along with course fee for introductory session of **five days** during **2-6 September 2017** and **Final session of five days** will be during **December 2017 (22-28 Dec 2017)**).

---

## Internet Courses - 2017-2018

Course offered [**XV<sup>th</sup> Session**]:

# ENVIRONMENTAL MANAGEMENT

## Course Faculty:

**Dr. T. V. Ramachandra**

Energy & Wetlands Research Group,  
**Centre for Ecological Sciences**  
**New Bioscience Building, CES TE15,**

**Indian Institute of Science**

<http://ces.iisc.ernet.in/energy>

E-mail: [ram@ces.iisc.ernet.in](mailto:ram@ces.iisc.ernet.in)

Phone: 080-22933099/22933503

Fax: 080 23601428



---

**Centre for Continuing Education**

**Indian Institute of Science**

**Bengaluru - 560012**

<http://cce.iisc.ernet.in>

## Course Schedule

- Course material (is available in self learning format).
- Class room briefing and introductory sessions at the beginning of the courses (5 days: **During 2-6<sup>th</sup> September 2017**) followed by first term test (covering 5 chapters, on 6<sup>th</sup> Sept 2017, 2-5 PM).
- **October and November 2017:** Interactive session through internet (web and email) for two months. The course will be active only as online study through Internet and interaction with course faculty by chat sessions, Internet discussion forums and e-mail. Participation in online test and assignments are mandatory.
- **November and December 2017:** Announcement of dissertation and implementation by participations.
- **December 2017:** Final Contact session (22-28 Dec, interactive session, project presentations, guest lectures), Final exam (28<sup>th</sup> Dec 2017, 2-5 PM).

In all these modes of teaching, structuring of course is done to fuse all the three core components of competency like attitude behaviors, skills and knowledge.

**Assignments:** Assignment submission can be done through Internet or by post or by hand within the specified date.

**Feedback:** Participant who would like to have the feedback from the tutor can pose their queries in the discussion forum or through chat sessions or through e-mail or by post.

**Tutors /Resource Persons:** The tutors will act as catalysts, emphasized on participatory style of learning and providing ample scope for discussions, and the resource persons facilitate the learning process. Successful realization of Competence

Based Education heavily depends on the teachers' contribution to the curriculum reform. Teachers involved here have wide scope from the lesson level to the level of curriculum development, and adapt new role of coach of the students' learning processes. Faculties and course coordinators are from Indian Institute of Science.

**Venue:** The classroom sessions and examinations will be held at Centre for Continuing Education (CCE) Lecture Hall, Indian Institute of Science, Bengaluru-560012, Karnataka, India

**Entry Requirements:** In-service professionals (BE / M.Sc/ B Sc with 1 years work experience) and fresh graduates are eligible for this course. *Participants are expected to take part in all activities that form part of course in addition the participants should work on individual projects. During course, participants should compulsorily attend to interactive chat session, which is considered while grading.* Participants should actively participate in the course for best results. A certificate along with grades will be given to all the successful participants by the CCE

**Study schedule:** Each course should be completed within 4 months. Candidates are required to spend time in reading and carrying out the assignments. The number of weeks of study for a course, will, of course, depend on your chosen rate of study. This allows sufficient time for study, submission and returns of assignments and also provides the opportunity for two courses to be taken parallel with in 4 months.

**Reward of participation:** Candidates will be graded as A+, A, B, C and D according to the performance from Centre for Continuing Education, Indian Institute of Science, Bengaluru -560012.

**Levels of Evaluation:** At concept level, after candidates go through each concept, will be

evaluated online by randomly displaying multiple-choice questions. Each question carries some weightage of marks. Based on the test performance, system checks the number of correct answers and the performance is evaluated. At course level, after completing all the concepts, candidates are given final exam, which will be held at CCE. Concept level evaluation marks will also be considered for grading. Completion of a project is a partial requirement for the course. Apart from this, candidates will be assessed on the basis of assignment submission, active participation in chat sessions, contact sessions and quizzes, project report submission and presentation, mid term and final exams scoring. Facility to communicate among participants: Sharing experiences and establishing contacts is an important aspect of learning. Registered participants can contact other participants during contact sessions, in Internet discussion forum and chat sessions and through personal e-mail id, and also a Course e-mail id allotted by the coordinator.

### Course Fee:

- Rs.25,000 for participants from industries and independent consultants
- Rs. 18,000 for participants nominated from academic institutions and government agencies.
- Rs. 15,000 for ISTE Members – with work experience of 5 years as teaching faculty and nominated from academic institutions
- Rs. 10,000 for unemployed **FRESH** graduates (graduated after 2015), PG students and weaker sections (including SCs/STs)

Number of registrants is restricted to 50 students. Admission is based on first come, first serve basis. Along with the registration form, the course fee and accommodation charges are to be sent in the form of **Demand Draft (DD)** only. The DD to be drawn in favor of '**Registrar, Indian Institute of Science, Bengaluru**', payable at Bengaluru and send to the Officer-in-Charge address indicated above.

## REGISTRATION FORM

(Please mail to reach before 1<sup>st</sup> August 2017)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Permanent Address

\_\_\_\_\_

E Mail: \_\_\_\_\_

Tel: \_\_\_\_\_

Fax: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Academic Qualification (with proof)

Professional Experience:

---

Accommodation required: YES / NO

Course fee: \_\_\_\_\_ Draft No: \_\_\_\_\_

dated: \_\_\_\_\_ Bank: \_\_\_\_\_

I agree to abide by the norms of IISc. If selected I shall participate in the course for the entire duration, including Lab sessions and presentations by participants.

Date: \_\_\_\_\_ Signature \_\_\_\_\_

---

**(Photocopy of this form may be used).**

**Nomination form (sponsored candidates from Academic Institutions)**

The applicant Mr. / Ms. \_\_\_\_\_ from our institution will be permitted to attend the Internet course on 'Environment Management' to be held during August – December 2017 session at CCE, Indian Institute of Science, Bengaluru, if selected for the same.

**Signature of the Head of the institution with seal.**

## REGISTRATION FORM

(Please mail to reach before 1<sup>st</sup> Aug 2017)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Permanent Address

\_\_\_\_\_

E Mail: \_\_\_\_\_

Tel: \_\_\_\_\_

Fax: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Academic Qualification (with proof)

Professional Experience:

---

Accommodation required: YES / NO

Course fee: \_\_\_\_\_ Draft No: \_\_\_\_\_

dated: \_\_\_\_\_ Bank: \_\_\_\_\_

I agree to abide by the norms of IISc. If selected I shall participate in the course for the entire duration, including Lab sessions and presentations by participants.

Date: \_\_\_\_\_ Signature \_\_\_\_\_

---

**(Photocopy of this form may be used).**

**Nomination form (sponsored candidates from Academic Institutions)**

The applicant Mr. / Ms. \_\_\_\_\_ from our institution will be permitted to attend the Internet course on 'Environment Management' to be held during August – December 2017 session at CCE, Indian Institute of Science, Bengaluru, if selected for the same.

**Signature of the Head of the institution with seal.**

## REGISTRATION FORM

(Please mail to reach before 1<sup>st</sup> August 2017)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Permanent Address

\_\_\_\_\_

E Mail: \_\_\_\_\_

Tel: \_\_\_\_\_

Fax: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Academic Qualification (with proof)

Professional Experience:

---

Accommodation required: YES / NO

Course fee: \_\_\_\_\_ Draft No: \_\_\_\_\_

dated: \_\_\_\_\_ Bank: \_\_\_\_\_

I agree to abide by the norms of IISc. If selected I shall participate in the course for the entire duration, including Lab sessions and presentations by participants.

Date: \_\_\_\_\_ Signature \_\_\_\_\_

---

**(Photocopy of this form may be used).**

**Nomination form (sponsored candidates from Academic Institutions)**

The applicant Mr. / Ms. \_\_\_\_\_ from our institution will be permitted to attend the Internet course on 'Environment Management' to be held during August – December 2017 session at CCE, Indian Institute of Science, Bengaluru, if selected for the same.

**Signature of the Head of the institution with seal.**