

	<p><b>Dr. T. V. Ramachandra</b> Energy and Wetlands Research Group, TE 15 Center for Ecological Sciences, New Biology Building, Near D Gate <b>Indian Institute of Science</b>, Bangalore 560012 Web: <a href="http://wgbis.ces.iisc.ernet.in/energy">http://wgbis.ces.iisc.ernet.in/energy</a> <a href="http://wgbis.ces.iisc.ernet.in/biodiversity">http://wgbis.ces.iisc.ernet.in/biodiversity</a> Web: <a href="http://cce.iisc.ernet.in">http://cce.iisc.ernet.in</a>, Email: <a href="mailto:ram@ces.iisc.ernet.in">ram@ces.iisc.ernet.in</a> Phone: 91-080-22933099/22933503 extn 107</p>
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## Course: Environmental Management 3+0

Department: **Centre for Continuing Education** (<http://cce.iisc.ernet.in>)

August to December 2013

**Course URL:** <http://wgbis.ces.iisc.ernet.in/emcourse>

### Course Details (Announcement, etc.)

[http://wgbis.ces.iisc.ernet.in/energy/distance\\_education\\_courses/internet\\_course\\_2013/index.htm](http://wgbis.ces.iisc.ernet.in/energy/distance_education_courses/internet_course_2013/index.htm)

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Co-coordinator: Dr. T. V. Ramachandra [[ram@ces.iisc.ernet.in](mailto:ram@ces.iisc.ernet.in)]

Administration: 2293 2247/22932491 (Ms. Vatsala,  
Email: [vatsala@cce.iisc.ernet.in](mailto:vatsala@cce.iisc.ernet.in))

### Reference Book:

Vijay Kulkarni and Ramachandra T.V., 2009. Environmental Management, Commonwealth Of Learning, Canada and Indian Institute of Science, Bangalore, Printed by TERI Press, New Delhi.

	<p>Author: <b>Vijay Kulkarni and T V Ramachandra</b> Year: 2009 Size: 18.4 x 24 cm; 375pp; (Hardbound) Language: English ISBN: 978-81-7993-184-4 Cover price: <b>Rs 550.00 / US \$112.00</b> Special price: <b>Rs 495.00 / US \$101.00</b></p> <p>Available on line: <a href="http://bookstore.teriin.org/book_inside.php?material_id=557">http://bookstore.teriin.org/book_inside.php?material_id=557</a></p>
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**Please procure this publication quickly.** The chapters are in self-learning format.

## **Important Dates**

Contact Session	12-15 <sup>th</sup> September 2013
Midterm exam	16 <sup>th</sup> Sept 2013
Internet sessions	October/November 2013
Final Contact session	21 <sup>st</sup> -25 <sup>th</sup> December 2013
Final Exam	26 <sup>th</sup> December 2013

Course Announcement: <http://wgbis.ces.iisc.ernet.in/energy>

## **Course Schedule:**

**Venue: L 10 Lecture Hall Complex, Centre for Continuing Education  
Indian Institute of Science  
Registration: September 2013**

**Class Schedule: 9 am to 6 pm**

<b>12 -15<sup>th</sup> September 2013 16<sup>th</sup> Sept 2013</b>	First contact Session, Mid term Exam
October to November 2013	E-learning: Chat session, E mail, Interaction through discussion via E mail
21 <sup>st</sup> -26 <sup>th</sup> December 2013	Presentation of 10 units by participants (Dec 2013), Project presentation by participants (Dec 2013), Final Examination (Dec 2013)

## **E. Tutors:**

E Mail	Role
	Internet – chat session, etc.

Dr. T. V. Ramachandra	ram@ces.iisc.ernet.in	Co-ordinator
Durga Madhab Mahapatra	durgamadhab@ces.iisc.ernet.in	Subject Expert
Dr. Uttam Kumar	uttam@ces.iisc.ernet.in	Subject Expert
Bharath H. Aithal	bharath@ces.iisc.ernet.in	Subject Expert
Shwetmala	shwetmala@ces.iisc.ernet.in	Subject Expert
Harish Bhat	harishrbhat@gmail.com	Subject Expert
Sudarshan P. Bhat	sudarshan@ces.iisc.ernet.in	Subject Expert
Vatsala	vatsala@cce.iisc.ernet.in office@cce.iisc.ernet.in	Administration

## Internet Course:

### Environment Management (3:0), Aug - Dec 2013

#### Programme Outline

1. **First Contact Session** : 12<sup>th</sup> to 16<sup>th</sup> Sept 2013, Topics Covered: All ten chapters, Guest lectures – Urban solid waste management, Processing techniques, aquatic ecosystems monitoring – diatoms, economic valuation, landscape ecology, unplanned urbanization and consequences on the local environment, Mid term exam (16 Sept 2013)
2. **Accommodation:** All outstation participants will be accommodated at Hoysala Guest House, IISc Campus (in case outstation who has not indicated in the application but require accommodation need to inform Ms. Vatsala – [vatsala@cce.iisc.ernet.in](mailto:vatsala@cce.iisc.ernet.in) with CC to [ram@ces.iisc.ernet.in](mailto:ram@ces.iisc.ernet.in)  
(Phone: 080 2292535 / 22932247)

**Gates closer to Hoysala Guest House:**

(You may enter from the Main gate or D – Gate (Mathikere road)

(CCE Lecture Hall is about 5 minutes' walk from Hoysala Guest house)

3. **Internet Session:** Discussion of 10 chapters through Chat session moderated by respective participants

Date	Time	Chapters	Moderators
19 <sup>th</sup> and 20 <sup>th</sup> Sept 2013	7-8 30 pm		Interactive session moderated by Padma Ashok, Nishakumari, Shyamala A.M, Ashok Kumar, Prahallas
26 <sup>th</sup> ,and 27 <sup>th</sup> Sept 2013	7:00-8:30 pm	1	Pannaga N P, Col. Jeffery M J Valentine,Prashanth T S
3 <sup>rd</sup> and 4 <sup>th</sup> Oct 2013	7:00-8:30 pm	2	PrahallasRao,Arun, Hemanth Kumar T R, VandanaSreedharan
10 <sup>th</sup> and 11 <sup>th</sup> Oct 2013	7:00-8:30 pm	3	Nafisa S M, Sugeetha , Shailesh Kumar Sinha, Shiwang
17 <sup>th</sup> and 18 <sup>th</sup> Oct 2013	7:00-8:30 pm	4	Padma Ashok , Bhanumathi V, Narayan V Nayak
24 <sup>th</sup> and 25 <sup>th</sup> Oct 2013	7:00-8:30 pm	5	Dhan Singh, Ashok Kumar, MugdhaVedanti C
31 <sup>st</sup> and 1 <sup>st</sup> Nov 2013	7:00-8:30 pm	6	Vijay Bhaskar, BhoomaMadhavan, Trivendra S G,Shyamala A M
7 <sup>th</sup> and 8 <sup>th</sup> Nov 2013	7:00-8:30 pm	7	Pooja, Roy K Varghese, AjitDasharath, Vikrant M K,
14 <sup>th</sup> and 15 <sup>th</sup> Nov 2013	7:00-8:30 pm	8	AnaghaPrakashPatil, Sneha D K, Harish Kumar
21 <sup>st</sup> and 22 <sup>nd</sup> Nov 2013	7:00-8:30 pm	9	Sandeep Banerjee , Abhijeet V G, Piyush Kumar
28 <sup>th</sup> and 29 <sup>th</sup> Nov 2013	7:00-8:30 pm	10	Vrijulal M V, NishaKumari, T S Ajai, Sourabh

4. **Assignments:** At the end of each chat session, an assignment would be announced to be submitted as email attachment within a week (From the announcement date).
5. **Tests:** Quiz with random questions would be arranged once we complete significant number of chapters (after 4/5 chapters)

**6. Projects (Titles will be finalized during the midterm contact session)**

Candidate	Dissertation title
Abhijeet Vinay Gharal	Environment profile of Kolhapur
Ajai T. S	E-waste management in Electronic city
Anagha Prakash Patil	Water quality in Nagpur: Case study of Bajaj Nagar
Arun Bharathi V	Insight to Geology of Western Ghats and Landslides
Ashok Kumar	LCA of detergent soap/ Environment quality of soap industry
Bhanumathi V	MSWM at Bangalore : Challenges and Solutions
Bhooma Madhavan	MSWM in Chennai
Col. Jeffery M J Valentine	Energy auditing at MEG
Dhan Singh	Environment profile of Bhubaneswar
Harish Kumar	Environment profile of Nagpur
Hemanth Kumar T R	Air pollution status in Bangalore East
MugdhaVedanti C	Environmental auditing of glass industry
Nafisa Shabbir Malwawala	Green Building
Narayan V Nayak	LCA of MSWM
Nisha Kumari	Status of Lakes in Hyderabad
Padma Ashok	Environmental audit of IT/ E-waste management
Pannaga Narayana Prasad	LCA of domestic solar devices (water heater, SPV)
Piyush Kumar	States of Water bodies in Jamshedpur
Pooja S	EIA of Biotechnical Industry
Prahallad Rao C R	Renewable Energy potential in Karnataka/South India
Prashanth T S	Trees of Bangalore
Roy K Varghese	MSWM in TVM : Opportunities and Challenges
Sandeep Banerjee	Organic vs Inorganic farming: Environment and Sustainability aspect
Shailesh Kumar Sinha	Waste management of Railways
Shingate Ajit Dasharath	Environmental auditing of cable industry
Shiwang	Carbon sequestration potential of Bangalore Trees
Shyamala A M	Environment profile of R.K mission
Sneha Digambar Kamble	Mangroves in Mumbai
Sourabh Madhav Kulkarni	Wastewater management in Kolhapur
Sugeetha B	Environment profile of Chennai
Trivendra Singh Gangwar	Status of water bodies in Trichy
VandanaSreedharan	SEA of Environment Management for construction
Vijay Bhaskar	Waste minimization/ Auditing in a industry
Vikrant Murlidhar Khedikar	Environmental auditing of mining Industry
Vrijulal M V	Birds of R.K mission

Last date for submission 1<sup>st</sup> Dec 2013

**Format for Dissertation**

**Format for Dissertation**

Title

Author

Summary

Keywords

Introduction

Literature Review

Objectives

Methods

Study Area

Results

Discussion

Scope for further work

Conclusions

Acknowledgement

References

Journal Article:

Author/s, year, Title of the article, Journal title, Vol (Issue), Page no's

Book:

Author/s, year, Title of the book, publisher, place

Vijay Kulakarni and Ramachandra, T.V. 2009, *Environmental Management*, Commonwealth of Learning, Canada and IISc, Printed by TERI Press New Delhi

Note: the report be submitted in e-version as well as one hard copy (no plastics for cover page, etc.)

**Final contact Session - 21<sup>st</sup> – 26<sup>th</sup> December 2013**

**Venue:** L 10 Lecture Hall Complex, Centre for Continuing Education

Indian Institute of Science

**Class Schedule:** 9 am to 6.30 pm

Dates	Activities
21 <sup>st</sup> Dec 2013	Presentation of chapters
22 <sup>nd</sup> Dec 2013	Presentation of chapters
23 <sup>rd</sup> Dec 2013	Project Presentation of Dissertation, Guest lectures
24 <sup>th</sup> Dec 2013	Project Presentation of Dissertation, Guest lectures
25 <sup>th</sup> Dec 2013	Interactive session at R K Mission/IISc, Guest lectures
26 <sup>th</sup> Dec 2013	Final Exam
25 <sup>th</sup> Jan 2014	Announcement of Results
5 <sup>th</sup> Mar 2014	Dispatch of graded certificates by CCE office

**Chapters Presentations:**

Chapters	Presenters
Chapters 1	Pannaga N P, Col. Jeffery M J Valentine, Prashanth T S
Chapters 2	Prahallad Rao, Arun, Hemanth Kumar T R, Vandana Sreedharan
Chapters 3	Nafisa S M, Sugeetha , Shailesh Kumar Sinha, Shiwang
Chapters 4	Padma Ashok , Bhanumathi V, Narayan V Nayak
Chapters 5	Dhan Singh, Ashok Kumar, Mugdha Vedanti C
Chapters 6	Vijay Bhaskar, Bhooma Madhavan, Trivendra S G, Shyamala A M
Chapters 7	Pooja, Roy K Varghese, Ajit Dasharath, Vikrant M K
Chapters 8	Anagha Prakash Patil, Sneha D K, Harish Kumar
Chapters 9	Sandeep Banerjee , Abhijeet V G, Piyush Kumar
Chapters 10	Vrijulal M V, Nisha Kumari, T S Ajai, Sourabh Madhav Kulkarni

**Contact person:** For certificate, Accommodation

Ms. Vatsala (22932247)

vatsala@cce.iisc.ernet.in

office@cce.iisc.ernet.in

**Accommodation arrangements:**

At Hoysala House Phone number 22932535

**Hoysala Guest House - Behind Physics Department, Opposite to NMR centre, (closer to Canara Bank) IISc Campus, Bangalore-12 (Phone 22932535)**

## Route Map

[http://wgbis.ces.iisc.ernet.in/energy/lake2010/Hoysala%20GH\\_map.JPG](http://wgbis.ces.iisc.ernet.in/energy/lake2010/Hoysala%20GH_map.JPG)

## Food availability in the campus

Closer to Hoysala House Hotel/Restaurant – **NESARA Restaurant** (8 am to 9 30pm),

Kabini Canteen (8 am to 9 30 pm)

Closer to CCE Lecture Hall – **Prakruthi Canteen** (7 am to 10 pm)

## **General Info - How to reach IISc**

<http://wgbis.ces.iisc.ernet.in/energy/lake2010/information.htm>

[http://www.iisc.ernet.in/content\\_geninfohowtoreach.html](http://www.iisc.ernet.in/content_geninfohowtoreach.html)

How to reach IISc from the Airport/Railway station /Majestic?

Bangalore is connected by air, rail and road to all the metropolises and most major cities of the country. Also, one can fly direct to Bangalore from several international airports

IISc is about 35kms from the airport. One could take either a prepaid taxi (currently, costs Rs. 750, and the counter is available near the exit of the Airport Building), or a city taxi (costs about Rs. 500, and a queue for the same is just outside the airport building). The Institute is known as "Tata Institute" to the locals and is just past Mekhri circle and on the way to Yeshwantpura (one must take a right turn at Mekhri circle). [Shuttle bus service](#), operated by Bangalore Metropolitan Transport Corporation (BMTC), runs from the airport to various areas in Bangalore city every 15 minutes. Details of the schedule can be found [here](#). Additional information on the airport can also be found at its official website: (<http://www.bengaluruairport.com/>)

The city railway station is about 7 kms from IISc campus. One will have to get out of the station from platform number ONE and reach the prepaid taxi stand and hire a city taxi (costs about Rs 150). Majestic (7kms from IISc) is the central Bus stand in Bangalore which is just opposite to the City Railway station. If one happens to reach Majestic, Bangalore by bus, reach platform number 22 from where almost all buses come to the Institute.

If one plans to take a bus into town, one will have to move past Malleswaram 18th cross bus stand towards Yeshwantpura in order to reach IISc (also popularly called Tata Institute). There is also a bus stop on the highway between the yellow over bridge and Prof. CNR Rao circle, and another one at Prof. CNR Rao circle (on Sir CV Raman Road ). Finally there is a bus stop at Yeshwantpura tollgate, just off campus near R block. Most buses go to one of these places.

>> [Click here](#) to view the route map

Take assistance from [Google map](#)