



Under the Aegis of

**Ministry of Human Resource & Development, Govt. of India**

announces

# SUSTAINABILITY IN THE BUILT ENVIRONMENT

Date: 19<sup>th</sup> - 30<sup>th</sup> March, 2018

Venue: Faculty Resource Center, MITS, Gwalior



## Modules:

Introduction to Green Building – Principles & Practice  
Performance Assessment, Benchmarks and Indices  
Environmentally Sustainable Design

**The workshop is open to all stakeholders in the building industry**

Global Initiative of Academic Networks (GIAN) is convened under the aegis of MHRD, Govt. of India. It ensures to garner best international experiences into our systems of education. The course aims to improve professional skills for the design and development of green buildings. The goal is to apply the learning in the development of passive design strategies for an existing building, complemented with the Excellence in Design for Greater Efficiencies (EDGE) software that focuses on improving energy, water and embodied energy use in the built sector through intelligent and informed use of passive and active designs.

**For Registration:**

<http://www.gian.iitkgp.ac.in/GREGN>

Contact Dr. R.K. Pandit, [director@mitsgwalior.in](mailto:director@mitsgwalior.in)

# Sustainability in the Built Environment

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## Overview

Buildings are next only to agriculture in the way they have impacted the earth's ecosystems. Conventional designs often consume huge quantities of material and natural resources, deplete non-renewable resources, have high-embodied energy and pollute the air, water and soil in the process of manufacture. All this has necessitated the need for designing buildings that are efficient, sustainable and integrated within the cultural context. Performance assessment frameworks are also used and have become more acceptable the world over to determine sustainability of built environments.

The course aims to improve professional skills for the design and development of green buildings. The course is divided into 10 modules dealing with focus areas of environmental architecture planning and design. Throughout the course, the lectures focus on the application of theory using various examples. Green building standards, codes and certificates are also introduced. The course incorporates practical applications, so attendees are able to immediately apply their learnings. The goal is to apply the learning in enhancing sustainability outcomes of buildings and the built environment from a Triple Bottom Line perspective. The exercise will be complemented with the Excellence in Design for Greater Efficiencies (EDGE) software, that focuses on improving energy, water and embodied energy use in the built sector through intelligent and informed use of passive and active designs. At the end of the course students will be able to:

- Identify the world challenges that affect building construction and viceversa
- Understand the importance of green building planning and design
- Apply and examine the knowledge and methods provided for passive design strategies for green buildings & other aspects of green design
- Integrate and combine building standards, codes and certifications for green buildings
- Evaluate and verify the design exercise with knowledge acquired during the course
- Adopt a building performance and systems approach, and apply specialist knowledge and technical skills to creatively address the diverse needs of sustainable building stakeholders

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|--------------------------------|---|
| <b>Modules</b>                 | <p><b>A: Introduction to Green Building – Principles &amp; Practice: March 19 – March 21</b></p> <p><b>B: Performance Assessment, Benchmarks and Indices: March 22 - March 25</b></p> <p><b>C: Environmentally Sustainable Design: March 25 - March 30</b></p>  |
| <b>You Should Attend If...</b> | <ul style="list-style-type: none"> <li>▪ You are a Professional from the field of Architecture, Engineering, Environmental Science, Building Management.</li> <li>▪ You are a student or faculty from academic institution interested in learning how to design green buildings or integrate green theory into practice.</li> </ul>   |
| <b>Fees</b>                    | <p>The participation fees for taking the course is as follows:</p> <p><b>Participants from abroad: US \$500</b></p> <p><b>Industry/ Research Organizations: INR 30,000/-</b></p> <p><b>Faculty: INR 10,000/-</b></p> <p><b>Students/Self Employed: INR 5,000/-</b></p> <p>The above fee includes all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hour free internet facility. The participants will be provided with accommodation on payment basis.</p>  |
| <b>Registration</b>            | <p>Register through the GIAN portal:<br/> <a href="http://www.gian.iitkgp.ac.in/GREGN">http://www.gian.iitkgp.ac.in/GREGN</a></p> <p>Seats are limited to 50 participants only</p> <p>Register by 15 March 2018</p>   |
| <b>Accommodation</b>           | <p>MITS Gwalior may provide accommodation to a limited number of participants on a first come first serve basis and depending upon availability on single/twin sharing basis. Gwalior is also endowed with suitable and economical hotels in the vicinity of the campus.</p>  |
| <b>About GIAN</b>              | <p>Global Initiative of Academic Networks (GIAN) is convened under the aegis of MHRD, Govt. of India. It aims at tapping the talent pool of scientists and entrepreneurs, internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence. GIAN ensures to garner best international experiences into our systems of education, enable interaction amongst the best academic and industry experts from all over the world.</p>   |
| <b>MITS Gwalior</b>            | <p>Madhav Institute of Technology &amp; Science (MITS), Gwalior, was established in 1957 by <b>His Highness Sir Jiwaji Rao Scindia</b>, Maharaja, of the erstwhile state of Gwalior under open door policy of Govt. of India. The institute is affiliated to RGPV, Bhopal but has academic autonomy since 2002 to run courses of its choice. Recently the institute has been granted autonomy by UGC, New Delhi for 6 years from July 2017. The institute is also accredited by the National Assessment and Accreditation Council (NAAC) and by the National Board of Accreditation (NBA).</p> <p>Gwalior is well connected to Delhi by rail, road and air. It is the northern-most city of the State of Madhya Pradesh in India and is known for its historic sites of Gwalior fort, Gujari Mahal, Sarod Ghar, Man Singh Palace and Tansen Memorial. Gwalior has been selected as one of the hundred Indian cities to be developed as a smart city under the PM's flagship Smart Cities Mission.</p> |

## The Faculty



**Dr. Usha Iyer-Raniga** is Associate Professor and Deputy Head, International, at the School of Property and Construction Management, RMIT University, Melbourne, Australia. Dr. Raniga is currently leading the Sustainable Buildings and Construction Programme (SBC) under UNEP's Ten Year Framework of Programmes on Sustainable Consumption and Production (10FYP SCP).



**Prof. Roshni Udyavar Yehuda** is Vice President, Sustainability, ICMQ Certification India Pvt. Ltd. and Advisor, Environment & Sustainability, Science & Technology Park, Pune. She was Head of the Rachana Sansad's Institute of Environmental Architecture, Mumbai, India (2003- 2017); She is a Bureau of Energy Efficiency (BEE) certified Master Trainer and empanelled energy efficiency expert professional.



**Prof. R. K. Pandit** is the Director of the Madhav Institute of Technology & Science, Gwalior, 474005, MP, India.

## Course Co-ordinator

**Prof. R.K. Pandit**

Phone No: +91-7512409300

Fax No: +91-7512664684

Cell No: +91-9926454902

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