Workshop on

Adding Sustainability to Engineering Courses

January 14, 2015 • 9 AM to 5 PM • IIT Gandhinagar

The Center for Sustainable Engineering (CSE) will offer a workshop at Indian Institute of Technology Gandhinagar entitled "*Adding Sustainability to Engineering Courses*" on January 14, 2015.

The sessions will address concepts in sustainable engineering, ways to incorporate these concepts into courses, examples of educational modules in sustainable engineering, and finding sources of information on this emerging topic. The workshop will also provide guidance in using and contributing to the CSE's Electronic Library of sustainable engineering education materials.

Established in 2006, the CSE has conducted more than a dozen workshops around the U.S. and Canada to help engineering instructors introduce more content on sustainability into their courses. Nearly 400 instructors have participated in these workshops over the years.

The Center for Sustainable Engineering is a partnership of Syracuse University, Georgia Institute of Technology, Carnegie Mellon University, and Arizona State University.

All participants are requested to choose a course they are teaching or will be teaching where they have an interest in introducing sustainability or increasing the sustainability content. The workshop is intended to assist the participants in achieving these goals.

Center for Sustainable Engineering

Indian Institute of
Technology Gandhinagar

AGENDA

Adding Sustainability to Engineering Courses

Cliff Davidson and Ted Russell
January 14, 2015

9:00-9:15   Welcome by IIT Gandhinagar personnel
Welcome by Cliff Davidson (Syracuse Univ) and Ted Russell (Georgia Tech)

9:15-10:15   Introduction and Goals: A Transition in Engineering Education

10:15-10:30   *Break*

10:30-11:00   What is a sustainability module? Examples of some modules used at Syracuse University.

11:00-12:00   Example of a Detailed Module from Georgia Tech: Air Pollution and Health

12:00-1:00   *Lunch*

1:00-2:00   Panel of Workshop Participants: What has been done to teach Sustainable Engineering at IIT-GN

2:00-2:15   Instructions for breakout sessions: Learning Objectives and Class Activities

2:15-3:15   Breakout Sessions. Participants meet in breakout groups for 3 or 4 simultaneous interactive sessions. For the first half of the session, each participant writes 2-3 learning objectives and class activities for their proposed module. For the second half of the session, the breakout group discusses the learning objectives and class activities of each person in the group. The group selects one participant to report back to the full workshop on the breakout discussions.

3:15-3:30   Entire workshop re-convenes: One participant from each breakout group reports back to the full workshop

3:30-3:45   *Break*

3:45-4:15   Modules of the Center for Sustainable Engineering: How to get access, how to contribute

4:15-4:45   Open Discussion: How to improve teaching of sustainability in engineering courses

4:45-5:00   Summary of the Workshop

5:00-5:10   Workshop evaluations distributed and completed by all participants

Center for Sustainable Engineering

Indian Institute of Technology Gandhinagar