

# Engineering Education in a Globalized World

Satish Udpa  
Michigan State University

GEDC Panel Discussion  
Chicago, October 22, 2013

## MSU/IITM Program

- Joint Ph.D. Program
- Undergraduate Summer Internship Program

## Joint Ph.D. Program

- Students can enroll in the program either at IITM or MSU
- Admitting institution's rules prevail
- At least one year stay required in the partnering institution
- Advisors at both institutions
- Research topic chosen on the basis of mutual interest
- Two diplomas

## Research Topics

- Water
  - Pathogen detection
  - Treatment
- Energy
  - Biofuels
  - Thermoelectrics

## Undergraduate Summer Internship Program

- 10 week summer program
- Hosting institution covers cost of room and board
- NSF/DST funded
- MSU provides \$4,400 to cover costs of room, board and incidentals for visiting students

## Pre-visit Message

- We live in a globally hyper-connected economy/world
- Glaring iniquities in income/life style/consumption patterns are not sustainable
- We have to learn how to be more respectful of the ecosystem we live in
- We have to respect cultural contexts and imperatives
- We have a role to play in addressing global iniquities and mitigating the violence we perpetrate on our ecosystem
- Global problems need globally relevant solutions

# MSU Program

- Pre-visit
  - Cultural sensitization
  - Rudimentary language training
  - Coursework on country's history recommended
- During Visit
  - Local travel
  - Cultural programs
- Post-Visit
  - Report
  - Blog
  - E-mail contact