



GUJARAT TECHNOLOGICAL UNIVERSITY

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CIRCULAR

Interested faculty members and students may register for the following webinar which is going to be held on Tue, Sep 27, 2016 4:30 PM - 5:30 PM IST.

IUCEE Virtual Academy: “Real Life (or Everyday) Examples in STEM Education”; R. Echempati

Tue, Sep 27, 2016 4:30 PM - 5:30 PM IST

Registration URL: <https://attendee.gotowebinar.com/register/7919879389082359043>

Description

This webinar is believed to help instructors both to use few of the existing examples from the literature and also to develop more examples of common interest to the students taking courses in the Science, Technology, Engineering and Math (STEM) areas. This webinar covers courses on Solid Mechanics and Finite Element areas; however, with little more efforts, it can be easily extended to other areas of STEM education.

Following the Bloom's Taxonomy of learning, three types of Everyday Examples in Engineering can be thought of. First are lesson plans and solutions that help prepare the students and the instructors use the principle of 5-Es: Engage, Explore, Explain, Elaborate and Evaluate. The second type are demonstrations, including directions for building and using the demonstrations. The third type are lists of engineering ideas that could be used to illustrate engineering concepts.

These can be organized by course area for easy retrieval by the instructors and the students. While developing the new examples, one of the main things is to innovatively come up with ideas that every student has already seen or experienced in daily life. Based on this presumption, the students use the physics and engineering principles to formulate and to solve the problems posed in those examples using justifiable engineering assumptions. Out of the three types discussed above, in this webinar, few examples from Solid Mechanics and Finite Element Analysis courses will be presented and discussed.

Presenter:

Dr. Raghu Echempati,
Professor, Mechanical Engineering
Kettering University, MI, USA
<https://my.kettering.edu/faculty/raghu-echempati>

Sd/-
Registrar (I/c)