

## TALE 2: COURSE DESIGN AND INSTRUCTION OF ENGINEERING COURSES

PROF. N J RAO **Consulting Professor IISc Bangalore** 

TYPE OF COURSE EXAM DATE

: New | Elective | PG COURSE DURATION : 8 weeks (29 Jul'19 - 20 Sep'19) : 29 Sep 2019

**PRE-REQUISITES : TALE Module 1: Learning Outcomes INTENDED AUDIENCE :** Working and aspiring engineering teachers

## **COURSE OUTLINE :**

The quality of Teaching And Learning in Engineering (TALE) has come to be an important issue in India to all stakeholders including teachers, students, parents, Managements, University, AICTE, NBA and Industry. The curriculum of a program decides the nature of learning experiences including the courses, projects, internships, and co-curricular and extra-curricular activities. This course focuses on students attaining a certain set of outcomes requiring a shift from teacher centric approach to student centric instruction. There is no unique method that leads to good learning in all contexts. The course TALE addresses many of the common issues of teaching and learning in engineering in the Indian context and tries to provide a complete solution to a teacher to the process of design and conduct of an engineering course leaving all the academic freedom he/she wants to have.

## **ABOUT INSTRUCTOR:**

Prof. N.J. Rao , Previously the Chairman of CEDT (Centre for Electronics Design and Technology, IISc during 1981 - 1996, and Chairman, Department of Management Studies during 1998 -2006, superannuated as Professor at CEDT in July 2006. Presently he is a Consulting Professor at International Institute of Information Technology (IIIT), Bangalore, a member of several committees associated with NBA, and a member of the Core Committee that defined the new Accreditation processes of NAAC. Present research interests include higher education, pedagogy and education technologies. He is presently working with Department of Higher Education, Kerala for improving quality of learning in Higher Education Degree Colleges, and several engineering colleges for curriculum design, pedagogy and quality of learning. He has designed and has been conducting a wide range of faculty development programs on NBA Accreditation, Curriculum Design.

## **COURSE PLAN:**

Week 1: Course Design, Instructional System Design and ADDIE

- Week 2: Analysis and Design Phases
- Week 3: Development
- Week 4: Implement and Evaluation Phases
- Week 5: Learner Centered Education
- Week 6: Instruction Methods
- Week 7: Instruction for Outcomes
- Week 8: Planning Instruction