

SUBJECT NO-ET60004, SUBJECT NAME- INFORMATION AND COMMUNICATION TECHNOLOGY IN
EDUCATION

LTP- 3-1-0,CRD- 4

SYLLABUS :-

Course description and Target audience :The role of ICT in education is increasing phenomenally. With knowledge explosion and increasing rate of obsolescence of knowledge, it becomes necessary to extend the reach of education to many more. Building brick and mortar infrastructure is not the solution. The only path is to use ICT in education to extend reach and improve quality. The Govt of India recognizes this and has already sanctioned Rs. 10,000 crores for National Mission Project on Education through ICT (NMEICT) during the XI th plan period. IIT Kharagpur is a major partner in this endeavour. In addition, the Ministry of Finance, Govt of India has already taken a major initiative to train 5 crore young people of India during the next 5 yrs in various vocational skills through their National Skill Development Programme using ICT. In the near future there will be need for thousands of people trained in the field of ICT in education. The course aims to create a holistic understanding of the different types of communication technologies used to increase the effectiveness and outreach of education and training. It is suitable for UG / PG students and Research Scholars who could use the potential of ICT based learning in both training situations in the industry, as well as face-to-face and distance learning situations. It would be of great to anyone who may wish to pursue distance education and e-learning as a professional interest in the future.

Course content :Introduction, Use of ICT in different countries and cultures. issues of basic multimedia design, use of teleconferencing in education, theory and hands-on module including use of LMS, VOD and video production techniques. The course also deals with different models of distance education and their implications, Elearning design, delivery and management issues including design of LMS, LCMS and SCORM. No pre-requisites necessary

Text books :1.2.Elearning and the Science of Instruction â RC Clark and RE Mayer; Pfeiffer -Wiley ICT 4 D (Information and Communication Technology for Development) -General Editor Tim Unwin; Cambridge University Press

Course structure

Introduction- What is ICT

ICT policies

Implication and Challenges of ICT on Higher Education

A framework for ICT in Education â Pedagogy and Technology

Need for ICT in future

Basics of Instructional Design in Education

ADDIE model and its uses

Domains of Learning

Instructional Objectives and Specification Matrix

Collaborative Learning

Types of ICT

Elearning and Electronic Self Learning Material (ESLM)

Learning Management Systems

SCORM

Blended Learning

Moodle

EDUSAT

Video On Demand (VOD)

Game-based Learning

Virtual Learning

Basics of Multimedia Design,

Hands-on module on :Video production techniques.

LMS

Streaming technology

Video conferencing