Knowledge Network of
Indian Institute of Technology Gandhinagar
TEQIP-III Initiative (MHRD, Govt. of India, NPIU & World Bank)

TEQIP – III Summer Training Program on Advance Pedagogy & Digital Tool

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Date: 5-days course in three slots
Batch 1 - 20th - 24th May 2019
Batch 2 - 27th - 31st May 2019
Batch 3 - 10th - 14th June 2019

Venue: IIT Gandhinagar, Palaj Campus

Target group: TEQIP-III Institutes Nominated Faculty Members

Dates (5-days)	Batch size	Schedule
Batch - 1 20th -24th May 2019	Around 60 faculty participants	Tentative curriculum is below. Four Broad Areas: Advance Pedagogy Active Learning Digital Pedagogy Collaborative Research
Batch – 2 27th -31st May 2019	Around 100 faculty participants	
Batch - 3 10th- 14th June 2019	Around 60 faculty participants	

COURSE OBJECTIVES: To increase effectiveness of the young faculties in teaching

1. To adopt advanced learning tools for deeper learning.
2. To understand the use of formative assessment/ test for better growth like making question papers that test higher order thinking skills.
3. To understand using diagnostic tests to identify student weakness.
4. To be able to differentiate between concepts, skills and subject knowledge.
5. To be able to understand importance of Collaborative Research.
6. To understand the methodology to inculcate Entrepreneurship skills in the students.

Tentative Curriculum -

1. **Advanced Pedagogy**
   - Understanding of the concepts and skills rather than subject knowledge
   - Peer Learning: Peer-Instruction, group-study and Think-Pair-Share strategies
   - Carry out a pedagogical case study of one or two common courses to several engineering disciplines
   - Laboratory visits and interactions with IIT faculty & students
   - Mentorship programs, students' well-being and happiness

2. **Active learning**
   - Faculty-student interaction and establishment of a larger educational community.
   - Participate in a round table deliberation to identify the 'carry-away' for their own institutes
   - Engaging class activities like team projects, presentations, case study learning, brainstorming, field visits, hands-on activities etc.
   - Active learning on topics pertaining to Mathematics in Engineering and Technology

3. **Digital pedagogy**
   - Technology-enhanced learning: Flipped classroom, use of software pedagogical aids
   - Hands on sessions on Digital Learning
   - Specific IIT-MHRD initiatives for higher education

4. **Collaborative Research and Innovation**
   - Research Methodology and Technical Communication to develop skills which will strengthen their endeavours in the pursuit of PhD level projects, R&D and supervision of graduate students in the Masters' and PhD Programmes.
   - TEQIP initiative on Collaborative Research Scheme, how to build research community, proposal submission, implementation etc.
   - 'Make in India' based pedagogical initiative at IIT