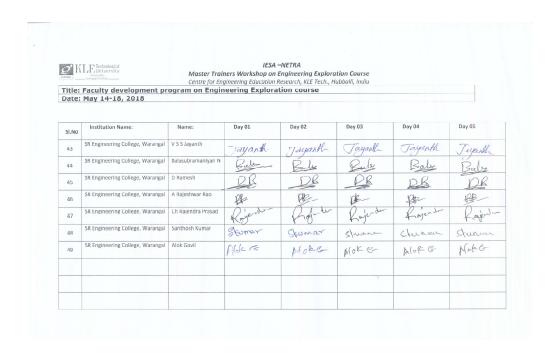
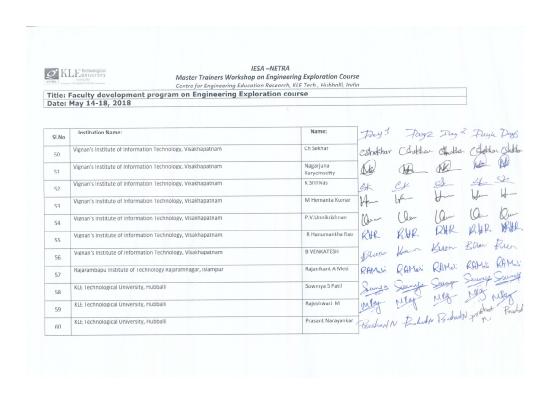


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Name	Day 01	Day 02	Day 03	Day 04	Day 05
Anil M. Bawiskar	AnB	AB	ASB	ALB	An B
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uri , Nanded Arunkumar R. Patil	A.R. Pull	A.R. Publ	A.R.Pahl	A.R.Pall	A.RPa
	Anil M. Bawiskar  Dhananjay, G. Thomban  Ajit S. Mali  urt, Nanded Uday V. Kulkarni  uri, Nanded Anil B. Gonde  uri, Nanded Satish T. Hamde  uri, Nanded Lalit N. Wankhado  uri, Nanded Madhav V. Vaidya	Anil M. Bawiskar  Dhananjay, G. Thombare  Ajit S. Mali  Uday V. Kulkarni  Uday V. Kulkarni  Uday V. Rulkarni  urri, Nanded Anil B. Gonde  Ali B. Gonde  Ali G. Satish T. Hamde  Stlandu  urri, Nanded Lalit N. Wankhado  A. Lalit N. Wankhado  Madhav V. Vaidya	Anil M. Bawiskar  Dhananjay. G. Thombare  Ajit S. Mali  Uday V. Kulkarni  Uday V. Valdy V. Kulkarni  Uday V. Valdy V. Kulkarni  Uday V. Valdy V. Kulkarni  Maka V. Valdy V. Kulkarni  Maka V. Valdy V. Kulkarni  Maka V. Valdy V. Valdy V. Kulkarni  Maka V. Valdy V. Kulkarni  M	Anii M. Bawiskar  Dhananjay. G. Thombare  Ajit S. Mali  Ajit S. Mali  Uday V. Kulkarrii  Uday V. Validya  V. Kulkarrii  Uday V. Kulkarrii  Uday V. Validya  V. Kulkarrii  Uday V. Validya  V. Kulkarrii  Uday V. Validya	Anil M. Bawiskar  Dhananjay, G. Thombare  Ajit S. Mali  Ajit S. Mali  Nk. Ali M. Awali  Awali  Awali  Wagth  Wagth









#### SCHEDULE for Master Trainers Workshop on Engineering Exploration Course Centre for Engineering Education Research, KLE Tech., Hubballi, India

		14-05-2018	15-05-2018	16-05-2018	17-05-2018	18-05-2018
Time		Day 1	Day 2	Day 3	Day 4	Day 5
9.00 am to 9.30 am	Session 1	Inaguration and Context setting	Reflection of Day 1	Reflection of Day 2	Reflection of Day 3	Reflection of Day 4
9.30 am to 10.30 am	Session 2	Introduction to Engineering Exploration course	Essentials of module design	Student Engagement and Multidisciplinary learning	Introduction to project based learning	Course project presentations
10.30 am to 11.00 am	Tea/ Discussions					
11.00 am to 12.30 pm	Session 3	Elements of course design and student-centred learning	An application of case- based pedagogy	Student Engagement and Multidisciplinary learning	Project based learning - A case in Engineering Exploration	Creating an ecosystem for engineering exploration
12.30 pm to 1.30 pm	Lunch					
1.30 pm to 3.00 pm	Session 4	Essentials of module design	Participants presentations I	Participants presentations III	PDCA for course projects	Assessments of student learning and course
3.00 pm to 3.30 pm	Tea/ Discussions					
3.30 pm to 5.00 pm	Session 5	Essentials for module design.	Participants presentations II	Participants presentations IV	Enhancing prototyping skills for course project	Valedictory and Feedback
5.00 pm to 5.30 pm	Wrap-up					
7.00 pm	Dinner					



#### IESA –NETRA Master Trainers Workshop on Engineering Exploration Course

Centre for Engineering Education Research, KLE Tech., Hubballi, India

#### Master Trainers Workshop on Engineering Exploration-2

India Electronics and Semiconductors association is promoting Electronics System Design and Manufacturing and entrepreneurship in India through select educational institutes and universities in India. This is being pursued through NETRA (National ESDM Training and Research Academy) which has been created for this aforementioned purpose.

As a part of this program, MoU has been signed between IESA-NETRA and CEER, KLE Tech to take Engineering Exploration to develop ESDM skills in select universities / engineering colleges in India. This collaboration covers:-

- 1. Sharing of curriculum content with select institutes
- 2. Empowering faculty members through workshops
- 3. Mentoring to create a required learning environment in these institutes
- 4. Periodic review and impact assessment

This collaboration signed during September 2017 is for a three-year period. Master Trainers Workshop on Engineering Exploration was conducted during 2018 the details of which are shown in table below.

The workshop was conducted by the lead designers of the course Engineering Exploration:

- Dr. Gopalkrishna Joshi, Director, Centre for Engineering Education Research, KLE Tech.
- Ms. Preethi Baligar, Assistant Professor, Centre for Engineering Education Research, KLE Tech.
- Mr. Sanjeev Kavale, Assistant Professor, School of Mechanical Engineering, KLE Tech.
- Mr. Kaushik M, Assistant Professor, School of Electronics and Communication Engineering, KLE Tech.

The objectives of the workshop was to

- 1. Frame the course structure, assessment and evaluation plans
- 2. Interpret the context of each module in the engineering profession
- 3. Identify the concepts related to the module
- 4. Design content and activities related to the each of the identified concepts
- 5. Identify resources for activities
- 6. Develop worksheet/s to structure student learning
- 7. Formulate rubrics for assessment of activity/ies



#### IESA –NETRA Master Trainers Workshop on Engineering Exploration Course

Centre for Engineering Education Research, KLE Tech., Hubballi, India

As of date, a number of institutes in India have started Engineering Exploration course.

Table Master Trainers workshop for Engineering Exploration conducted during 2017-2018

FDP	Institutes	Number of participants	Date
Second	13	64	May 14-18, 2018

The participants were from the following institutes:

- 1. CHH. SHAHU COLLEGE OF ENGINEERING, Aurangabad
- 2. CMR College of Engineering & Technology, Hyderabad
- 3. Deogiri Institute of Engineering and Management studies, Aurangabad
- 4. Government Engineering College , Aurangabad
- 5. Hyderabad institute of technology and management, Hyderabad
- 6. K J Somaiya College of Engineering, Vidyavihar, Mumbai
- 7. MGM's Jawaharlal Nehru Engineering College, Aurangabad
- 8. MIT, Aurangabad
- 9. P.E.S. College of Engineering , Aurangabad
- 10. Rajarambapu Institute of Technology Rajaramnagar, Islampur
- 11. Shri Guru Gobind Singhji Institute of Engineering and Technology ,Vishnupuri, Nanded
- 12. SR Engineering College, Warangal
- 13. Vignan's Institute of Information Technology, Visakhapatnam

#### Glimpses of faculty in action



