

FACULTY DEVELOPMENT PROGRAM ON ENGINEERING EXPLORATION COURSE

**Application closes
on April 20th, 2018**

ABOUT THE WORKSHOP



This workshop is aimed at empowering faculty members of engineering institutions in designing student centered freshman engineering course that helps students explore and understand what engineering, engineering problem solving, engineering design process, multi-disciplinary skills, team work and collaboration is. It will be led by a team of experts from KLE Technological University who have been involved in designing such courses and research in engineering education. The workshop follows active, collaborative and experiential learning pedagogies.

At the end of the workshop each team would be able to carry the content, delivery details, resource procurement plan and deployment schedule of Engineering Exploration course for implementation in their respective institution.

The workshop is recognized by IESA – NETRA, the national initiative on ESDM skill development. All the participants will be getting certificate from Electronics Sector Skills Council of India (ESSCI).

WORKSHOP DATES: MAY 14-18,2018 (MONDAY – FRIDAY)

WORKSHOP DETAILS

Who can apply?

A team of 03-05 faculty members from AICTE recognized Engineering Institution offering undergraduate degree in engineering. The team shall consist of at least one member each from mechanical, electronics and computer science disciplines.

Apply using the link : <https://goo.gl/forms/OYXqaZO0bJZqQASv1>

Registration Fees and Accommodation

Rs. 10,000/- per participant + Taxes. Includes course content, lunch and tea / coffee during sessions.

We encourage on campus stay for participants. Limited accommodation available on campus on twin sharing basis. Rs.2500/- per person for five days. Includes breakfast and dinner.

Hosts:

CENTRE FOR ENGINEERING EDUCATION RESEARCH



ABOUT ENGINEERING EXPLORATION COURSE

The first year course – “Engineering Exploration” is an unique innovation born in the educational ecosystem of KLE Tech. This is a co-designed and co-taught course that focuses on problem solving, engineering design, multi-disciplinary skills, data analysis and acquisition, ethics and sustainability. It follows PBL pedagogy and students work in teams to solve identified problems through the entire semester.

This course is recognized by IESA NETRA as a foundation course for its partner institutions.

CONTACT DETAILS

NETRA PARTNER ENGINEERING INSTITUTIONS:

Ms. Swapna Ankola
Email: swapna.ankola@gmail.com)

OTHER ENGINEERING INSTITUTIONS:

Ms. Preethi Baligar
Email: preethi.b@kletech.ac.in

IESA –NETRA
Master Trainers Workshop on Engineering Exploration Course
Centre for Engineering Education Research, KLE Tech., Hubballi, India

Title: Faculty development program on Engineering Exploration course

Date: May 14-18, 2018

Sl.No	Institution Name	Name	Day 01	Day 02	Day 03	Day 04	Day 05
1	CHH. SHAHU COLLEGE OF ENGINEERING , Aurangabad	Vishwanath Madhavrao Chavan	VC	VC	VC	VC	VC
2	CHH. SHAHU COLLEGE OF ENGINEERING, Aurangabad	Akshay T Jadhav	AJadhav	AJadhav	AJadhav	AJadhav	AJadhav
3	CMR College of Engineering & Technology, Hyderabad	Sowjanya Dundhigal	SD	SD	SD	SD	SD
4	CMR College of Engineering & Technology, Hyderabad	B.Suresh Ram	SR	SR	SR	SR	SR
5	CMR College of Engineering & Technology, Hyderabad	Dasari Ajay	Ajay	Ajay	Ajay	Ajay	Ajay
6	CMR College of Engineering & Technology, Hyderabad	R.Venkteswara Reddy	RVReddy	RVReddy	RVReddy	RVReddy	RVReddy
7	CMR College of Engineering & Technology, Hyderabad	T.Rajesh	R	R	R	R	R
8	Deogiri Institute of Engineering and Management studies, Aurangabad	Ganesh L.Dake	G.Dake	G.Dake	G.Dake	G.Dake	G.Dake
9	Deogiri Institute of Engineering and Management studies, Aurangabad	Abhijeet A.Chavan	Abhijeet Chavan	Abhijeet Chavan	Abhijeet Chavan	Abhijeet Chavan	Abhijeet Chavan
10	Deogiri Institute of Engineering and Management studies, Aurangabad	Chetan D. Sagar	CSagar	CSagar	CSagar	CSagar	CSagar

Title: Faculty development program on Engineering Exploration course

Date: May 14-18, 2018

Sl.No	Institution Name:	Name:	Day 01	Day 02	Day 03	Day 04	Day 05
11	Deogiri Institute of Engineering and Management studies, Aurangabad	Amitpalsingh J. Punewale	AJP	AJP	AJP	AJP	AJP
12	Deogiri Institute of Engineering and Management studies , Aurangabad	Pravin Bhivsen Mahadik	PBM	PBM	PBM	PBM	PBM
13	Deogiri Institute of Engineering and Management studies , Aurangabad	Pankaj Katkar	PK	PK	PK	PK	PK
14	Deogiri Institute of Engineering and Management studies, Aurangabad	Krishna Dachawar	KD	KD	KD	KD	KD
15	Government Engineering College , Aurangabad	D. G. Regulwar	DGR	DGR	DGR	DGR	DGR
16	Government Engineering College , Aurangabad	Pranesh. B. Murnal	PM	PM	PM	PM	PM
17	Government Engineering College , Aurangabad	Kushal. S. Wasankar	KWS	KWS	KWS	KWS	KWS
18	Hyderabad institute of technology and management, Hyderabad	M.Rajeshwar	MR	MR	MR	MR	MR
19	Hyderabad institute of technology and management, Hyderabad	Vinod Kumar Ahuja	VKA	VKA	VKA	VKA	VKA
20	Hyderabad institute of technology and management, Hyderabad	Morrish Kumar	MK	MK	MK	MK	MK
21	Hyderabad institute of technology and management, Hyderabad	R.Uma Maheshwara Singh	US	US	US	US	US

Title: Faculty development program on Engineering Exploration course

Date: May 14-18, 2018

Sl.No	Institution Name	Name	Day 01	Day 02	Day 03	Day 04	Day 05
22	Hyderabad institute of technology and management, Hyderabad	Pedda Suresh Ogeti					
23	K J Somaiya College of Engineering, Vidyavihar, Mumbai	Arati Phadke					
24	K J Somaiya College of Engineering, Vidyavihar, Mumbai	Ramesh Lekurwale					
25	K J Somaiya College of Engineering, Vidyavihar, Mumbai	Sagar Korde					
26	MGM's Jawaharlal Nehru Engineering College, Aurangabad	Sumit D. Kaldate					
27	MGM's Jawaharlal Nehru Engineering College, Aurangabad	Gaurav R. Bhalekar					
28	MGM's Jawaharlal Nehru Engineering College, Aurangabad	Atul V. Dusane					
29	MIT, Aurangabad	Vinod S. Damdhar					
30	MIT, Aurangabad	Suhas Chate					
31	P.E.S. College of Engineering , Aurangabad	Arvind Uttamrao Jadhav					
32	P.E.S. College of Engineering, Aurangabad	Niteen T. Kolambikar					

Title: Faculty development program on Engineering Exploration course
Date: May 14-18, 2018

Sl.No	Institution Name:	Name:	Day 1	Day 2	Day 3	Day 4	Day 5
50	Vignan's Institute of Information Technology, Visakhapatnam	Ch Sekhar	Cshkhar	Cshkhar	Cshkhar	Cshkhar	Cshkhar
51	Vignan's Institute of Information Technology, Visakhapatnam	Nagarjuna Karyemsetty	NK	NK	NK	NK	NK
52	Vignan's Institute of Information Technology, Visakhapatnam	K Srinivas	SK	SK	SK	SK	SK
53	Vignan's Institute of Information Technology, Visakhapatnam	M Hemanta Kumar	HK	HK	HK	HK	HK
54	Vignan's Institute of Information Technology, Visakhapatnam	P.V.Unnikrishnan	U	U	U	U	U
55	Vignan's Institute of Information Technology, Visakhapatnam	R Hanumantha Rao	RHR	RHR	RHR	RHR	RHR
56	Vignan's Institute of Information Technology, Visakhapatnam	B VENKATESH	B	B	B	B	B
57	Rajarambapu Institute of Technology Rajaramnagar, Islampur	Rajanikant A Meti	RAMeti	RAMeti	RAMeti	RAMeti	RAMeti
58	KLE Technological University, Hubballi	Sowmya S Patil	Sowmya	Sowmya	Sowmya	Sowmya	Sowmya
59	KLE Technological University, Hubballi	Rajeshwari M	MRaj	MRaj	MRaj	MRaj	MRaj
60	KLE Technological University, Hubballi	Prasanth Narayankar	Prasanth N	Prasanth N	Prasanth N	Prasanth N	Prasanth N

Title: Faculty development program on Engineering Exploration course

Date: May 14-18, 2018

Sl.No	Institution Name:	Name:	Day1	Day2	Day3	Day4	Days
61	KLE Technological University, Hubballi	Bhagya Sunag	<u>BS</u>	<u>BS</u>	<u>BS</u>	<u>BS</u>	<u>BS</u>
62	KLE Technological University, Hubballi	Doddabasappa Marebal	<u>Dmp</u>	<u>Dmp</u>	<u>Dmp</u>	<u>Dmp</u>	<u>Dmp</u>
63	KLE Technological University, Hubballi	Sushma V	<u>Sushma</u>	<u>Sushma</u>	<u>Sushma</u>	<u>Sushma</u>	<u>Sushma</u>
64	KLE Technological University, Hubballi	B Surendra Reddy	<u>SR</u>	<u>SR</u>	<u>SR</u>	<u>SR</u>	<u>SR</u>

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	Inauguration 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

