

Workshop Invitation to IUCEE Consortium Institutions

WHAT IS THE WORKSHOP FOR?

IUCEE is partnering with MindCrafters to make available to member institutions a novel, exciting programme for their students and faculty. The programme involves creating project leadership teams of engineering students, mentored by faculty, that will work with area grade school students in the middle grades - 3rd to 8th - and form teams to design and execute appropriately scoped projects. Potential benefits to students include **developing useful soft skills and technical skills to complement their formal education**. MindCrafters experts, with extensive experience in the programme, will be available for training the student and faculty teams throughout the programme.

WANT TO LEARN MORE?

A pre-conference workshop has been scheduled on the afternoon before ICTIEE 2020 Conference in Hyderabad. The workshop will be led by Mr. Aditya Bhatnagar, Senior Partner at The MindCrafters, who will be assisted by Mr. Dilip Chemburkar of IUCEE. All aspects of the programme will be covered in detail – including benefits, project management, costs, funding and revenue etc. The workshop will be interactive with opportunities ask questions and get clarifications. **Interested institutions are urged to sign up and attend this workshop.**

AGENDA FOR WORKSHOP

ITEM	DETAILS	FACILITATOR	TIME
INTRODUCTION	<ul style="list-style-type: none">• STEAM values,• Benefits to teacher and taught• takeaways of all stakeholders	Aditya Bhatnagar	30 Minutes
HANDS ON GROUP ACTIVITIES	<ul style="list-style-type: none">• participants will do tiny, engaging group projects and learn• Unusual projects which will whet the appetite• one or two taken from the local environment.	Aditya Bhatnagar assisted by Dilip Chemburkar	90 Minutes
B R E A K			15 Minutes
PROJECT EXAMPLES	<ul style="list-style-type: none">• show casing some actual projects with photographs, findings and some physical examples	Aditya Bhatnagar	45 Minutes
IMPLEMENTATION DETAILS	<ul style="list-style-type: none">• Project Steps• Cost Estimates• Funding/Revenue	Dilip Chemburkar	30 Minutes
QUESTIONS AND ANSWERS	<ul style="list-style-type: none">• Participants ask questions / clarify doubts	All Participants	30 Minutes
SIGN-UP FOR PILOT ADJOURN			

WORKSHOP DETAILS and SIGNUP

WHEN: 5th January 2020 - 2PM

WHERE: Anurag Group of Institutions, Hyderabad

SIGNUP: <mailto:Krishna.Vedula@uml.edu?subject=STEAM EDUCATION WORKSHOP SIGNUP>

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BIOS OF WORKSHOP FACILITATORS



Aditya Bhatnagar is an electronics engineer by profession, having graduated from IIT Delhi in 1977. He has spent more than 30 years in the Electronics manufacturing industry and has worked in discrete semiconductor production, Contract Manufacturing of assemblies for Automotive, Medical and consumer electronics, supplying to GE, Visteon, Continental, Philips etc. He has spent the past 9 years working independently in the field of education, starting with some Technical Universities in the North. He worked in various capacities but mostly as a consultant to enrich the education of engineering as well as humanities students. For the last four years, Aditya has been actively working in the area of STEM education and has taken the meaning, values and methods of STEM education to schools in the North. STEAM has become his passion and he is committed to see this spread in schools. He has done extensive research and experimented on the ground with students of grades 3 to 8 with positive results. The view held by him is that the teaching and teacher have to be creative to engage and excite the minds of students. An ardent believer in hands-on, Aditya has mentored and set up a few Atal Tinkering Labs. The mentorship provided by his team, called the MindCrafters, is valued by all the schools he interacts with. He has been bringing STEAM education to the local Blind school and also to unlettered children in slums in UP.



Prathiba Nagabhushan is an educational psychologist who completed her PhD at the Australian National University in Canberra. She has more than three decades of teaching experience in a variety of educational settings and at different levels of the educational system with diverse students, across a wide range of cultural contexts such as, in India, Mexico and Australia. Prathiba received the Best Research Paper Award for her research on '*Academic Motivation and Engagement: Its Nature and Development in the Final Years of Secondary Education*' at the International Conference on Cognitive-Behaviour Psychology in Singapore. Prathiba's publications include student motivation and engagement in learning, global trends in education and pre-service teachers' emotional well-being. Her current research interests include self-efficacy in students, ICT in education and educational practices and research in engineering education. Prathiba is currently teaching Psychology at St. Mary MacKillop College in Canberra, and English Curriculum and Teaching Methods to MTeach students at the Australian Catholic University, also in Canberra. She is a core member of the Indo-Universal Consortium of Engineering Educators, based in Boston, USA.



Dilip Chemburkar is a retired business executive with more than four decades management experience in the manufacturing and financial services industries. He has a bachelor's degree in Metallurgical Engineering from IIT Bombay and a master's degree in Materials Engineering from Mississippi State University, US. He was granted a [United States Patent for inventing a new electric motor manufacturing process](#). He was certified by General Electric Corporation as a Six Sigma Master Black Belt, specializing in improving business processes. He currently mentors and tutors high school and university students in STEM subjects. Dilip is a member of the Global Industrial Advisory Forum (GIAF) of the Indo Universal Collaboration for Engineering Education (IUCEE). He facilitates the Outcomes Based Education (OBE) cluster of institutions engaged in OBE accreditation.