

MECH VAARTHA

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**DEPARTMENT OF
MECHANICAL ENGINEERING**

**Bapatla Engineering College, Bapatla
522102, Andhra Pradesh, India.**

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Department of Mechanical Engineering

Vision of the Department

"To become a centre of Excellence in producing the graduates as professional Mechanical Engineers with a high-quality education, innovative and entrepreneurial skills to secure the society and industry needs".

Mission of the Department

- To impart high-quality education in curriculum and to build the students in their capacity and enhancing skills to make them globally competitive Mechanical Engineers.
- To prepare the students by providing exceptional academic environment, leadership, ethical guidelines and lifelong learning needed for a long professional career.
- To enhance the overall academic performance of the students gradually and thereby increasing their placement potential.
- To build the institute-industry interaction by providing the internship programs

EVENTS CONDUCTED BY THE DEPARTMENT OF MECHANICAL ENGINEERING

1. A one-day National level webinar was conducted on Recent Advancements in Aluminium and Magnesium Technologies on 4th July 2020 with around 100 participants across India.
2. An online training programme was conducted to the staff of Mechanical Engineering department on the topic “How to Schedule and Conduct online classes via Google Meet & Microsoft Teams” by Dr. D. Sameer Kumar on 1st August 2020.
3. Engineer’s day was conducted on 15th September 2020.

FACULTY ACHIEVEMENTS OF DEPARTMENT OF MECHANICAL ENGINEERING:

1. Dr. P. Ravi Kumar, Dr. T. Nancharaiah, and Dr. D. Sameer Kumar of Mechanical Engineering Department had published a paper in Journal of Xi'an University of Architecture & Technology, Volume No: XII, Issue No: 4, pp 5663- 5668.
2. D.Vijay Praveen of Mechanical Engineering Department had published a book chapter titled "Investigations on Wear Properties of Nickel coated Al₂O₃ reinforced 7075 metal matrix composites using GRA" in Trends in Mechanical and Biomedical Design, Lecture notes in Mechanical Engineering, published by Springer and indexed in Scopus.
3. Sri.S. Ravi Kumar of Mechanical Engineering Department had published a paper titled "Corrosion and tribological behavior of magnesium metal matrix hybrid composites- A review" in AIP Conference Proceedings Volume No: 2259, Issue No: 20018 published by American Institute of Physics and indexed in Scopus.
4. T. Nancharaiah, P. Ravi Kumar & D. Sameer Kumar of Mechanical Engineering Department had published a paper titled "Influence of Canola Oil on The Emission and Performance Characteristics of Four Stroke Diesel Engine as A Bio Fuel" in International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) Volume No: 10, Issue No: 3, pp 7127-7134 published by Transstellar Journal Publications and Research Consultancy Private Limited and indexed in Scopus.
5. Sri.S. Ravi Kumar of Mechanical Engineering Department had published a paper titled "Investigation of Microstructures, Mechanical Properties of AZ91E Hybrid Composite Reinforced with Silicon Carbide and Fly Ash" in SILICON Journal published by Springer and indexed in SCI / SCIE / ESCI.
6. Dr. Ch. Lakshmi Srinivas of Mechanical Engineering Department had published a paper titled "Investigation of the effect of micro-fillers on Viscoelastic and Erosion wear Characteristics of PTFE composites" in Journal of Mechanics of Continua and Mathematical Sciences, Volume No: 15, Issue No:7, pp 696-703 indexed in web of science.
7. Dr. D. Sameer Kumar of Mechanical Engineering Department had published a paper titled "A study on the impact and fatigue failure of AZ91E–Ni coated alumina composites" in Canadian Metallurgical Quarterly Journal with Volume No: 59, Issue No:3 pp 316-323 published by Taylor & Francis and indexed in SCOPUS, SCI / SCIE / ESCI.
8. Sri. S. Krugon of Mechanical Engineering Department had published a paper titled "On the Optimality of Inventory and Shipment Policies in a Two echelon Supply Chain under Trade Credit with Finite Production Rate" in International Journal of Advanced Science and Technology Volume No: 29, Issue No: 7, pp 3583-3599 published by Science and Engineering Research Support Society, Australia and indexed in Scopus.

9. Sri. S. Krugon of Mechanical Engineering Department had published a paper titled “An Integrated Method Using Fuzzy AHP and TOPSIS Method for Supplier Selection in Recycled Lubricating Oil Industry for GSCM” in International Journal of Advanced Science and Technology, Volume No: 29, Issue No: 3, pp 12473 -12480 published by Science and Engineering Research Support Society, Australia and indexed in Scopus.
10. Dr. B. IFTEKHAR HUSSAIN of Mechanical Engineering Department was invited as Resource person to deliver the expert lecture on “From 3D printing to 4D printing: A drone view of Additive Manufacturing Technologies” in a Six day Faculty Development Programme titled "RECENT TRENDS IN FUELS AND MANUFACTURING PROCESS" on 11.8.2020 organized by SRI VENKATESWARA INSTITUTE OF SCIENCE & TECHNOLOGY, KADAPA.
11. Dr. V.V. Kondaiah and Dr .B. Ratna Sunil of Mechanical Engineering Department along with the students had published an Indian patent titled “PRODUCING MICRO-LAMELLAR ZINC ORTHOPEDIC IMPLANTS” with patent application number 202041034166 A.
12. Dr. V.V. Kondaiah and Dr .B. Ratna Sunil of Mechanical Engineering Department along with the students had filed an Indian patent titled “Developing zinc calcium silicate composites for degradable load bearing implants applications” on 16-08-2020 with Application No: 202041035260.
13. Dr .B. Ratna Sunil of Mechanical Engineering Department had filed an Indian patent titled “Developing high wetttable pure titanium bone fixing plate by repetitive ball impacting” on 16-08-2020 with Application No: 202041035262.

WORKSHOPS/SEMINARS/CONFERENCES ATTENDED BY THE FACULTY OF MECHANICAL ENGINEERING DEPARTMENT:

Department	Name of the Event	Title	Faculty Name	Organizers
Mechanical Engineering	Webinar	Personal Branding is a Need to Reach Pinnacle	AANCHUP OGU PRAVEEN	St. Joseph’s Institute of Technology , Chennai
Mechanical Engineering	Module	How to review a manuscript	ANCHUPO GU PRAVEEEN	Elsevier publications
Mechanical Engineering	Webinar	Simulation Driven Design using Altair Hyper works	ANCHUPO GU PRAVEEN	Francis Xavier Engineering College, Tirunelveli
Mechanical Engineering	Webinar	Nanofluids In Solar Energy Utilization	ANCHUPO GU	Francis Xavier Engineering College, Tirunelveli

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Mechanical Engineering	Webinar	Combustion In SI & CI Engines	ANCHUPO GU PRAVEEN	Francis Xavier Engineering College, Tirunelveli
Mechanical Engineering	Webinar	Recent Advancements In Aluminium and Magnesium Technologies	ANCHUPO GU PRAVEEN	Bapatla Engineering College, Bapatla
Mechanical Engineering	Webinar	Numerical Investigation of flow and heat transfer using Nanofluids	ANCHUPO GU PRAVEEN	Francis Xavier Engineering College, Tirunelveli
Mechanical Engineering	Webinar	BIOENERGY: TRANSITION AND TECHNOLOGY	ANCHUPO GU PRAVEEN	Dr. B R Ambedkar National Institute Of Technology, Jalandhar, Punjab
Mechanical Engineering	FDP	Open Foam	ANCHUPO GU PRAVEEN	V.K.R, V.N.b & A.G.K College of Engineering, Gudivada
Mechanical Engineering	Webinar	Processing of Light Metal Alloys and Characterization	ANCHUPO GU PRAVEEN	RAGHU Institute of Technology ,Visakhapatnam
Mechanical Engineering	Webinar	Energy Conservation and Management	ANCHUPO GU PRAVEEN	Francis Xavier Engineering College, Tirunelveli
Mechanical Engineering	Webinar	Robotics in Automotive Industry and its Functional Applications	ANCHUPO GU PRAVEEN	HINDUSTAN College of Engineering and Technology, Coimbatore
Mechanical Engineering	Workshop	Innovation and Intellectual Property Rights Filling	ANCHUPO GU PRAVEEN	Dr. B R Ambedkar National Institute Of Technology, Jalandhar, Punjab
Mechanical Engineering	Webinar	Operation Management- An Overview	ANCHUPO GU PRAVEEN	NRI Institute of Technology , Guntur
Mechanical Engineering	Conference	International Virtual Conference on CO2 and Green Technologies	ANCHUPO GU PRAVEEN	VIT University, Vellore
Mechanical Engineering	Webinar	Invention to Patent Awareness and Strategies	ANCHUPO GU PRAVEEN	St. Joseph's Institute of Technology , Chennai
Mechanical Engineering	FDP	OpenFOAM	CHINTAKRI NDA LEELA	V.K.R.,V.N.B. & A.K.R. College of Engineering

			PRITHVI RAZ	
Mechanical Engineering	FDP	“Five Day Online Faculty Development Program on OpenFOAM”	CHINTAKRI NDA LEELA PRITHVI RAZ	V.K.R,V.N.B & A.G.K. COLLEGE OF ENGINEERING,GUDIVADA,521301
Mechanical Engineering	FDP	Industrial Automation and Robotics	D Narayana Chowdary	DIT University, Dehradun
Mechanical Engineering	FDP	Recent Developments in Mechanical Engineering	D Narayana Chowdary	Prasad V Potluri Siddartha Institute of Technology, Vijayawada
Mechanical Engineering	Conference	Recent Trends in Nano materials synthesis and Applications RTNSA-2020	D.VIJAY PRAVEEN	Madanapalli institute of Technology and Sciences, Madanapalli
Mechanical Engineering	Webinar	One day National Level Student’s Development Programme	Dr BEPORAM IFTEKHAR HUSSAIN	St. Xavier’s College, Mahuadanr, Jharkhand
Mechanical Engineering	Webinar	Recent advances is Aluminum and Magnesium technologies	Dr Vemula Venkata Kondaiah	Bapatla Engineering College, Bapatla Guntur. Andhra Pradesh-501 102
Mechanical Engineering	Webinar	A Practical Approach on Industry 4.0 & it’s Implementation in	Dr Vemula Venkata Kondaiah	Mahatma Gandhi institute of technology, Kokapeta, Hyderabad, Telangana-500075
Mechanical Engineering	Webinar	Effect of rare earth oxide on cyclic oxidation & Hot corrosion behavior of detonation-gun sprayed NiCrAlY+0.4 wt%CeO2 coating	Dr Vemula Venkata Kondaiah	Sathupally, Khammam, Telangana-507303
Mechanical Engineering	FDP	Advanced research traits in materials & Design of mechanical Systems	Dr Vemula Venkata Kondaiah	Department of Mechanical Engineering, VFSTR Deemed to be university, Vadlamudi, Guntur, A.P
Mechanical Engineering	Webinar	National Level Webinar on Recent Trends In	Dr. B. IFTEKHAR HUSSAIN	K. J. Somaiya Institute of Engineering and Information Technology (KJSIEIT), Sion,

		Autonomous Robots		Mumbai.
Mechanical Engineering	Webinar	Technical webinar on the topic "Testing Of Internal Combustion Engines"	Dr. B. IFTEKHAR HUSSAIN	Francis Xavier Engineering College (An Autonomous Institution), Tirunelveli, Tamil Nadu, India.
Mechanical Engineering	Webinar	Webinar titled "Electric Vehicle Technology"	Dr. B. IFTEKHAR HUSSAIN	Kalasalingam Academy of Research and Education (Deemed to be University), Krishnankoil, Tamilnadu.
Mechanical Engineering	Webinar	One Day Online Webinar on "A Practical Approach on Industry 4.0 & it's Implementation in Smart Factories"	Dr. B. IFTEKHAR HUSSAIN	Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad-500075 and MTAB Technology Centre, Chennai.
Mechanical Engineering	FDP	Five Day Online Faculty Development Programme titled "Research Methodologies in Mechanical Engineering (A Refresher Approach)"	Dr. B. IFTEKHAR HUSSAIN	Narsimha Reddy Engineering College, Hyderabad
Mechanical Engineering	QUIZ	AutoQuiz	Dr. B. IFTEKHAR HUSSAIN	Mechbix
Mechanical Engineering	QUIZ	National level quiz on AI and ROBOTICS	Dr. B. IFTEKHAR HUSSAIN	Holy Mary Institute of Technology and Science, Hyderabad
Mechanical Engineering	QUIZ	Quiz on Thermal Engineering-1	Dr. B. IFTEKHAR HUSSAIN	Nadimpalli Satyanarayana Raju Institute of Technology, Visakhapatnam - 531173, Andhra Pradesh, India
Mechanical Engineering	FDP	Five Day Online Faculty Development Programme titled "Research Methodologies in Mechanical Engineering (A Refresher Approach)"	Dr. B. IFTEKHAR HUSSAIN	Narsimha Reddy Engineering College, Hyderabad
Mechanical Engineering	Webinar	Webinar entitled "Challenges and Opportunities in	Dr. B. IFTEKHAR HUSSAIN	Sri Ramakrishna Engineering College, Coimbatore

		Robotics and Automation".		
Mechanical Engineering	Webinar	One Day Online Webinar on "Revised Bloom's Taxonomy (A Refresher Approach)"	Dr. B. IFTEKHAR HUSSAIN	Narsimha Reddy Engineering College, Secunderabad
Mechanical Engineering	Webinar	One Week Short term training programme on "Learning Management System: MOODLE"	Dr. B. IFTEKHAR HUSSAIN	NIT Warangal, Warangal-506004, Telangana
Mechanical Engineering	FDP	One Week Online Faculty Development Programme on Advanced Research Traits on Materials & Design of Mechanical Systems	Dr. B. IFTEKHAR HUSSAIN	V F S T R University, Vadlamudi, Guntur Andhra Pradesh - 522 213
Mechanical Engineering	QUIZ	An awareness Quiz on Intellectual Property Rights	Dr. B. IFTEKHAR HUSSAIN	BAPATLA ENGINEERING COLLEGE, BAPATLA, ANDHRA PRADESH
Mechanical Engineering	FDP	A SIX Day Faculty Development Programme on "RECENT TRENDS IN FUELS AND MANUFACTURING PROCESS"	Dr. B. IFTEKHAR HUSSAIN	SRI VENKATESWARA INSTITUTE OF SCIENCE & TECHNOLOGY, KADAPA
Mechanical Engineering	Seminar	Two-Day Global Virtual Seminar Series on "EXCITING ADVANCES IN MANUFACTURING AUTOMATION-2020" (Fabrication, Monitoring, Sensors, Materials, Characterisation and Applications) by esteemed resource person Prof.Navin Kumar, IIT Ropar, Ropar, INDIA	Dr. B. IFTEKHAR HUSSAIN	GITAM Deemed To Be University, Visakhapatnam-530045

Mechanical Engineering		Two-Day Global Virtual Seminar Series on “EXCITING ADVANCES IN MANUFACTURING AUTOMATION-2020” (Fabrication, Monitoring, Sensors, Materials, Characterisation and Applications) by esteemed resource person Dr.Arvid UD, Dental Surgeon, Hyderabad, India	Dr. B. IFTEKHAR HUSSAIN	GITAM Deemed To Be University, Visakhapatnam-530045
	Seminar			
Mechanical Engineering		Two-Day Global Virtual Seminar Series on “EXCITING ADVANCES IN MANUFACTURING AUTOMATION-2020” (Fabrication, Monitoring, Sensors, Materials, Characterisation and Applications) by esteemed resource person Dr. Faiz Bin Mohd Turan, University PAHANG, Malaysia	Dr. B. IFTEKHAR HUSSAIN	GITAM Deemed To Be University, Visakhapatnam-530045
	Seminar			
Mechanical Engineering		Two-Day Global Virtual Seminar Series on “EXCITING ADVANCES IN MANUFACTURING AUTOMATION-2020” (Fabrication, Monitoring, Sensors, Materials, Characterisation and Applications) by esteemed resource	Dr. B. IFTEKHAR HUSSAIN	GITAM Deemed To Be University, Visakhapatnam-530045
	Seminar			

		person Prof. K.Venkata Rao, VIGNAN DEEMED UNIVERSITY, Guntur, INDIA		
Mechanical Engineering	Webinar	Online webinar on “INNOVATIVE MATERIALS FOR AUTOMOBILE APPLICATIONS”	Dr. B. IFTEKHAR HUSSAIN	Kuppam Engineering College, Kuppam
Mechanical Engineering	FDP	AICTE sponsored One Week Online Short Term Training Program on “Recent Advances in Materials and Manufacturing: Part II”	Dr. B. IFTEKHAR HUSSAIN	Gayatri Vidya Parishad College of Engineering (Autonomous), Visakhapatnam
Mechanical Engineering	Webinar	Online webinar on “INNOVATIVE MATERIALS FOR AUTOMOBILE APPLICATIONS”	Dr. B. IFTEKHAR HUSSAIN	Kuppam Engineering College, Kuppam
Mechanical Engineering	Webinar	Webinar titled “Education 4.0: Industry 4.0”	Dr. B. IFTEKHAR HUSSAIN	Vellore Institute of Technology (Chennai Campus), Chennai
Mechanical Engineering	Webinar	Webinar titled “Education 4.0: 3D Printing”	Dr. B. IFTEKHAR HUSSAIN	Vellore Institute of Technology (Chennai Campus), Chennai
Mechanical Engineering	Webinar	Webinar titled “Education 4.0: Design Thinking”	Dr. B. IFTEKHAR HUSSAIN	Vellore Institute of Technology (Chennai Campus), Chennai
Mechanical Engineering	Webinar	Webinar titled “Education 4.0: Smart Manufacturing”	Dr. B. IFTEKHAR HUSSAIN	Vellore Institute of Technology (Chennai Campus), Chennai
Mechanical Engineering	Webinar	National Webinar Series on "Recent Innovations in Mechanical Engineering_2020" with expert talk on "Multiphysics simulations using ANSYS"	Dr. B. IFTEKHAR HUSSAIN	VFSTR (Deemed to be University), Vadlamudi, Guntur Andhra Pradesh - 522 213
Mechanical Engineering	Webinar	National Webinar	Dr. B.	VFSTR (Deemed to be

Engineering		Series on "Recent Innovations in Mechanical Engineering_2020" with expert talk on "Innovative Applications of 3D Printing"	IFTEKHAR HUSSAIN	University), Vadlamudi, Guntur Andhra Pradesh - 522 213
Mechanical Engineering		National Webinar Series on "Recent Innovations in Mechanical Engineering_2020" with expert talk on "Advanced Applications of 3D Printing Technologies"		
	Webinar		Dr. B. IFTEKHAR HUSSAIN	VFSTR (Deemed to be University), Vadlamudi, Guntur Andhra Pradesh - 522 213
Mechanical Engineering		National Webinar Series on "Recent Innovations in Mechanical Engineering_2020" with expert talk on "Vibration based Tool Condition Monitoring"		
	Webinar		Dr. B. IFTEKHAR HUSSAIN	VFSTR (Deemed to be University), Vadlamudi, Guntur Andhra Pradesh - 522 213
Mechanical Engineering		National Webinar Series on "Recent Innovations in Mechanical Engineering_2020" with expert talk on "CFD using Finite Volume Method with simulation in ANSYS"		
	Webinar		Dr. B. IFTEKHAR HUSSAIN	VFSTR (Deemed to be University), Vadlamudi, Guntur Andhra Pradesh - 522 213
Mechanical Engineering		National Webinar Series on "Recent Innovations in Mechanical Engineering_2020" with expert talk on "Fluidization techniques for deagglomeration of		
	Webinar		Dr. B. IFTEKHAR HUSSAIN	VFSTR (Deemed to be University), Vadlamudi, Guntur Andhra Pradesh - 522 213

		nanopowders”		
Mechanical Engineering	Webinar	One Day National Level Webinar On “3D PRINTING DESIGN AND APPLICATION”	Dr. B. IFTEKHAR HUSSAIN	Anantrao Pawar College of Engineering & Research, Pune in association with 3Dexter Education Pvt. Ltd., Delhi.
Mechanical Engineering	FDP	TEQIP-III Sponsored one-week online Faculty Development Programme (FDP) on “Recent Advancement of Materials and it’s Application (RAMA-2020)	Dr. B. IFTEKHAR HUSSAIN	Veer Surendra Sai University of Technology (VSSUT), Burla, Odisha.
Mechanical Engineering	FDP	AICTE AQIS Sponsored Short Term Training Program on “Advances in Additive Manufacturing”	Dr. B. IFTEKHAR HUSSAIN	Yeshwantrao Chavan College of Engineering, Nagpur
Mechanical Engineering	FDP	AICTE Training And Learning (ATAL) Academy Online FDP on "Cyber-physical production Systems"	Srinivasulu Varadhineni	National Institute of Technology Andhra Pradesh