Vardhaman College of Engineering Department of Mechanical Engineering YANTRIK News letter

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About the Department

Engineering advancements happening in the world's workshop, so with the standard of engineering consistently rising, mechanical engineering is creating ripples in the technology world.

The department is established in the year 2006 with an intake of 60 and the number is increased upto 90 in 2009 and 120 in 2013. The department is headed by Dr .B.Subbaratnam. Mechanical Engineering is a fast growing discipline in tune with the demands in the core areas of infrastructure and Manufacturing.

Vision of the Department

To be a premier center for producing competent mechanical engineers to cater the ever changing industrial demands and societal needs.

Mission of the Department

- To impart knowledge and skills in basic and applied areas of Mechanical Engineering through innovative learner-centric approach.
- To associate with industries and research organizations for gaining real time practical knowledge.
- To facilitate continuous learning based on dynamic needs of the society.

Program Educational Objectives (PEOs)

- Graduates make their way to the society with proper scientific and technical knowledge to identify, formulate and solve Mechanical Engineering problems.
- Graduates adapt to rapidly changing environment in the areas of Mechanical Engineering and explore possible profession in industry, academic, research and self-employment opportunities.
- Graduates excel in career by their team-working ability and communicate effectively to complete task with minimal resources.
- Graduates commit to professional and ethical practices encouraging diversity, continuous improvement and lifelong learning.

Program Specific Outcomes (PSOs)

- Demonstrate knowledge in the area of design, analysis and fabrication of mechanical systems.
- Apply learned concepts and management skills to associate professionally in industry or as an entrepreneur.

About MESA (Mechanical Engineering Student Association)



MESA (Mechanical Engineering Student Association) is a student organization for conducting career developing, interpersonal and intrapersonal skills for students. It organizes Seminars, Quiz Programmes, Industrial Visits, Paper Contests, Group Discussions, Guest Lectures, Career Guidance etc under its auspices. The students are encouraged to present papers and participate in seminars conducted in IITs, NITs and other engineering colleges. Industrial tours are arranged for students to familiarize exposure to industries.

Student Articles

PINNACLE ENGINES PARTNERS WITH INDIA'S GREAVES COTTON ON NEW LOW-EMISSIONS OP ENGINE

Indian engine- and equipment-maker Greaves Cotton Ltd. and U.S.-based Pinnacle Engines Inc. recently announced a technology partnership for the launch of an opposed-piston (OP), spark-ignited CNG lean-burn BS VI-compliant engine for three-wheelers in India. This move is said to make India one of the lead markets to adopt this technology. The Indian government's Bharat Stage VI emissions regulations are expected to be adopted by late 2020. The transition to BS VI requires three-wheeler OEMs in India to significantly upgrade their emissions-control technology. Through the new partnership, Greaves Cotton will have access to export markets with a large three-wheeler population. With Pinnacle's fourstroke, sleeve-valve, opposed- piston design, Greaves aims to offer BS VI-compliant highpower and fuel-efficiency engines with lower maintenance cost. This partnership enables Greaves, claimed to be the market leader in diesel engines for three-wheelers, to enter the larger threewheeler gasoline/CNG space. Pinnacle Engines holds over 170 patents related to its opposed-piston engine architecture and electronic controls. "Greaves has been a dominant player in the 'last-mile' transport segment with our range of diesel engines for a large number of automotive OEMs," said Nagesh Basavanhalli, Managing Director and CEO, Greaves Cotton Ltd., in a statement. "The opposed-piston technology has been designed, developed and evolved by the Pinnacle Engines team to give class-leading fuel economy at the right cost, enabling best-inclass total cost of ownership for the end customer."



Pinnacle's sleeve-valve, opposed piston four stroke engine addresses the challenges of fuel economy and increasingly stringent emissions regulations for three-wheeler OEMs in India. It also opens new overseas markets for both Pinnacle and Greaves Cotton, the companies said. (Image: Pinnacle Engines)

Labchand Bhati, IV Year

PARTICIPATION OF STUDENTS IN INTER INSTITUTE EVENTS

Name of the student	Event	Organized and Venue	Date	
Rechu Abhilash Reddy	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
J Abhishek	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Geddam Aditya Nagendra Bhargav	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Sunkari Ajith	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
P Akhil Chary	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Goli Akhil Kumar	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Ganganaboyina Akhilesh	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Gandla Akshay Kumar	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Habeeb Ali	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Madugolu Anil Kumar	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Jonnalagadda Sai Sashank	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Bala Sai Vivek	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Samala Saiakhil	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Kunaparaju Saichandra Kaladhar	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Karangala Saikiran	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
P Samhitha Reddy	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Puvvada Sampath Kumar	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Mula Santhoshi	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Y Sarvesh Kumar	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	
Shaik Shajid Basha	Anna Fest 2017	KITS , AP	8 th -9 th September 2017	

PRIZES AND AWARDS RECEIVED BY THE STUDENTS

Name of the Student	Event	Organized	Position	Date
Jonnalagadda Sai Sashank	Anna Fest 2017	KITS , AP	Third	8 th -9 th September 2017
Bala Sai Vivek	Anna Fest 2017	KITS , AP	Second	8 th -9 th September 2017
Samala Saiakhil	Anna Fest 2017	KITS , AP	Third	8 th -9 th September 2017

PARTICIPATION OF STUDENTS IN INTER INSTITUTE EVENTS

Name of the student	Event	Organized and Venue	Date	
Gogikar Rohit	Research Workshop	IIIT, Hyderabad	26 th -27 th August 2017	
Mudda Durga Bhavani	Robokart	VBIT, Hyderabad	20-21 st Sep,2017	
D Sampada Reddy 3 rd Annual Cyber Security Summit		Sytech Labs, Hyderabad	8 th October 2017	
M Madhu Kumar	3 rd Annual Cyber Security Summit	Sytech Labs, Hyderabad	8 th October 2017	

PLACEMENTS:

S. No.	Name of the student placed	Enrollment No.	Name of the Employer	Appointment letter reference no. with date
1	Madugolu Anil Kumar	13881A0310	Rotodyne	RES/HR/ET/2017 Dated 10.08.2017
2	Peddinti Kiran	13881A0337	Cognizant	Process Excutive Dated 06.03.2018
3	Pathipaka Kishore	13881A0338	Ark Info Solutions	Graduate Engineer Trainee Dated 25.05.2017
4	Kaushal Kumar	13881A0340	Rotodyne	RES/HR/ET/2017 Dated 10.08.2017
5	Nanda Kishore Pullela	13881A0352	Air Force	M-AFCAT(345)345 Dated 29.12.2017
6	Karangala Saikiran	13881A0386	Rotodyne	RES/HR/ET/2017 Dated 10.08.2017
7	J Vikas Goud	13881A03B6	Tech Mahindra	696645/1476628/ELTP Dated 07.04.2018
8	M Vikram Naik	13881A03B7	Power Mech	PM/CO/HR/F.NO.703/17- 18/16 Dated 14.12.2016
9	Chikkam Yashwanth	13881A03C0	Rotodyne	RES/HR/ET/2017 Dated 10.08.2017
10	Budde Kishore	14885A0304	Rotodyne	RES/HR/ET/2017 Dated 10.08.2017
11	Besta Sandeep Kumar	14885A0318	Rotodyne	RES/HR/ET/2017 Dated 10.08.2017

PAPERS PUBLISHED BY FACULTY

- Kanna AshokReddy, K.Sandeep Kumar, K. Raja Sekhar Reddy, V.V.S. Harnadh Prasad, G. Arun Reddy, A critical review materials for aerospace and cryoge of composite buildings, thermal,cryogenic applications, International Journal of Civil Engineering and Technology, Vo. 8(7), July 2017, pp.789.800.
- M. Ashok Kumar, K. Deepak, B. Subramanyam, "Influence of Fiber Orientation on the Properties of Composites", International Journal of Mechanical and Production Engineering Research and Development, ISSN (Print): 2249-6890 ISSN (Online): 2249-8001, Vol.7-6, December 2017.
- **T.Vijaya Babu**, J.S Soni and S. Ajaya Kumar , An experimental investigation of machining parameters on elctrical discharge machining of m-250 (maraging) steels,2016, International Journal of Engineering Sciences & Research Technology, Vol-5(12),pp. 55-60.
- **Deepak K,** Gupta A.V.S.S.K.S. and Srinivas T, "Comparative Study of Augmentation in Low Temperature Kalina Cycle Systems" International Journal of Application of Engineering and Technology, ISSN:2395-3594, vol.2-3, pp. 211-216,

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- **T.Vijaya Babu** and Dr.J.S Soni , B Sures Kumar, S. Ajaya Kumar Electrical Discharge Machining (EDM): A Review ,2016, International Journal of Engineering Trends and Technology (IJETT),Vol-40(6), pp. 371-375.
- Sharma, Rakesh and **K, Deepak**, Thermoelectric refrigerator with patterned air flow arrangement, 2016, International Journal of Research in Engineering and Technology, Vol-5(12), pp. 43-46.
- **T.Vijaya Babu**, S.Ajaya kumar and J.S Soni , Multi Response Optimization of Wire-EDM Process Parameters of Aluminum Alloy 6063 using Taguchi method , 2017,International Journal of current Engineering and technology (IJCET) Vol-7(3) , pp. 1040-1045.
- Reddy, B V., M, Vishnu Vardhan and H Jeevan Rao, Axiomatic design for process planning in injection moulding process, 2016, International Journal of Advanced Technology in Engineering Science, Vol-4(8), pp. 223-231.

Faculty achievements:

• Dr.B.Subbaratnam , Received "Research excellence award –2017 "from Institute for exploring advances in engineering (IEAE) .

Participation of Faculty in FDP/STTPS/Workshops/Guest Lectures

S. No	Name of faculty	Title of Event	Seminar/FD P STTPs/ Workshop Attended	Venue	Period	No. of Days	Facult y Attend ed	Relevanc y Of Training Program
1	Dr. S. Venu kumar	GIAN	Workshop	IIT- MADRAS	11 th - 15 th Dec - 2017	05	01	Productio n Technolog y
2	E. Manoj Kumar	Rapid Casting Techniques	FDP	GNIT Hyderab ad	27 th No v-09 th Dec - 2017	12	01	Productio n Technolog y
3	Dr. Vijayababu	Rapid Casting Techniques	FDP	GNIT Hyderab ad	27 th No v-09 th Dec - 2017	12	01	Productio n Technolog y
4	Dr. Subbaratn am	Rapid Casting Techniques	FDP	GNIT Hyderab ad	27 th No v-09 th Dec - 2017	12	01	Productio n Technolog y
5	Dr. S.S.Harish	GIAN	Workshop	IIT- MADRAS	09 th - 13 th Oct - 2017	05	01	Heat Transfer

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6	G.Ravi Chandra	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
7	M.Vishnu Vardhan	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
8	S.Maruthi Gangadhar	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
9	V. Anil Kumar	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
10	Seshappa	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
11	J. Anoop Joshi	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
12	S. Naresh Kumar	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
13	K. Sai Ram	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
14	Dr.T. Vijaya Babu	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM
15	D. V. Ramana Reddy	AUTODESK INVENTOR	FDP	VCE	04 th - 08 th Jul- 2017	05	01	CAD/CAM

Editorial Members

Newsletter Designations	Name of the Faculty/ Student			
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