YANTRA NEWSLETTER

DEC– FEB 2021-22

Volume-3

At a Glimpse

- POs,PSOs,PEOs
- Student Training Programmes
- Student Technical Events
- Faculty Publications
- NPTEL Certifications
- Faculty as Resource Person
- Batch Toppers

ABOUT MECHANICAL DEPARTMENT

Mechanical engineers develop state-of-the-art technologies and exhilarating solutions for the mankind. We attempt to provide our students with a cheerful, productive and satisfying experience at all levels of their program of studies to explore the amazing world of mechanical engineering. The department has secured high repute through its quality of teaching, infrastructure & equipment. Teaching has been rendered by highly qualified and experienced faculty with good publications in reputed journals. The department is recognized as a research centre by JNTUK, Kakinada for pursuing Ph.D. programme in Mechanical Engineering. The department has spacious laboratories and well equipped with experimental set-ups as per the requirement of the curriculum. The faculty are very active and encourage the students in fabricating real models viz., Go-kart, Robots, Solar based vehicles and other working models, which are very useful in day-to-day life and teach students with live examples.

Vision

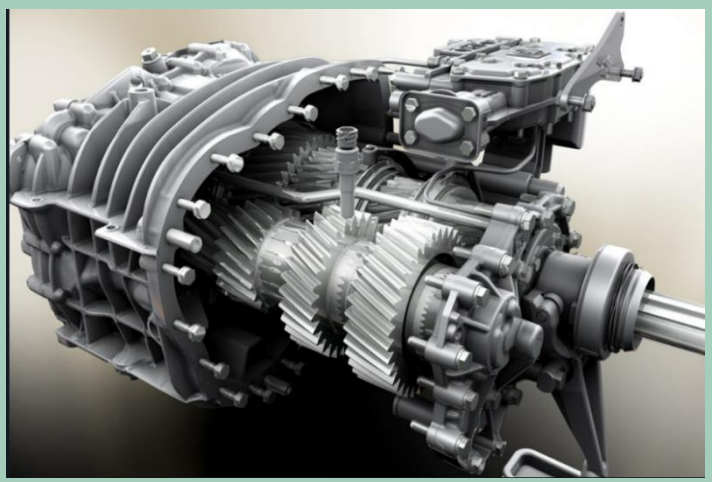
To be a center of excellence in Mechanical Engineering education and research

Mission

To promote trainings with institutional association

To provide skill-based education with focus on Automotive

To promote innovative ideas through creativity and leadership quality



Programme Outcomes (POs)

1. ENGINEERING KNOWLEDGE: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. PROBLEM ANALYSIS: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. DESIGN/DEVELOPMENT OF SOLUTIONS: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. MODERN TOOL USAGE: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

6. THE ENGINEER AND SOCIETY: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. ENVIRONMENT AND SUSTAINABILITY: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. ETHICS: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. INDIVIDUAL AND TEAM WORK: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. COMMUNICATION: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, give and receive clear instructions.

11. PROJECT MANAGEMENT AND FINANCE: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one’s own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. LIFE-LONG LEARNING: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Programme Specific Outcome (PSOs)

PSO1: Mechanical Engineers must be able to analyze, design and evaluate mechanical components and systems using cutting edge software tools as required by the industries from time to time.

PSO2: The ability to work in manufacturing and other sectors operations and maintenance plants.

PSO3: As part of a team or individually, plan and manage activities in micro, small, medium and large enterprise.

Programme Educational Objectives

PEO1: Learn the principles of applied and fundamental engineering sciences that are required to formulate and solve problems in Mechanical Engineering.

PEO2: Exhibit technical skills in solving real world problems using emerging technologies considering societal, technological and business challenges

PEO3: Work effectively as individuals and as team members in multidisciplinary projects.

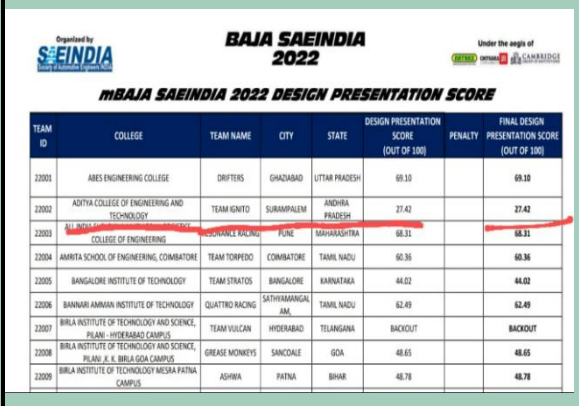
PEO4: Engage in professional practice with ethical values and attitude of lifelong learning.

Student Training Programmes

To improve communication skills of stuents a training program has been conducted on Improvement of language and communication skills

Student Technical Events

Students have successfully participated and cleared in virtual phase 2 round of BAJASAE INDIA, this round involves CAE evaluation Manufacturing plan Estimation cost IPG CAR Maker Design, brake, ac



BAJA SAEINDIA 2022

mBAJA SAEINDIA 2022 DESIGN PRESENTATION SCORE

TEAM ID	COLLEGE	TEAM NAME	CITY	STATE	DESIGN PRESENTATION SCORE (OUT OF 100)	PENALTY	FINAL DESIGN PRESENTATION SCORE (OUT OF 100)
22001	ABES ENGINEERING COLLEGE	DRIFTERS	GHAZIABAD	UTTAR PRADESH	69.10		69.10
22002	ADITYA COLLEGE OF ENGINEERING AND TECHNOLOGY	TEAM IGNITO	SURAMPALEM	ANDHRA PRADESH	27.42		27.42
22003	[illegible] COLLEGE OF ENGINEERING	[illegible] RACING	PUNE	MAHARASHTRA	68.31		68.31
22004	AMRITA SCHOOL OF ENGINEERING, COIMBATORE	TEAM TORPEDO	COIMBATORE	TAMIL NADU	60.36		60.36
22005	BANGALORE INSTITUTE OF TECHNOLOGY	TEAM STRATOS	BANGALORE	KARNATAKA	44.02		44.02
22006	BANNARI AMMAN INSTITUTE OF TECHNOLOGY	QUATTRO RACING	SATHYAMANGALAM,	TAMIL NADU	62.49		62.49
22007	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI - HYDERABAD CAMPUS	TEAM VULCAN	HYDERABAD	TELANGANA	BACKOUT		BACKOUT
22008	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, K. K. BIRLA GOA CAMPUS	GREASE MONKEYS	SANCOALE	GOA	48.65		48.65
22009	BIRLA INSTITUTE OF TECHNOLOGY MESRA PATNA CAMPUS	ASHWA	PATNA	BIHAR	48.78		48.78

BAJA SAEINDIA 2022

mBAJA SAEINDIA 2022 SALES PRESENTATION SCORE

TEAM ID	COLLEGE	TEAM NAME	CITY	STATE	SALES PRESENTATION SCORE (OUT OF 50)	PENALTY	FINAL SALES PRESENTATION SCORE (OUT OF 50)
22001	ABES ENGINEERING COLLEGE	DRIFTERS	GHAZIABAD	UTTAR PRADESH	33.15		33.15
22002	ADITYA COLLEGE OF ENGINEERING AND TECHNOLOGY	TEAM IGNITO	SURAMPALEM	ANDHRA PRADESH	39.00		39.00
22003	[illegible] OF ENGINEERING	[illegible] RACING	PUNE	MAHARASHTRA	37.42		37.42
22004	AMRITA SCHOOL OF ENGINEERING, COIMBATORE	TEAM TORPEDO	COIMBATORE	TAMIL NADU	32.40		32.40
22005	BANGALORE INSTITUTE OF TECHNOLOGY	TEAM STRATOS	BANGALORE	KARNATAKA	33.48		33.48
22006	BANNARI AMMAN INSTITUTE OF TECHNOLOGY	QUATTRO RACING	SATHYAMANGALAM, ERODE(DISTRICT),	TAMIL NADU	22.50		22.50
22007	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI - HYDERABAD CAMPUS	TEAM VULCAN	HYDERABAD	TELANGANA	BACKOUT		BACKOUT
22008	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, K. K. BIRLA GOA CAMPUS	GREASE MONKEYS	SANCOALE	GOA	40.50		40.50
22009	BIRLA INSTITUTE OF TECHNOLOGY MESRA PATNA CAMPUS	ASHWA	PATNA	BIHAR	32.64		32.64
22010	BIRLA INSTITUTE OF TECHNOLOGY, MESRA	FIREBOLT RACING TEAM	RANCHI	JHARKHAND	45.84		45.84

SAE BAJA

Organized by SAEINDIA Society of Automotive Engineers INDIA — Under the aegis of

BAJA SAEINDIA 2022

mBAJA SAEINDIA 2022 COST PRESENTATION SCORE

TEAM ID	COLLEGE	TEAM NAME	CITY	STATE	COST PRESENTATION SCORE (OUT OF 50)	PENALTY	FINAL COST PRESENTATION SCORE (OUT OF 50)
22001	ABES ENGINEERING COLLEGE	DRIFTERS	GHAZIABAD	UTTAR PRADESH	25.48	5.00	20.48
22002	ADITYA COLLEGE OF ENGINEERING AND TECHNOLOGY	TEAM IGNITO	SURAMPALEM	ANDHRA PRADESH	19.80		19.80
22003	[illegible] COLLEGE OF ENGINEERING	RESONANCE RACING	[illegible]	[illegible]	[illegible]		29.34
22004	AMRITA SCHOOL OF ENGINEERING, COIMBATORE	TEAM TORPEDO	COIMBATORE	TAMIL NADU	29.05		29.05
22005	BANGALORE INSTITUTE OF TECHNOLOGY	TEAM STRATOS	BANGALORE	KARNATAKA	18.00		18.00
22006	BANNARI AMMAN INSTITUTE OF TECHNOLOGY	QUATTRO RACING	SATHYAMANGALAM, ERODE(DISTRICT).	TAMIL NADU	24.74		24.74
22007	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI - HYDERABAD CAMPUS	TEAM VULCAN	HYDERABAD	TELANGANA	BACKOUT		BACKOUT
22008	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI ,K. K. BIRLA GOA CAMPUS	GREASE MONKEYS	SANCOALE	GOA	26.04		26.04
22009	BIRLA INSTITUTE OF TECHNOLOGY MESRA PATNA CAMPUS	ASHWA	PATNA	BIHAR	30.64		30.64
22010	BIRLA INSTITUTE OF TECHNOLOGY, MESRA	FIREBOLT RACING	RANCHI	JHARKHAND	33.52		33.52
22011	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

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BAJA SAEINDIA 2022

mBAJA SAEINDIA 2022 MANUFACTURING PRESENTATION SCORE

TEAM ID	COLLEGE	TEAM NAME	CITY	STATE	MANUFACTURING PRESENTATION SCORE (OUT OF 50)	PENALTY	FINAL MANUFACTURING PRESENTATION SCORE (OUT OF 50)
22001	ABES ENGINEERING COLLEGE	DRIFTERS	GHAZIABAD	UTTAR PRADESH	29.87		29.87
22002	ADITYA COLLEGE OF ENGINEERING AND TECHNOLOGY	TEAM IGNITO	SURAMPALEM	ANDHRA PRADESH	25.49		25.49
22003	ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY'S COLLEGE OF ENGINEERING	RESONANCE RACING	PUNE	MAHARASHTRA	41.25		41.25
22004	AMRITA SCHOOL OF ENGINEERING, COIMBATORE	TEAM TORPEDO	COIMBATORE	TAMIL NADU	27.63		27.63
22005	BANGALORE INSTITUTE OF TECHNOLOGY	TEAM STRATOS	BANGALORE	KARNATAKA	34.09		34.09
22006	BANNARI AMMAN INSTITUTE OF TECHNOLOGY	QUATTRO RACING	SATHYAMANGALAM, ERODE(DISTRICT).	TAMIL NADU	30.55		30.55
22007	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI - HYDERABAD CAMPUS	TEAM VULCAN	HYDERABAD	TELANGANA	BACKOUT		BACKOUT
22008	BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI ,K. K. BIRLA GOA CAMPUS	GREASE MONKEYS	SANCOALE	GOA	33.34		33.34
22009	BIRLA INSTITUTE OF TECHNOLOGY MESRA PATNA CAMPUS	ASHWA	PATNA	BIHAR	29.99		29.99
22010	BIRLA INSTITUTE OF TECHNOLOGY, MESRA	FIREBOLT RACING	RANCHI	JHARKHAND	37.29		37.29

Faculty Publications

Dr P Daniah has published in Scopus indexed journal paper entitled **Renewable Energy Systems for Machine Learning.** International Journal of Mechanical engineering	
Dr P Gangadhar rao has published in scopus indexed journal, paper entitled **Design and Optimization of 200 Ton H- Type Hydraulic Press** in E3S web of conferences	
Dr Akilesh Kumar Singh has published in Scopus indexed journal paper entitled **Thermal analysis of Laser welding of Grade 91 steel**. Materials Today: Proceedings.	

NPTEL Certification

Elite

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

P V S MURALIKRISHNA

for successfully completing the course

Fluid Machines

with a consolidated score of 70 %

Online Assignments	21.79/25	Proctored Exam	48/75

Total number of candidates certified in this course: 89

Prof. G P Raja Sekhar, Dean, Continuing Education, IIT Kharagpur

Aug-Oct 2021 (8 week course)

Prof. Debjani Chakraborty, Coordinator, NPTEL, IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No:NPTEL21ME75S14410150

To validate and check scores: https://nptel.ac.in/noc

Elite

TOPPER

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

DR NITLA STANLEY EBENEZER

for successfully completing the course

Theory of Production Processes

with a consolidated score of 69 %

Online Assignments	22.81/25	Proctored Exam	46.5/75

Total number of candidates certified in this course: 71

Prof. V. C. Srivastava, Coordinator, Continuing Education Centre, IIT Roorkee

Jul-Oct 2021 (12 week course)

Prof. Priti Maheshwari, NPTEL Coordinator, IIT Roorkee

Indian Institute of Technology Roorkee

swayam

Roll No:NPTEL21ME88S44590546

To validate and check scores: https://nptel.ac.in/noc

Elite

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

SATYA SURYA PRAKASH VINNAKOTA

for successfully completing the course

Foundations of Cognitive Robotics

with a consolidated score of 63 %

Online Assignments	25/25	Proctored Exam	37.5/75

Total number of candidates certified in this course: 154

Prof. Rajesh M.Hegde, Chairman, Centre for Continuing Education, IIT Kanpur

Jul-Aug 2021 (4 week course)

Prof. Satyaki Roy, NPTEL Coordinator, IIT Kanpur

Indian Institute of Technology Kanpur

swayam

Roll No:NPTEL21ME100S24300189

To validate and check scores: https://nptel.ac.in/noc

Elite

NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

GOLLAPALLI VEERA SATYA SRINIVAS

for successfully completing the course

Fluid Machines

with a consolidated score of 60 %

Online Assignments	22.33/25	Proctored Exam	37.5/75

Total number of candidates certified in this course: 89

Prof. G P Raja Sekhar, Dean, Continuing Education, IIT Kharagpur

Aug-Oct 2021 (8 week course)

Prof. Debjani Chakraborty, Coordinator, NPTEL, IIT Kharagpur

Indian Institute of Technology Kharagpur

swayam

Roll No:NPTEL21ME75S14410181

To validate and check scores: https://nptel.ac.in/noc

Faculty acted as resource person

Certificate of Appreciation

THIS CERTIFICATE IS PROUDLY AWARDED TO

Assoc. Prof. Akhilesh Kumar Singh

This is to certify that Assoc. Prof. Akhilesh Kumar Singh has participated in the 2021 6th International Conference on Modern Machinery Manufacturing and Materials Engineering (IC4ME 2021) on 26th Nov, 2021 as one of the keynote speakers. And the title of keynote speech is "Research on recent advances development in the TIG welding process to improve weld quality, productivity and penetration"

The Committee of IC4ME 2021
IC4ME
November 2021

Dr Akilesh Kumar Singh acted as keynote speaker in the international conference on modern machinery manufacturing and materials engineering

ADITYA ENGINNERING COLLEGE(A)
Approved by AICTE, Affiliated to JNTUK, Accredited by NBA, NAAC with "A" Grade
ADB Road, Surampalem, EG District, AP – 533437. Phone: 0884 2326202

DEPARTMENT OF MECHANICAL ENGINEERING

CERTIFICATE

This is to certify that Dr. Akhilesh Kumar singh, from Aditya College of Engineering & Technology, of Mechanical Engineering, had participated and successfully delivered A Guest Lecture on "Recent Welding Process" organized by Department of Mechanical Engineering on 30 December 2021.

Convener
(Dr. Bh. Varaprasad)
HOD

Patron
(Dr. M. Sreenivasa Reddy)
Principal

Dr Akilesh Kumar Singh acted as resource person and delivered a guest lecture on recent welding process organized Aditya engineering college

2022 2nd International Conference on Mechanical Design and Simulation (MDS 2022)

March 18, 2022 Online Conference

Certificate of Appreciation

is presented to

Assoc. Prof. Dr. Akhilesh Kumar Singh,
Aditya College of Engineering & Technology, Surampalem, India

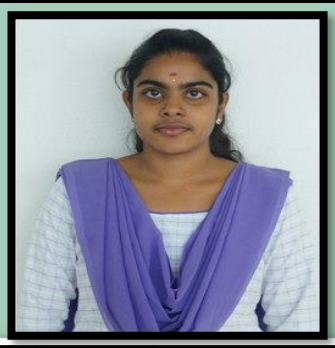
Speech title:
Advancements in Joining and Welding Technologies for Dissimilar Metals and their Applications

This is to certify that Dr. Akhilesh Kumar Singh has participated in 2022 2nd International Conference on Mechanical Design and Simulation (MDS 2022) and made a keynote speech on March 18, 2022.

The Committee of MDS 2022
AEIC Academic Exchange Information Center
March 18, 2022

Dr Akhilesh Kumar Singh acted as keynote speaker in the international conference of mechanical design and simulation 2022

Batch Toppers



Ms. T ALEKHYA
19P35A0302 8.52 (SGPA)

Mr. A BHASKAR
19P35A0304 8.43 (SGPA)

Mr.ABHISHEK SINHA
18P31A0302 8.05 (SGPA)

III B.TECH - II SEM MECHANIACL – B TOPPERS

19P35A0351
Mr. A RAMESH 8.86(SGPA)

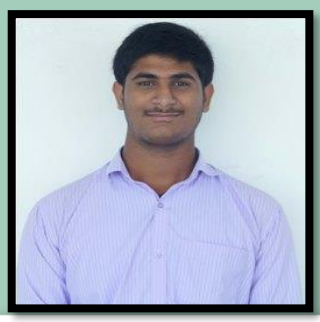
19P35A0384
Mr R S KRISHNA 8.71

19P35A0375
Mr M VEERENDRA 8.43(SGPA)

III B.TECH - II SEM MECHANIACL – C TOPPERS

19P35A03B1
Mr. J N M SWAMY 8.90 (SGPA)

18P31A0351
Mr. K M REDDY 8.57SGPA



19P35A03A9
Mr.G NARAYANA 8.57(SGPA)