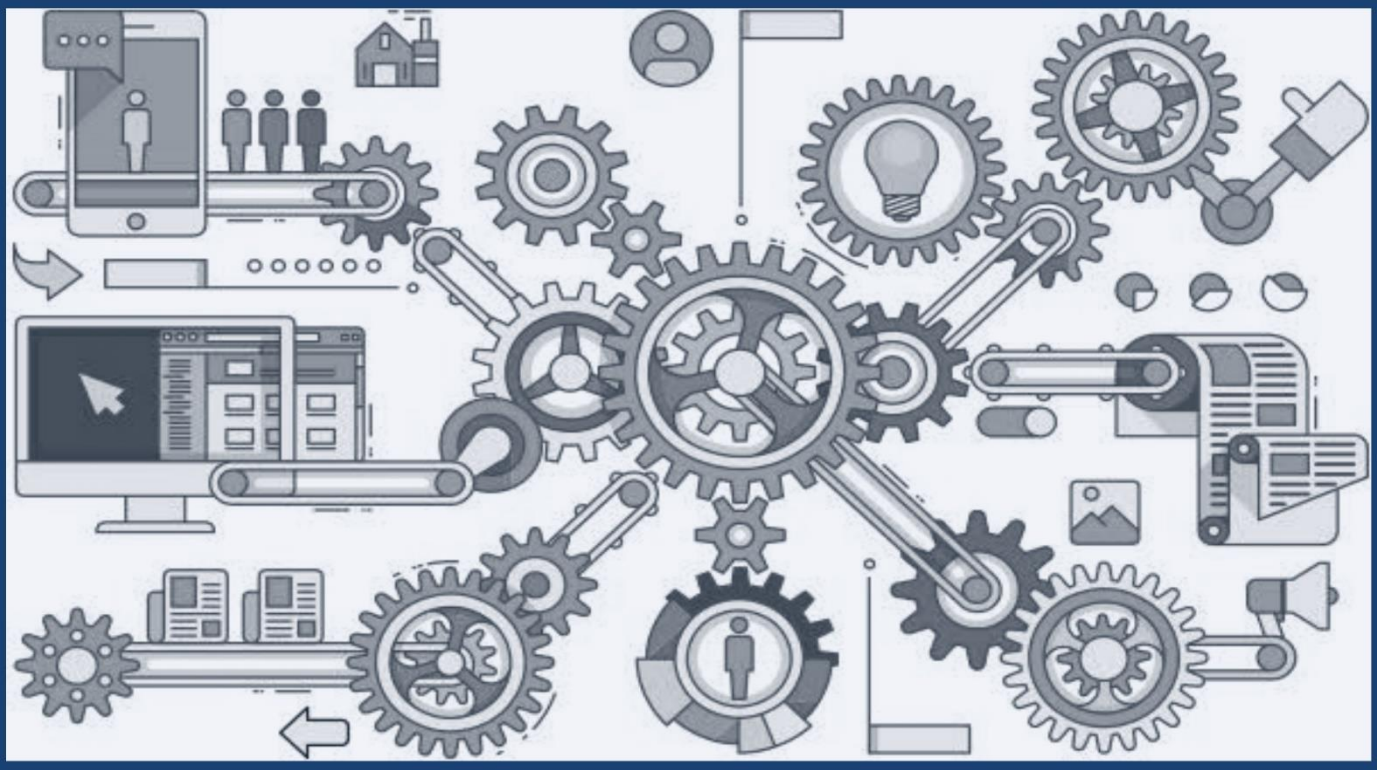
Aditya College of Engineering & Technology

Department of Mechanical Engineering

IGNITO MAGAZINE

DEC-MAY (2021-2022)



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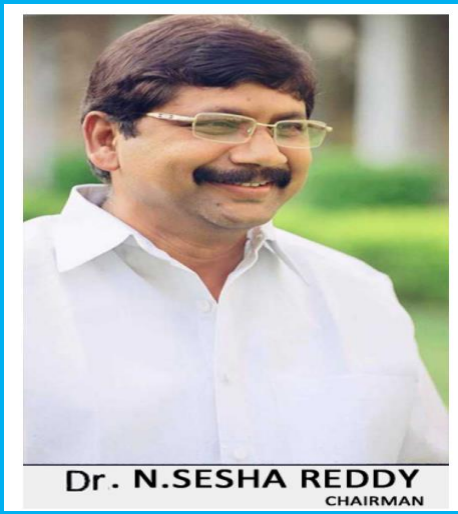
Chairman's Message



I believe in the philosophy of thought, word and deed as eternal which made Aditya what it is today. My thought to set a high bar to the institutions I setup by rising to the challenges of the educational field and get prepared for a life dedicated to the pursuit of knowledge, my word which always reflected my vision and gained the conviction of the heads of the institutes and parents, and my deed which makes my home and workplace as extensions of each other by considering the staff and students as the members of my extended family shaped Aditya

I know the value of a good education, more so because I did not have the benefit of the facilities that make the learning process smooth. I began my career as a lecturer, giving up my desire of qualifying in the Service Commission Examination. Out of my despair was born a strong determination which took the shape of Aditya Educational Institutions. The present-day job market poses fresh challenges that need to be managed innovatively. Global business Incubation centre, Microsoft Innovation Centre, Technical Skill Development Institute, T-hub, Training and Placement Cell, GATE coaching etc., act as perfect vehicles for this.

Vice- Chairman's Message

As a direct product of Aditya, I know how hard my father worked to put Aditya on the academic map of the country during its many stages of expansion, even in the most trying conditions. My master's degree from UTS Australia, the continent's premier university, has given me a better grasp of the educational system. Aditya technical campus in Surampalem was constructed in the aftermath to provide professional education in engineering, technology, management, and pharmacy, with the underlying principle of excellence and quality The campus has made rapid growth since its beginning in 2001 by upholding its unwavering dedication to advance knowledge and educate students in science and technology. The campus' main goal is to make teaching and research more relevant to the real world. The ultimate aim of Aditya is to make the campus the 'first stop' for companies in the recruitment process. Keeping in view the demands of the work environment which is beyond just knowledge and marks, a lot of emphasis is laid on the overall personality development of the students.

Principal's Message

Dr. T. K. Rama Krishna Rao
PRINCIPAL

The major issues we confront can't be handled at the same level of reasoning that we used to create them." Albert Einstein is credited with coining the phrase "theory of relativity." Man can only achieve immortality through knowledge. To stay relevant, knowledge must extend or grow. The road to excellence is the world's toughest, roughest, and steepest. Only quality is required and rewarded in our world. To develop new knowledge, available information must be directed by wisdom and intellect. Education's new duty is to promote creativity. The only way to address current and future problems and discover dynamic answers is to think creatively. Technology should be used to aid in the eradication of poverty around the world. In truth, India is home to 40% of the world's poor. Capacity is a result of confidence.

Miracles are the result of one's faith in oneself. At ACET, education aims to develop character, strengthen the mind, broaden the intellect, and foster a culture of problem-solving. The student is placed through rigorous training so that when he leaves the Institute, he can stand on his own two feet.

HOD Message

Dr. Puli Danaiah, HOD

Mechanical engineering is one of the oldest and broadest engineering discipline, and plays a significant role in enhancing safety, economic vitality, enjoyment and overall quality of life throughout the world.

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.

Our department has a team of highly qualified and experienced faculty, good infra structure and lab facilities. We are striving hard continuously to improve upon the quality of education and to maintain its position of leadership in engineering and

Department of Mechanical Engineering

The Department of Mechanical Engineering is a pioneer department since the establishment of college in 2011. The department has extensive facilities in terms of faculty, infrastructure & equipment. The department is recognised 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.

The department has an entrepreneurship cell through which it organises lectures by successful entrepreneurs, bank officers, MSME officials to nurture them as successful entrepreneurs in future. To nurture the students to gain all-round development, the department has many clubs like, ‘cultural club’, “We can talk” to improve soft skills and improve their intra and inter-personal skills, interactive skills to make them leaders of tomorrow. The faculty encourages students to participate in competitions like Go-kart at National level and present technical papers in conferences and publish papers in journals

Department Vision

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

Department Mission

- *To promote trainings with institutional association*
- *To achieve learning centric infra-structure.*
- *To provide skill-based education with focus on Automotive*
- *To promote innovative ideas through creativity and leadership quality*

PSO'S

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.

Article

Robotics:

Robotics is an interdisciplinary research area between computer science and engineering. Robotics involves design, construction, operation, and the use of robots. The goal of robotics is to design intelligent machines that can help and assist humans in their day-to-day lives and keep everyone safe. Robotics draws on the achievements of information engineering, computer engineering, mechanical engineering, electronic engineering and others.

automation. Most robots are “manipulators”—machines devised to function in place of a human. Some robots function as “walking” Robotics engineers work in the science of robotics, or flexible machines, or tele-operators, using remote control or sensory manipulators. Microprocessors, which are very small computers, direct most robots in their tasks.

Robotics develops machines that can substitute for humans and replicate human actions. Robots can be used in many situations for many purposes, but today many are used in dangerous environments (including inspection of radioactive materials, bomb detection and deactivation), manufacturing processes, or where humans cannot survive (e.g. in space, underwater, in high heat, and clean up and containment of hazardous materials and radiation). Robots can take on any form, but some are made to resemble humans in appearance. This is claimed to help in the acceptance of robots in certain replicative behaviours which are usually performed by people. Such robots attempt to replicate walking, lifting, speech, cognition, or any other human activity. Many of today's robots are inspired by nature, contributing to the field of bio-inspired robotics

Mr. G Ravi Teja
Student II Mechanical

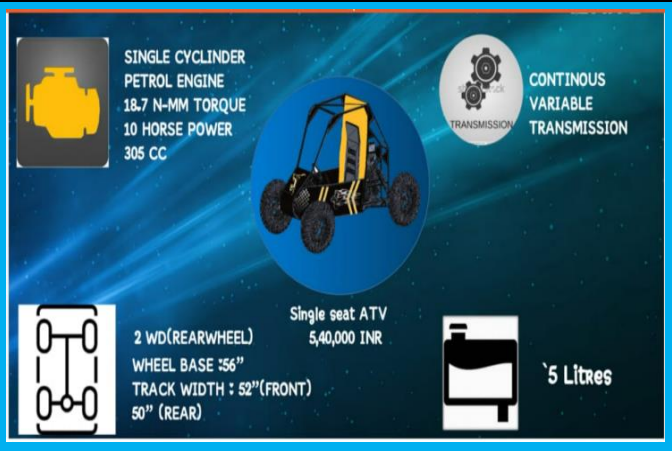
Student Training Programmes

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

Student Technical Events

SAE BAJA

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, acceleration, manoeuvrability test



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	ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY'S COLLEGE OF ENGINEERING	RESONANCE 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	ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY'S COLLEGE OF ENGINEERING	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	RANCHI	JHARKHAND	45.84		45.84

SAE BAJA

Organized by SAEINDIA Society of Automotive Engineers INDIA

BAJA SAEINDIA 2022

Under the aegis of

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]

Organized by SAEINDIA Society of Automotive Engineers INDIA

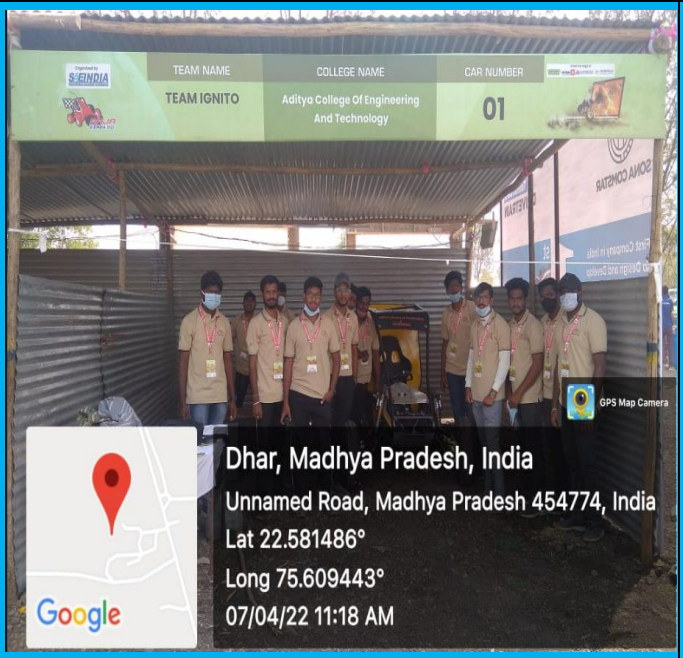
BAJA SAEINDIA 2022

Under the aegis of

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

BAJA SAE INDIA DYNAMIC EVENTS: Students of Mechanical engineering, EEE and ECE of ACET have shortlisted for BAJA SAE INDIA 2022 event, conducted at Pithampur Madhya Pradesh. In which students need to fabricate an ATV and it should have passed through these vehicle performance tests such as technical evaluation, weight, engine design as per rule book safety rules, Brake test, Acceleration test, Sledge pull, endurance students have successfully fabricated the ATV and participated SAE BAJA INDIA 2022



Robo Expo

Robotics club Mechanical engineering Department has actively engaged in developing different robots for attending in several technical events and projects, they have organized Robo Expo event in the campus by involving Electronics communication and Computer science students

Article

Solar Power:

Solar power is the conversion of renewable energy from sunlight into electricity, either directly using photovoltaics (PV), indirectly using concentrated solar power, or a combination. Photovoltaic cells convert light into an electric current using the photovoltaic effect. Concentrated solar power systems use lenses or mirrors and solar tracking systems to focus a large area of sunlight to a hot spot, often to drive a steam turbine.

Photovoltaics were initially solely used as a source of electricity for small and medium-sized applications, from the calculator powered by a single solar cell to remote homes powered by an off-grid rooftop PV system. Commercial concentrated solar power plants were first developed in the 1980s. Since then, as the cost of solar electricity has fallen, grid-connected solar PV systems have grown more or less exponentially. Millions of installations and gigawatt-scale photovoltaic power stations have been and are being built. Solar PV has rapidly become an inexpensive, low-carbon technology.

A solar cell, or photovoltaic cell (PV), is a device that converts light into electric current using the photovoltaic effect. The first solar cell was constructed by Charles Fritts in the 1880s. The German industrialist Ernst Werner von Siemens was among those who recognized the importance of this discovery. In 1931, the German engineer Bruno Lange developed a photo cell using silver selenide in place of copper oxide, although the prototype selenium cells converted less than 1% of incident light into electricity. Following the work of Russell Ohl in the 1940s, researchers Gerald Pearson, Calvin Fuller and Daryl Chapin created the silicon solar cell in 1954. These early solar cells cost US$286/watt and reached efficiencies of 4.5–6%. In 1957, Mohamed M. Atalla developed the process of silicon surface passivation by thermal oxidation at Bell Labs. The surface passivation process has since been critical to solar cell efficiency.

Mr. M Siva Krishna
Student IV Mechanical

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 29, 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

NPTEL Certification

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

DR NITLA STANLEY EBENEZER

for successfully completing the course

Effective Engineering Teaching In Practice

with a consolidated score of 60 %

Online Assignments	21/25	Proctored Exam	38.51/75

Total number of candidates certified in this course: 366

Prof. Devendra Jalihal, Chairman, Centre for Continuing Education, IITM

Jan-Feb 2022 (4 week course)

Prof. Andrew Thangaraj, NPTEL Coordinator, IIT Madras

Indian Institute of Technology Madras

swayam

Roll No: NPTEL22GE05S44481921

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

NPTEL-AICTE

Faculty Development Programme

(Funded by the MoE, Govt. of India)

This certificate is awarded to

DR AKHILESH KUMAR SINGH

for successfully completing the course

Inspection and Quality Control in Manufacturing

with a consolidated score of 69 %

Prof. Andrew Thangaraj, NPTEL Coordinator, IIT Madras

(Feb-Mar 2022)

Prof. Dileep N. Malkhede, Advisor-I (Research, Institute & Faculty Development), All India Council for Technical Education

Roll No: NPTEL22ME53S14260804

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

DR KUNAPULI SIVA SATYA MOHAN

for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of 58 %

Online Assignments	20.13/25	Proctored Exam	37.5/75

Total number of candidates certified in this course: 662

Jan-Apr 2022 (12 week course)

Prof. Hemant B Kaushik, Head, Center for Educational Technology, NPTEL Coordinator, IIT Guwahati

Indian Institute of Technology Guwahati

swayam

Roll No: NPTEL22ME65S44260414

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

NPTEL-AICTE

Faculty Development Programme

(Funded by the MoE, Govt. of India)

This certificate is awarded to

P V S MURALIKRISHNA

for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of 63 %

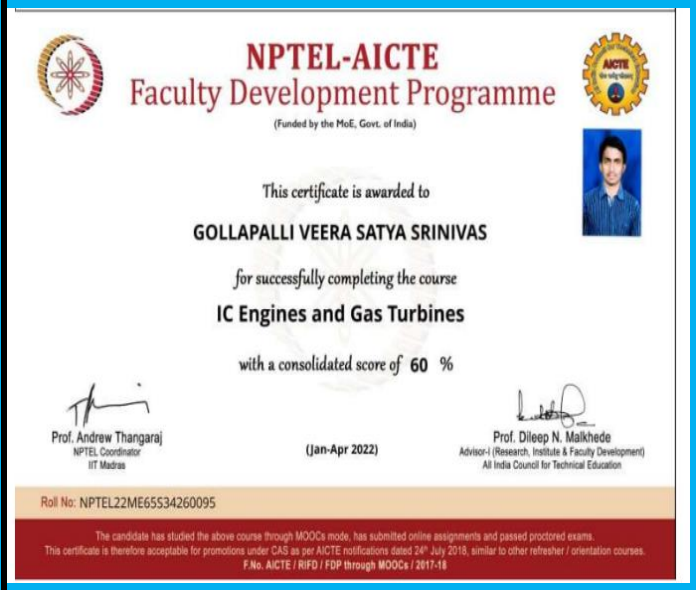
Prof. Andrew Thangaraj, NPTEL Coordinator, IIT Madras

(Jan-Apr 2022)

Prof. Dileep N. Malkhede, Advisor-I (Research, Institute & Faculty Development), All India Council for Technical Education

Roll No: NPTEL22ME65S34260017

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



NPTEL-AICTE

Faculty Development Programme

(Funded by the MoE, Govt. of India)

This certificate is awarded to

GOLLAPALLI VEERA SATYA SRINIVAS

for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of 60 %

Prof. Andrew Thangaraj, NPTEL Coordinator, IIT Madras

(Jan-Apr 2022)

Prof. Dileep N. Malkhede, Advisor-I (Research, Institute & Faculty Development), All India Council for Technical Education

Roll No: NPTEL22ME65S34260095

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18

Elite

NPTEL Online Certification

(Funded by the MoE, Govt. of India)

This certificate is awarded to

RATNALA PRASAD

for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of 69 %

Online Assignments	22.25/25	Proctored Exam	46.5/75

Total number of candidates certified in this course: 662

Jan-Apr 2022 (12 week course)

Prof. Hemant B Kaushik, Head, Center for Educational Technology, NPTEL Coordinator, IIT Guwahati

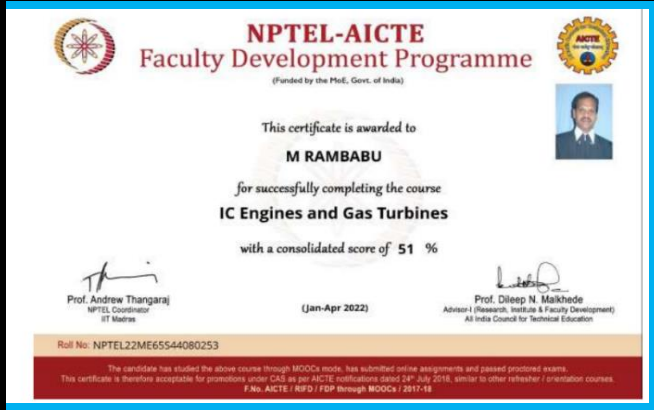
Indian Institute of Technology Guwahati

swayam

Roll No: NPTEL22ME65S34260301

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

NPTEL Certification


NPTEL-AICTE
Faculty Development Programme
(Funded by the MoE, Govt. of India)

This certificate is awarded to

M RAMBABU

for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of 51 %

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Jan-Apr 2022)

Prof. Dileep N. Malkhede
Advisor-I (Research, Institute & Faculty Development)
All India Council for Technical Education

Roll No: NPTEL22ME65S44080253

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18


NPTEL-AICTE
Faculty Development Programme
(Funded by the MoE, Govt. of India)

This certificate is awarded to

ABDUL ARIF

for successfully completing the course

Effective Engineering Teaching In Practice

with a consolidated score of 58 %

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

(Jan-Feb 2022)

Prof. Dileep N. Malkhede
Advisor-I (Research, Institute & Faculty Development)
All India Council for Technical Education

Roll No: NPTEL22GE05S34290124

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2018, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18


Elite

NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to

VALLAPUREDDY SIVA NAGI REDDY

for successfully completing the course

IC Engines and Gas Turbines

with a consolidated score of 69 %

Online Assignments	21.03/25	Proctored Exam	48/75

Total number of candidates certified in this course: 662

Jan-Apr 2022
(12 week course)

Prof. Hemant B Kaushik
Head, Center for Educational Technology
NPTEL Coordinator, IIT Guwahati

Indian Institute of Technology Guwahati

swayam

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Total number of candidates certified in this course: 366

Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Jan-Feb 2022
(4 week course)

Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No:NPTEL22GE05S34290177

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Student Placements

Congratulations

Kaja Kalki Bhagvan
Mahindra and Mahindra

M Siva Krishna
Mahindra andMahindra

B V S Naveen Reddy
Mahindra and Mahindra

Y S Brahmaji
Mahindra and Mahindra

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 Akilesh Kumar Singh has published in Scopus indexed journal paper entitled **Thermal analysis of Laser welding of Grade 91 steel**. Materials Today: Proceedings.	
Dr M Murugan has published in SCI indexed journal, paper entitled **Analysis of performance, combustion, and emission parameters in a reactivity-controlled combustion ignition (RCCI) engine–an intensive review.** International Journal of Ambient Energy, 1-10.	
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 CH V V M J Satish has published in a Scopus indexed journal, paper entitled **Collision-free Inverse Kinematics of Redundant Manipulator for Agricultural Applications through Optimization Techniques** in International Journal of Engineering	
Dr K S S Mohan has published in scopus indexed journal, paper entitled **Artificial Neural Network Technique for Estimating the Thermo-Physical Properties of Water-Alumina Nanofluid** in Ecological Engineering & environment technology	

Article

Wind Power or Wind Energy:

Wind power or wind energy is mostly the use of wind turbines to generate electricity. Historically, wind power has been used in sails, windmills and windpumps. Wind power is a popular, sustainable, renewable energy source that has a much smaller impact on the environment than burning fossil fuels. Wind farms consist of many individual wind turbines, which are connected to the electric power transmission network.

Wind power is variable renewable energy, so power-management techniques are used to match supply and demand, such as wind hybrid power systems, hydroelectric power or other dispatchable power sources, excess capacity, geographically distributed turbines, exporting and importing power to neighboring areas, or grid storage. As the proportion of wind power in a region increases the grid may need to be upgraded. Weather forecasting allows the electric-power network to be readied for the predictable variations in production that occur.

In 2021, wind supplied over 1800 TWH of electricity, which was over 6% of world electricity and about 2% of world energy, with about 100 GW added during 2021, mostly in China and the United States, global installed wind power capacity exceeded 800 GW. To help meet the Paris Agreement goals to limit climate change, analysts say it should expand much faster - by over 1% of electricity generation per year.

Mr. K Vijay
Assistant Professor