

RESOURCE PERSONS

Eminent Speakers from IITs, NITs, Universities and Industry

REGISTRATION

- The applicants should register at AICTE - ATAL web portal at the earliest using the link
- <https://atalacademy.aicte-india.org/signup>
- FDP ID - 4424
- No registration fee for participants.
- Number of participants is limited to a maximum of 50 on first come first serve basis and selected candidates will be intimated through email.

WHO CAN PARTICIPATE

- Faculty members of the AICTE approved institutions
- Research scholars and PG students
- Personnel from Government sector, R&D centers, and industries
- Faculty and staff of host institution

ORGANISING COMMITTEE

Dr. E. Nirmala Devi, Professor, Dept. of ME
Dr. B. Jogarao, Assoc. Professor, Dept. of ME
Dr. G. Ramakrishna, Assoc. Professor, Dept. of ME
Dr. Tankeshwar Prasad, Assistant Professor, Dept. of ME
Dr. Jeya Jeevahan, Assoc. Professor, Dept. of ME
Mr. Kedarnath Mahapatro, Assoc. Professor, Dept. of ME
Mr. M. Balakrishna, Assoc. Professor, Dept. of ME
Mrs. K. Gowthami, Assistant Professor, Dept. of ME
Mr. Sk. Nayeem, Assistant Professor, Dept. of ME
Mrs. M. Harika Chowdary, Assistant Professor, Dept. of ME
Mr. K. Sreenivasa Reddy, Assistant Professor, Dept. of ME
Mr. M. Siva Kumar, Assistant Professor, Dept. of ME
Mr. L. Lovaraju, Assistant Professor, Dept. of ME
Ms. P. Kalyani, Assistant Professor, Dept. of ME
Mr. G. Somaraju, Assistant Professor, Dept. of ME

Contact Us

Dr. Alapati Babji, Associate Professor
Coordinator, Department of Mechanical Engineering
Contact: 9949785654, 886668245
Email: babji.alapati@giet.ac.in

Mr. M. Manikanta, Assistant Professor
Co-Coordinator, Department of Mechanical Engineering
Contact: 9666624599
Email: gietautpoly@gmail.com

CHIEF PATRON

Shri K. V. V. Satyanarayana Raju

Founder & Chancellor, Godavari Global University and
Chairman, Konaseema Inst. of Medical Sciences & Research Foundation,
Former MLC & Govt. Whip, Andhra Pradesh

PATRONS

Shri K. Sasi Varma

President and Pro-Chancellor, Godavari Global University & Executive Director,
Konaseema Inst. of Medical Sciences & Research Foundation

Shri K. Ravi Varma

Pro-Chancellor, Godavari Global University & Managing Director,
Konaseema Inst. of Medical Sciences & Research Foundation &
Former MLC, Govt. of Andhra Pradesh

Smt. K. Lakshmi Raju

Executive Director, Godavari Global University

Dr. K. B. R. Varma

Academic Advisor, Member - BoG, Godavari Global University &
Former Vice-Chancellor, Sri Sathya Sai Inst. of Higher Learning &
Former Professor & Chair, Materials Research Center, IISc, Bangalore

CO-PATRONS

Dr. U. Chandra Sekhar

Vice-Chancellor, Godavari Global University

Dr. K. V. Bhaskar Raju

Pro Vice-Chancellor, Godavari Global University

Dr. P. M. M. S. Sarma

Registrar, Godavari Global University

Dr. M. Sreenivasa Rao

Director-Administration, Godavari Global University

Dr. T. V. Prasad

Director-IOAC & Foreign Relations, Godavari Global University

Dr. B. Prabhakara Rao

Dean-School of Engineering, Godavari Global University &
Former Vice-Chancellor (I/C), JNTUK

ADVISORY COMMITTEE

Dr. M. Vijaya Sekhar Babu

Principal GIET Engineering College (A)

Dr. R. S. Raju

Dean - R&B, Godavari Global University

Dr. N. Leelavathy

Dean - Academic Affairs, Godavari Global University

Dr. P. G. Ramanujam,

Principal, Polytechnic
Godavari Institute of Engineering and Technology (A)

CONVENER

Dr. T. Jayananda Kumar

Principal, Godavari Institute of Engineering & Technology (A)

CO-CONVENER

Dr. V. Subrahmanyam

Head, Department of Mechanical Engineering



Six Day AICTE Training and Learning (ATAL)
Offline Faculty Development Program on

**Performance of an Internal
Combustion Engine using
Alternate Fuels and
CFD Analysis**

23 - 28 JUNE 2025



**AUTONOMOUS
NAAC 'A++' ACCREDITED**

Coordinator

Dr. ALAPATI BABJI

Associate Professor

Department of Mechanical Engineering

Co-Coordinator

Mr. M. MANIKANTA

Assistant Professor

Department of Mechanical Engineering

GODAVARI GLOBAL UNIVERSITY
Erstwhile **GODAVARI INSTITUTE OF
ENGINEERING & TECHNOLOGY (A)**

NH-16, Chaitanya Knowledge City, Rajahmundry
East Godavari, Andhra Pradesh - 533296

www.giet.ac.in

www.ggu.edu.in

ABOUT THE UNIVERSITY

Godavari Global University (GGU) formerly Godavari Institute of Engineering & Technology (A), was established in 1998 and became a University in 2024 under the State Private University Act. It is a leading educational hub in Andhra Pradesh, catering to over around 10000 students from 15 Indian states and 13 countries. GGU holds NAAC 'A++' accreditation (3.58/4.0) and has been consistently ranked by NIRF since 2019. The University comprises three main schools – School of Computing, School of Engineering, and School of Sciences – offering diverse programmes. With 15 Centers of Excellence in collaboration with industry leaders like Siemens, Dassault Systems, GGU provides top-tier education and industry exposure. Recognized u/s 2(f) and 12(b) of UGC Act, it facilitates global partnerships and is a Study in India (SII) partner institute for attracting foreign students. Located in the serene and sylvan suburbs of Chaitanya Knowledge City, Rajahmundry, on NH-16, GGU's educational facilities hosts advanced labs, modern classrooms, and extensive student amenities.

ABOUT THE DEPARTMENT

The Department of Mechanical Engineering is operating since the inception of the Institute with highly qualified faculty members and technical staff. The department is offering Diploma, U.G, P.G and Ph.D programmes. The Department has 14 instructional and research laboratories equipped with state-of-art facilities. The Department has MOU with APSSDC in establishing Dassault Systems 3D experience Centre, APSSDC and ECM APS GmbH in establishing Applied Robotics Control Centre. The Department has a Research Centre recognized by JNTUK also to its credit.

ABOUT THE FDP

The objective of this programme is to impart knowledge on the basics, analysis and applications of Internal Combustion engines and alternate fuels. Participation in this program will be helpful for young teachers engaged in research works in the synthesis, characterization and application of the alternate fuels in the field of Mechanical and Automobile Engineering. The Faculty Development Program covers applications of computational fluid dynamics in predicting performance of an IC Engine, analytical and experimental technology that is used to study and understand the mechanisms and applications of alternate fuel technology. The FDP "Performance of an Internal Combustion Engine using alternate fuels and CFD analysis" explores uses of alternate fuels and how computational fluid dynamics enhances performance of an Internal combustion engine by optimizing processes.

OUTCOMES OF FDP

- Develop a strong understanding of Internal combustion engines and applications.
- Gain expertise in Computational fluid dynamics modeling, and simulation.
- Enhance research capabilities by integrating renewable energy concepts into academia and industry.
- Acquire hands-on experience in CFD simulation and applying green fuels to real world challenges. Contribute to advancements in industrial applications.
- Empower educators to guide students in AI driven innovations and foster technological advancements.
- Explore research and paper publications in IC engines using optimization techniques and CFD techniques.

CONTENTS OF THE FDP

- Session 1: Advances in Internal Combustion Engines
- Session 2: Alternate Fuels
- Session 3: Emission and Combustion
- Session 4: Computational Fluid Dynamics
- Session 5: CNG and HCNG Engine
- Session 6: Engine Simulation
- Session 7: AI and CFD IC Engines
- Session 8: IoT Applications
- Session 9: AI driven Innovation
- Session 10: Optimization of I.C. Engine

SCHEDULE

Day 1 23-06-2025	Day 2 24-06-2025	Day 3 25-06-2025	Day 4 26-06-2025	Day 5 27-06-2025	Day 6 28-06-2025
09.00-09.30 Inauguration					
09.30-12.00 Session1	09.30-12.00 Session3	09.30-12.00 Session5	09.30-12.00 Session7	09.00-13.00 Industrial Visit	09.30-12.00 Session10
12.00-13.00 Article Discussion	12.00-13.00 Article Discussion	12.00-13.00 Article Discussion	12.00-13.00 Article Discussion		12.00-13.00 Article Summary
13.00-14.00 Lunch	13.00-14.00 Lunch	13.00-14.00 Lunch	13.00-14.00 Lunch	13.00-14.00 Lunch	13.00-14.00 Lunch
14.00-16.30 Session2	14.00-16.30 Session4	14.00-16.30 Session6	14.00-16.30 Session8	14.00-16.30 Session9	14.00-16.00 MCQ & Reflection Journal
16.30-17.30 Handson Training/Lab	16.30-17.30 Handson Training/Lab	16.30-17.30 Handson Training/Lab	16.30-17.30 Handson Training/Lab	16.30-17.30 Handson Training/Lab	16.00-16.00 Valedictory Session

For more information about GGU, please scan



Schedule of ATAL BASIC OFFLINE FDP

FDP Application Number: 1743148880

Title of the FDP: Performance of an Internal Combustion Engine using Alternate fuels and CFD Analysis

FDP Start Date: 23-06-2025

FDP End Date: 28-06-2025

Day 1 (23-06-2025)	Day 2 (24-06-2025)	Day 3 (25-06-2025)	Day 4 (26-06-2025)	Day 5 (27-06-2025)	Day 6 (28-06-2025)
9:00 – 9:30 Inauguration					
9:30 – 12:00 Session 1 <ol style="list-style-type: none"> Name of the Expert: <i>Prof. B. Balakrishna</i> Designation: <i>Professor</i> Organization: <i>JNTUK-Kakinada</i> Experience in Years: 25 Topic to be taught: <i>Advances in IC Engines</i> 	9:30 – 12:00 Session 3 <ol style="list-style-type: none"> Name of the Expert: <i>Dr. D. Jaya Krishna</i> Designation: <i>Professor</i> Organization: <i>NIT-Warangal</i> Experience in Years: 25 Topic to be taught: <i>Numerical Approaches to Fluid Flow and Heat Transfer Using Ansys Fluent</i> 	9:30 – 12:00 Session 5 <ol style="list-style-type: none"> Name of the Expert: <i>Dr. T. Karthikeya Sharma</i> Designation: <i>Assistant Professor</i> Organization: <i>NIT AP-Tadepalligudem</i> Experience in Years: 18 Topic to be taught: Hands on session in HCCI Combustion and emission Analysis with starCD and ESIce 	9:30 – 12:00 Session 7 <ol style="list-style-type: none"> Name of the Expert: <i>Mr. Baipalli Vallab Rao</i> Designation: <i>CEO</i> Organization: <i>Phytec Embedded pvt Ltd, Bangalore</i> Experience in Years: 15 Topic to be taught: <i>IOT applications</i> 	9:00 – 1:00 Industrial visit <ol style="list-style-type: none"> Name of the Organization: <i>RenEV projects and services private limited</i> Complete address with pin code: <i>Rajahmundry, East Godavari, Andhra Pradesh PIN:533101</i> Industry Type: <i>EV Chargers and Renewable Energy, EV manufactures</i> Area of specification: <i>Renewable Energy</i> 	9:30 – 12:00 Session 10 <ol style="list-style-type: none"> Name of the Expert: <i>Dr. P. Srinivasa Rao</i> Designation: <i>Chief Technology Officer</i> Organization: <i>Curlvee TechnoLabs, Hyderabad</i> Experience in Years: 25 Topic to be taught: Blending Artificial Intelligence and CFD: Engineering Tomorrow's Ultra-Efficient Engines
12:00 – 1:00 Article Discussion <ol style="list-style-type: none"> Title of the Research Paper: <i>Optimization of performance parameters of a variable compression ratio diesel engine with hibiscus cocos nucifera biodiesel using Taguchi method</i> Name of the journal: <i>IJAE</i> Year of Publication: 2022 	12:00 – 1:00 Article Discussion <ol style="list-style-type: none"> Title of the Research Paper: <i>Experimental investigations into engine characteristics fueled with hibiscus coconut biodiesel and its blends</i> Name of the journal: <i>IJATEE</i> Year of Publication: 2022 	12:00 – 1:00 Article Discussion <ol style="list-style-type: none"> Title of the Research Paper: <i>Optimization of compression ignition diesel engine combustion, emission, and performance characteristics at higher blends of biodiesel using RSM</i> Name of the journal: <i>PIOS</i> Year of Publication: 2024 	12:00 – 1:00 Article Discussion <ol style="list-style-type: none"> Title of the Research Paper: <i>Combustion characteristics of a variable compression ratio diesel engine using hibiscus cocos nucifera biodiesel and Taguchi optimization</i> Name of the journal: <i>JMMF</i> Year of Publication: 2024 		12:00 – 1:00 Article Summary
1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch
2:00 – 4:30 Session 2 <ol style="list-style-type: none"> Name of the Expert: <i>Prof. Veereshbabu A</i> Designation: <i>Professor</i> Organization: <i>NIT-Warangal</i> Experience in Years: 25 Topic to be taught: <i>Alternate fuels for IC Engines</i> 	2:00 – 4:30 Session 4 <ol style="list-style-type: none"> Name of the Expert: <i>Dr. S. Suryanarayana Raju</i> Designation: <i>Professor</i> Organization: <i>GGU, Rajahmundry</i> Experience in Years: 30 Topic to be taught: <i>Research Methodology: Statistical Data Analysis for Researchers- Testing of Hypothesis</i> 	2:00 – 4:30 Session 6 <ol style="list-style-type: none"> Name of the Expert: <i>Dr.M. P. Chakravarthi</i> Designation: <i>Production manager</i> Organization: <i>Hindustan Shipyard limited, Vizag</i> Experience in Years: 22 Topic to be taught: <i>Internal combustion Engines for marine propulsion in shipbuilding and ship repair</i> 	2:00 – 4:30 Session 8 <ol style="list-style-type: none"> Name of the Expert: <i>Mr. P. V. Ramprasad</i> Designation: <i>Director</i> Organization: <i>RenEV projects and services private limited, Rajahmundry</i> Experience in Years: 25 Topic to be taught: <i>Hybridization of IC engines for performance Enhancement</i> 	2:00 – 4:30 Session 9 <ol style="list-style-type: none"> Name of the Expert: <i>Dr. G. B. Amarnath</i> Designation: <i>CFD Application Engineer</i> Organization: <i>CoreEL Technologies, Bangalore</i> Experience in Years: 15 Topic to be taught: <i>Combustion Analysis of an IC Engine using CFD</i> 	2:00 – 4:00 MCQ & Reflection Journal
4:30 – 5:30 Hands on training /Labs	4:30 – 5:30 Hands on training /Labs	4:30 – 5:30 Hands on training /Labs	4:30 – 5:30 Hands on training /Labs	4:30 – 5:30 Hands on training /Labs	
					4:00 – 5:00 Valedictory Session



IS NOW



AICTE Training and Learning (ATAL) Academy Faculty Development Programme

Performance of an Internal Combustion Engine using Alternate Fuels and CFD Analysis



Dr. D. Jaya Krishna
NIT, Warangal



Dr. A. Veeresh Babu
NIT, Warangal



Dr. B. Balakrishna
JNTU Kakinada



Dr. T. Karthikeya Sharma
NITA, Tadepalligudem



Dr. M. P. Chakravarthy
Hindustan Shipyard Ltd
Visakhapatnam



Mr. B. Vallab Rao
Phytec Embedded Pvt. Ltd.
Bangalore



Dr. P. Srinivasa Rao
Curlvee Techno Labs
Hyderabad



Mr. P. Ramprasad
RenEV Pvt. Ltd.
Rajahmundry



Dr. G. B. Amarnath
CoreEL Technologies
Bangalore



23rd to 28th June, 2025

Organized by

Department of Mechanical Engineering

Godavari Global University

Erstwhile **Godavari Institute of Engineering & Technology (A)**



Scan to Register