

Workshop On GAS TURBINE ENGINES 23rd-25th January 2025



Organized by
Department of Aerospace Engineering
Indian Institute of Technology Madras

BACKGROUND

Gas Turbines (GT) find numerous applications in the aviation, space, automobile, and energy sectors. GT engines employed in these sectors offer high power-to-weight ratio and high efficiencies. Eminent experts from academia and industry will deliver talks covering several aspects of GT engines. Starting from the basics of fluid dynamic and thermodynamic principles governing gas turbines, the talks delve into the design and analysis of different components of GT engines. The talks address the complex flow physics in compressors, turbines, intakes, combustors, etc. and provide an overview of the state-of-the-art experimental and computational tools used in the industry to develop these engines. They also cover advanced topics on combustion instability, modern manufacturing methods, micro gas turbines, secondary air systems and maintenance of GT engines highlighting the futuristic opportunities that the Gas Turbine sector could offer.

OBJECTIVES:

1. Introduce thermodynamic, operating and fluid mechanic principles in Gas Turbine Engines.
2. Provide an overview and exposure to state-of-the-art experimental and computational methods in the GT sector.
3. Discuss the current challenges and futuristic opportunities

ELIGIBILITY

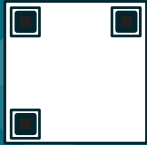
The course is open to registered Students, Faculty and Aspirants from companies/startups working in Aerospace and Mechanical Engineering sector, (with background in Fluid Mechanics and Heat Transfer) and allied branches from engineering colleges.

CONTENT

There will be a series of lectures, and a visit to related labs and NCCRD, IITM.

REGISTRATION LINK:

Please register using this QR Code:



“Will be Updated Soon”

REGISTRATION FEE:

Category	Stand-alone	NAPC Discounted price (if registered for NAPC)
Students	Rs 10000	Rs 8000
Faculty	Rs 12000	Rs 10000
Industry	Rs 16000	Rs 14000

ORGANIZING TEAM:

Prof. T M Muruganandam

Email: murgi@smail.iitm.ac.in

Prof. Nagabhushana Rao Vadlamani

Email: nrv@smail.iitm.ac.in

Student coordinators/ team:

Abdul Gafoor (ae20d752@smail.iitm.ac.in)

Poorva Shrivastava (ae18d300@smail.iitm.ac.in)

Ritu Rajkumar (ae22d016@smail.iitm.ac.in)

Sai Teja Kaluva (ae23d002@smail.iitm.ac.in)

Shivam Saini (ae21d201@smail.iitm.ac.in)

Shreeswaraj Panchal (ae21d200@smail.iitm.ac.in)

Vijayakrishnan V (vjk.surya@gmail.com)

ADDRESS FOR CORRESPONDENCE

Department of Aerospace Engineering,
Indian Institute of Technology Madras,
Chennai 600036