



Module PMRF-ISSS047/IV/2025

Convective Heat Transfer

Name of the PMRF student

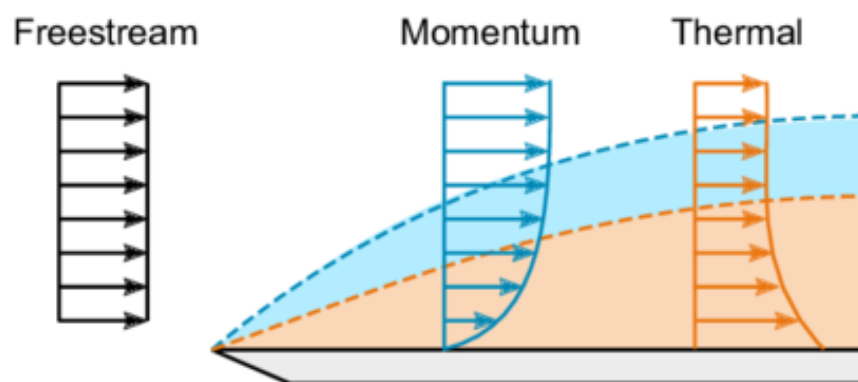
Saini Jatin Rao, IISc Bangalore

Required background of the students taught

Any learner with UG level background in Fluid Mechanics, Thermodynamics and Engineering Mathematics.

Online session coordinator

Will be chosen from the list of registrants



Details of the content of the module

The course aims to provide an understanding of the fundamental principles of convective heat transfer, which are applicable to a wide range of natural phenomena and engineering applications.

The following key concepts will be covered:

- Preliminaries
- Introduction to Forced convection
- External and Internal flows
- Momentum and Thermal boundary layers
- Scaling, Similarity and Integral solutions
- Different heating conditions
- Introduction to Natural Convection

There will be periodic reviews of essential concepts throughout the course.

Schedule of the module

Registration Deadline: 15th May 2025

Start date: 19th May 2025

End date: 30th September 2025 (tentative)

Lecture uploaded every Monday – 7:00PM

Meeting link : Will be shared later

Contact email ID: issf.forum@gmail.com

Registration link:

<https://forms.gle/foLD5fkpuA1xx8rK8>