PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems

# Module PMRF-ISSS018/2024

# Basic Transform Techniques

# Name of the PMRF student

## Details of the content of the module

# Pranay Mohta

## **Required background of the students taught**

Undergraduate students in any Engineering discipline



This series of sessions is designed to cover problem-solving from basic to mid level, encompassing theoretical concepts. The problem-solving sessions will cover a diverse range of topics, including:

- Introduction to Fourier series
- Finding Fourier series of a periodic function
- Fourier transform and its properties
- Fourier transform and its applications
- Introduction to Laplace transform
- Laplace transform and its properties
- Laplace transform and its applications
- Laplace transform and its applications to PDEs
- Z-transforms and its properties and applications



Start Date: 15/02/24

End Date: 26/03/24 (tentative)

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Lecture timing: Tuesday (11:00–13:00)
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Thursday (11:00-13:00)
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Note: The course may get extended by one week. In unforeseen cases, the recorded lectures will be uploaded on time.

### Meeting link : Will be shared later

#### Link

#### Contact email ID: <a href="mailto:isss.forum@gmail.com">isss.forum@gmail.com</a>

#### Registration link:

https://forms.gle/a1m1Cw9CMAjCpuJ49