**PMRF-ISSS Teaching Programme** Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems Module PMRF-ISSS050/2022 **Digital Communication** 



# Name of the PMRF student

# Jashaswini Bhuyan

# **Required background of the students taught**

3<sup>rd</sup> and 4<sup>th</sup> year UG and PG students from **Electronics and Communication Engineering Background** 

# **Online session coordinator**

Will be chosen from the list of registrants



Image Credits: VectorStock

#### Schedule of the module

**1.Probability Theory Basics** 

2. Baseband Representation of Bandpass Signals

Details of the content of the module

- **3.Uncoded Systems** 
  - a. Vector and Waveform Channels
  - b. Optimum Receiver Implementation
  - c. Probability of Error Calculation
- 4. Introduction to Information Theory
- 5. Coded Systems
  - a. Linear Block Codes
  - b. Convolutional Codes
  - c. Trellis Codes
- 6. Communication over Bandlimited Channels

#### Start date: 22nd Jan 2023

End date: 5th Mar 2023 (Tentative)

Class Schedule: Sat and Sun, 3:00 pm - 5:00 pm (IST)

# Meeting link : Will be shared later

Link

### Contact email ID: isss.forum@gmail.com

Registration link: Click here