PMRF-ISSS Teaching Programme

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

Module PMRF-ISSS006/III/2025



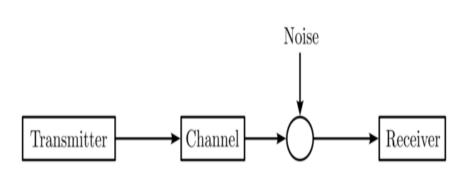
Communication Systems

Name of the PMRF student

Jashaswini Bhuyan

Required background of the students taught

3rd and 4th year UG students from **Electronics and Communication Engineering Background**



Picture Credits: Wikipedia

Details of the content of the module

This course is an introductory level course designed for students in electronics and communication engineering.

- 1. Review of Probability theory and Random Processes
- 2. Auto corelation and power spectral density
- 3. Amplitude modulation and demodulation
- 4. Angle modulation and demodulation
- 5. Basics of information theory
- 6. Basics of digital communication: Sampling, Quantization
- 7. PCM and DPCM
- 8. Digital modulation schemes: ASK, PSK, FSK
- 9. Multiple access
- 10. Overview of Optical communication

Schedule of the module

Start date : 7th Feb, 2025 End date: 7th Apr, 2025

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Friday, Saturday, Sunday - 2 pm – 4 pm
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Recorded lectures will be uploaded regularly.

Live problem solving sessions will be taken.

Number of hours: 50 hours

Meeting link : Will be shared later

Contact email ID: isss.forum@gmail.com

Registration link: Click <u>here</u>