

EE 703 Digital Message Transmission

Saravanan Vijayakumaran
sarva@ee.iitb.ac.in

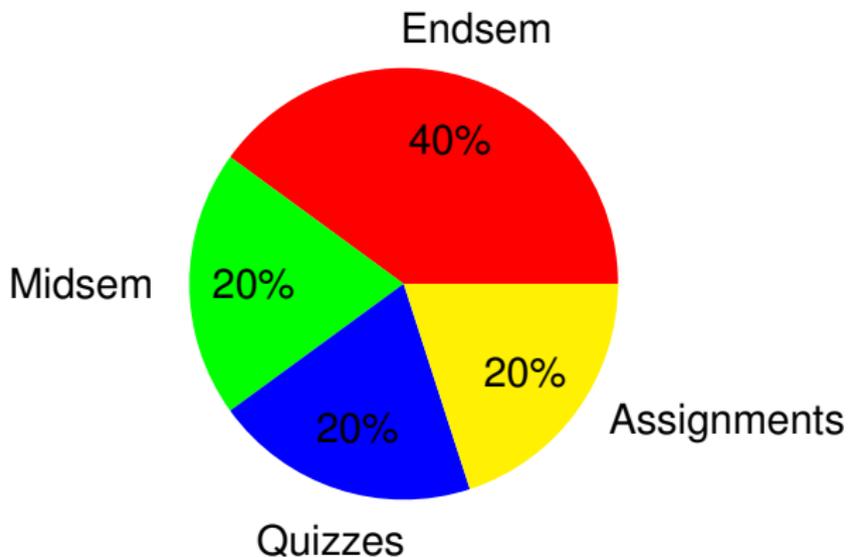
Department of Electrical Engineering
Indian Institute of Technology Bombay

Course Details

- **Schedule** Slot 1, Tuesday (9:30 AM - 10:25 AM), Thursday (10:35 AM - 11:30 AM).¹
- **Location** MS Teams or Google Meet (TBD)
- **Webpage** www.ee.iitb.ac.in/~sarva/EE703/Autumn2020.html
- **Announcements** <https://moodle.iitb.ac.in>
- **Teaching Assistants**
 - Akash Gupta (akashgupta06@iitb.ac.in)
 - Abhishek Sarkar (194076007@iitb.ac.in)

¹No live interactions on Mondays

Grading Policy



- Exam evaluation mode will be announced later
- Relative grading
- For AU, score \geq CC

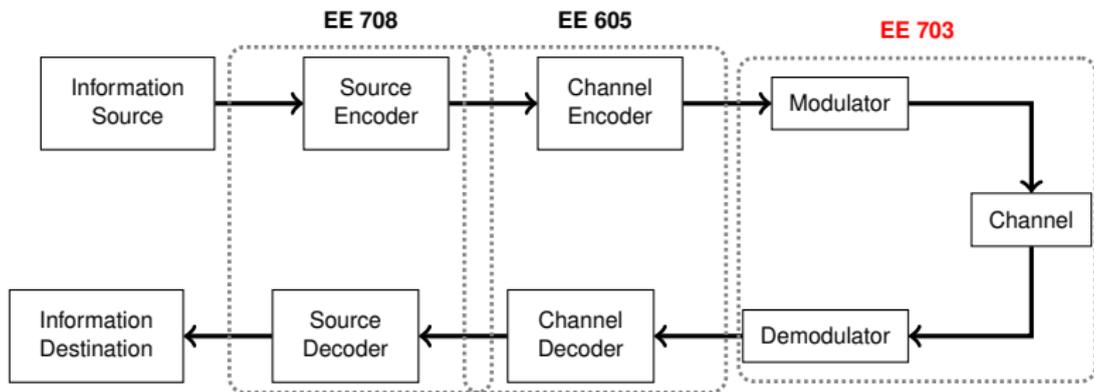
Online Course Structure

- Pre-recorded videos will be uploaded (every week)
- Each week's lectures will have a reflection quiz on Moodle
- In the lecture slot, we will have live interaction for solving problems and clearing doubts.
 - Recordings of these sessions will be uploaded
 - Only on Tuesdays and Thursdays
 - First interaction session will be on August 13th, 10:35 AM. Link will be posted on Moodle.
- Assignments will be assigned periodically. Submission will be through Moodle.
- Mode of conducting exams will be announced soon

Reference Books

- *Fundamentals of Digital Communication*, Upamanyu Madhow, 2008
- *Introduction to Communication Systems*, Upamanyu Madhow, Cambridge University Press, 2014
- *Digital Communications*, John G. Proakis and Masoud Salehi, 2008 (5th Edition)

Digital Communication Systems



EE 708 Information Theory and Coding

EE 605 Error Correcting Codes

EE 703 Digital Message Transmission

Course Outline

- Complex baseband representation
- Digital modulation schemes
- Gaussian random variables and processes
- Optimal demodulation schemes
- Carrier and timing synchronization
- Equalization

Thanks for your attention