

# EE 703 Digital Message Transmission

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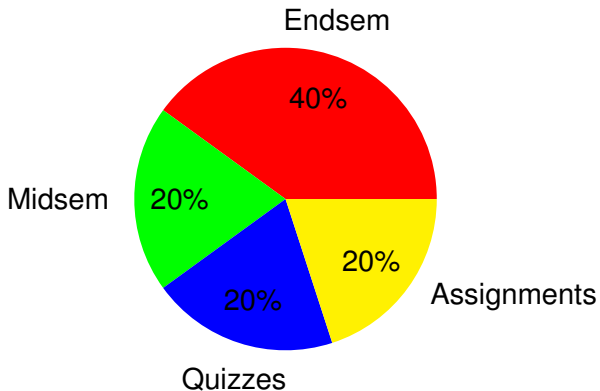
# Course Details

- **Schedule** Slot 1, Tuesday (9:30 AM - 10:25 AM), Thursday (10:35 AM - 11:30 AM).<sup>1</sup>
- **Location** MS Teams
- **Webpage** [www.ee.iitb.ac.in/~sarva/EE703/Autumn2021.html](http://www.ee.iitb.ac.in/~sarva/EE703/Autumn2021.html)
- **Announcements** <https://moodle.iitb.ac.in>
- **Teaching Assistants**
  - Nidhi Gupta (203070007@iitb.ac.in)
  - Vedant Kandoi (203070003@iitb.ac.in)

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<sup>1</sup>No live interactions on Mondays

# Grading Policy



- Exams will be conducted using SAFE app
- Relative grading
- For AU, score  $\geq$  CC

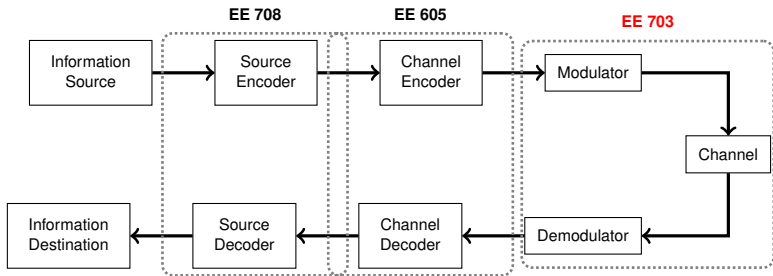
# Online Course Structure

- Pre-recorded videos will be available in MS Teams
- Slides will be available on course webpage
- In the lecture slot, we will have live interaction for solving problems and clearing doubts.
  - Only on Tuesdays and Thursdays
  - Recordings of these sessions will be uploaded
- Assignments will be assigned periodically
  - Submission will be through Moodle.

## 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