Digital Communications
EE328, Spring 2020

1 Instructors

S. N. Merchant merchant@ee.iitb.ac.in, Kumar Appaiah akumar@ee.iitb.ac.in

2 Teaching Assistants

1. Avirup Mandal (163070008@iitb.ac.in)
2. Kaushani Majumder (174070025@iitb.ac.in)
3. Anju R (164070017@iitb.ac.in)
4. Komal Ojha (194070013@iitb.ac.in)
5. Akash Gupta (193070006@iitb.ac.in)
6. Aboobackkar Sidhique (174070021@iitb.ac.in)
7. Mehta Parth Harshadbhai (184070009@iitb.ac.in)
8. Saurabh Jaiswal (184074003@iitb.ac.in)

3 Prerequisites

The prerequisites for this course is Signals and Systems (EE210) and Communication Systems (EE308). If you have doubts about this, consult the instructors.

4 Curriculum

1. Introduction to information theory and coding
2. Digital modulation and demodulation
3. Synchronization and noncoherent communication
4. Equalization
5. Advanced topics (spread spectrum, wideband modulation)

These items are subject to change based on the pace of the course and feedback from the class.

5 Textbook

The textbook used will be "Digital Communications Systems" by Simon Haykin. Pointers to other reference material shall be provided as needed.

6 Evaluation

Homework problems will be assigned, but not evaluated. The evaluation will follow:

1. Quizzes (20%): There will be two 45 minute quizzes in–class, with a weightage of 10% each. These quizzes will be held on 3rd February and 30th March.

2. Mid-semester exam (35%)

3. End-semester exam (45%)

Audit policy: A pass will be awarded for grade CC or equivalent. Audit students must attend classes and attempt homeworks as regular. The "pass" criterion is a CC grade.

Adherence to attendance norms is mandatory. **DX grade will be awarded for insufficient attendance.**

7 Office Hours

Office hours: Wednesdays, 4 PM to 5 PM, or by appointment.