

EE 605 Error Correcting Codes

Saravanan Vijayakumaran
sarva@ee.iitb.ac.in

Department of Electrical Engineering
Indian Institute of Technology Bombay

July 21, 2014

Course Details

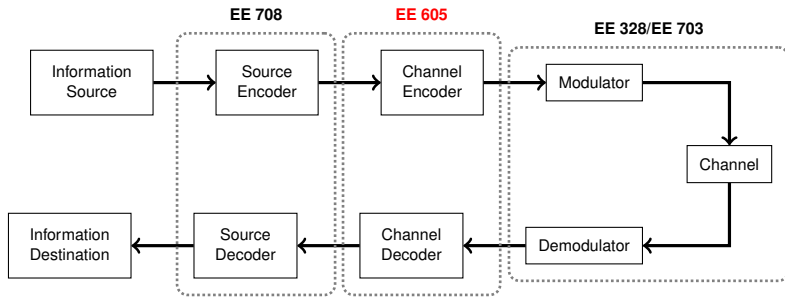
Instructor Saravanan Vijayakumaran

Office EE 331B

Webpage www.ee.iitb.ac.in/~sarva/courses/EE605/Autumn2014.html

Piazza https://piazza.com/iit_bombay/other/ee605

Digital Communication Systems



EE 708 Information Theory and Coding

EE 605 Error Correcting Codes

EE 328 Digital Communication

EE 703 Digital Message Transmission

Prerequisites

- Probability Theory
- Linear Algebra
- Digital Communication

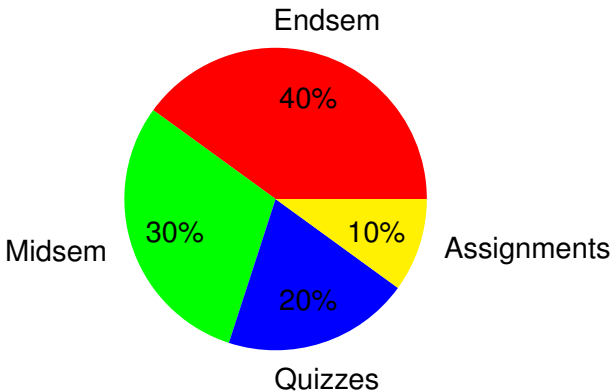
Syllabus

- Linear block codes
- Cyclic codes
- Convolutional codes
- Turbo codes
- LDPC codes

Reference Books

- *The Theory of Error Correcting Codes*, F. J. MacWilliams and N. J. A. Sloane, 1977
- *Error Control Coding*, Shu Lin and Daniel J. Costello, Second Edition, Prentice Hall, 2004.

Grading Policy



- Quizzes (Best two out of three)
- Relative grading
- For AU, score \geq CC

Attendance Requirement

- 80% attendance required
- DX grade deadline: October 28 (Tuesday)
- Number of lectures upto deadline = 37
- $37 \times 0.8 = 29.6 \approx 30$
- You can miss at most 7 lectures

Questions?