Course Objective: This course aims to review probability theory and introduce random processes and their analysis with applications in electrical engineering and information sciences.

Instructor: Özgür Gürbüz, Room #1109
ogurbuz@sabanciuniv.edu

Class Hours: Tuesdays 11:40 – 13:30, FENS L062
Wednesdays 11:40 – 16:30, FENS L063


Grading (Tentative):

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<th>Grade</th>
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<td>Final</td>
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Topics to be covered (Tentative):

- Probability Models in Electrical and Computer Engineering
- Basic Concepts of Probability Theory
- Random Variables
- Multiple Random Variables
- Sums of Random Variables and Long Term Averages
- Random Processes
- Analysis and Processing of Random Signals
- Markov Chains
- Introduction to Queing Theory

Project:

The students will perform a project that will involve probabilistic modeling and analysis of a problem or part of a problem related to their research topics.

Notes:

There will be only one make up test for students who have missed a test (a midterm or the final). The make up grade will replace the grade of the missed test. The make up will take place after the final examination and it will cover the entire the course.
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