Computer Networks

Listed as CSEE 4119, Spring 2014 Columbia University
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This website provides general information and access to teaching material for an introductory graduate course on computer networks, aimed at students with background in computer science / electrical engineering.

- You will find below on this page a very brief statement about the course,
- More information on the content of the class is available on the ongoing detailed content section of this site.
- Find more about logistics and grading and rules applying to homework submissions and academic honesty

Objective of this course:

In this class you will

- Learn fundamental concepts of networking, and how they apply (or not) to the Internet
- Learn how to program with network protocols, and how to program protocols (going beyond using libraries as black boxes)
- Learn about network performance

Who should take this class?
This class is open to under-graduate and graduate (Master or Ph.D students). It requires some fluency in C and/or Java and some elementary notions of discrete probability.

Who should NOT take this class?
Regarding the above prerequisite, if you have never programmed at all, you need to take a programming class first. Similarly, if you have never used discrete probability before.
This class is an introductory networking class and so if you have already followed a networking class it is recommended not to see the same material again, but to take an advance class in networking.
Finally, if you already have a strong focus in your research (e.g. toward working on physical layer, network security, or web and cloud applications) this class is not covering these topics in depth, and hence you are recommended to choose a more specific class.

Contents and Organization:

The course is organized in 5 parts:
Part I - Overview
Part II - Applications
Part III - Transport
Part IV - Network
Part V - Link

For more information, please visit Detailed Contents