COURSE DETAIL

NETWORK DYNAMICS
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Computer Science
UCEAP Course Number 110
UCEAP Course Suffix
UCEAP Official Title NETWORK DYNAMICS
UCEAP Transcript Title NETWORK DYNAMICS
UCEAP Quarter Units 6.00
UCEAP Semester Units 4.00

Course Description
This course focuses on common principles at the heart of the functioning of modern communication networks and shows how the same notions related to connectivity, resilience and fragility, centrality and influence arise in several different domains. It introduces mathematical tools from graph theory, random graphs, dynamical systems, optimization and game theory, and covers a wide variety of applications including: opinion dynamics and learning in social networks; economic and financial networks; communication networks and the Internet; consensus and gossiping; spread and control of epidemics; dynamics and control of transportation and power networks.

Language(s) of Instruction
English

Host Institution Course Number
FRTN30

Host Institution Course Title
NETWORK DYNAMICS

Host Institution Course Details
https://kurser.lth.se/kursplaner/live/40/en/FRTN30/

Host Institution Campus
Engineering

Host Institution Faculty

Host Institution Degree

Host Institution Department
Engineering- Automatic Control

Course Last Reviewed
2020-2021

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