COURSE DETAIL

2.00

INTRODUCTION TO NETWORK SCIENCE Country China **Host Institution Fudan University** Program(s) **Fudan University UCEAP Course Level Upper Division UCEAP Subject Area(s)** Engineering **UCEAP Course Number** 189 **UCEAP Course Suffix UCEAP Official Title** INTRODUCTION TO NETWORK SCIENCE **UCEAP Transcript Title NETWORK SCIENCE UCEAP Quarter Units** 3.00 **UCEAP Semester Units**

Course Description

From the Internet to the WWW, from wireless communication networks, large power networks to global transportation networks, from the brain in organisms, various metabolic networks to various economic, political, and social relationship networks, people's socioeconomic activities and daily life all take place in a world full of complex networks. Complex network theory studies the commonalities between various complex networks that appear to be different from each other and the universal methods for dealing with them. Since the end of the 20th century, complex network research has permeated many different fields from mathematics and physics to life sciences and information engineering. The scientific understanding of the quantitative and qualitative characteristics of complex networks has become an extremely important challenge in scientific research in the network era. This course will be taught in English, and strives to introduce the basic concepts, basic theories, basic algorithms and practical applications of network science represented by complex network theory in a way that science and engineering undergraduates can understand, including some of the lecturer's own research. The main purpose is to enable students to understand the basic system of complex network systems through the study of this course, master the basic concepts of complex network theory, and cultivate students' interest in network science.

Language(s) of Instruction

English

Host Institution Course Number

INFO130189

Host Institution Course Title

INTRODUCTION TO NETWORK SCIENCE

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2023-2024

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