

COURSE DETAIL

INTRODUCTION TO MATHEMATICAL MODELS

Country

China

Host Institution

Fudan University

Program(s)

Fudan University

UCEAP Course Level

Lower Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

12

UCEAP Course Suffix**UCEAP Official Title**

INTRODUCTION TO MATHEMATICAL MODELS

UCEAP Transcript Title

INTRO MATH MODELS

UCEAP Quarter Units

3.00

UCEAP Semester Units

2.00

Course Description

Introduce the concept, main types and basic methods of mathematical models through cases, so that students can master the thought and method of mathematical modeling initially. This course is also a basic course for students to participate in the mathematical contest in modeling.

Using cases as clues, this course introduces the basic principles and methods of building mathematical models, covering the fields of energy, communication, economy, ecology, aviation and aerospace. The main mathematical methods include elementary mathematics, elementary geometry, calculus, linear algebra, operations research, elementary number theory, graph theory, differential equations, etc.

Language(s) of Instruction

Chinese

Host Institution Course Number

MATH110002

Host Institution Course Title

INTRODUCTION TO MATHEMATICAL MODELS

Host Institution Campus

Host Institution Faculty

Zhijie CAI

Host Institution Degree

Host Institution Department

School of Mathematical Science

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