

COURSE DETAIL

RESERVOIR ENGINEERING

Country

Japan

Host Institution

Tohoku University

Program(s)

Engineering and Science

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mechanical Engineering

UCEAP Course Number

111

UCEAP Course Suffix**UCEAP Official Title**

RESERVOIR ENGINEERING

UCEAP Transcript Title

RESERVOIR ENGR

UCEAP Quarter Units

3.00

UCEAP Semester Units

2.00

Course Description

This lecture intends to understand the basic equations of fluid flow in porous media as reservoirs, and to master the fundamentals about reservoir engineering for analyzing quantitatively mass and heat transport phenomena in underground structures containing fracturing and multiphase flow.

Numerical analysis can provide fundamental information on the production of oil and gas, the extraction of geothermal energy, and the problems of soil contamination and carbon sequestration. A lot of practical examples on the topics are explained in this class.

It is recommended to master fluid dynamics in advance, but this is not compulsory so that we explain easily to master the phenomena.

Language(s) of Instruction

Japanese

Host Institution Course Number

N/A

Host Institution Course Title

RESERVOIR ENGINEERING

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[https://gkms3.bureau.tohoku.ac.jp/sa_gj/slbssbdr.do?value\(risyunen\)=2023&value\(...](https://gkms3.bureau.tohoku.ac.jp/sa_gj/slbssbdr.do?value(risyunen)=2023&value(...)

Host Institution Campus

Tohoku University

Host Institution Faculty

Host Institution Degree

Host Institution Department

Engineering

Course Last Reviewed

2022-2023

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