

COURSE DETAIL

NATURAL RESOURCE MATHEMATICS

Country

Australia

Host Institution

University of Queensland

Program(s)

University of Queensland

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

134

UCEAP Course Suffix**UCEAP Official Title**

NATURAL RESOURCE MATHEMATICS

UCEAP Transcript Title

NATRL RESOURCE MATH

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course examines how to apply deterministic differential and difference equation models to real world examples, and how to solve them using numerical methods. It also covers how to quantify system uncertainties with the help of statistical and probabilistic methods. Students will be taught a range of methods that are employed in industry, research, consultancies and government to model complex natural resource problems. In the process, students will learn how certain fundamental mathematical concepts such as critical points, orthogonality, eigenvalues and singularity recur in different mathematical frameworks with different but, invariably, vitally important physical interpretations.

Language(s) of Instruction

English

Host Institution Course Number

MATH3070

Host Institution Course Title

NATURAL RESOURCE MATHEMATICS

Host Institution Course Details

Host Institution Campus

St. Lucia

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed

2024-2025

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