# **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 Campus**

St. Lucia

# **Host Institution Faculty**

**Host Institution Degree** 

# **Host Institution Department**

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