

# COURSE DETAIL

## STOCHASTIC PROCESSES I

**Country**

Singapore

**Host Institution**

National University of Singapore

**Program(s)**

National University of Singapore

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Statistics Mathematics

**UCEAP Course Number**

117

**UCEAP Course Suffix**

A

**UCEAP Official Title**

STOCHASTIC PROCESSES I

**UCEAP Transcript Title**

STOCHASTIC PROCESS

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

### **Course Description**

This course introduces the concept of modelling dependence and focuses on discrete-time Markov chains. Topics include discrete-time Markov chains, examples of discrete-time Markov chains, classification of states, irreducibility, periodicity, first passage times, recurrence and transience, convergence theorems and stationary distributions. The course requires students to take prerequisites.

### **Language(s) of Instruction**

English

### **Host Institution Course Number**

MA3238,ST3236

### **Host Institution Course Title**

STOCHASTIC PROCESSES I

### **Host Institution Campus**

### **Host Institution Faculty**

### **Host Institution Degree**

### **Host Institution Department**

Mathematics

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