# **COURSE DETAIL**

### **DISTRIBUTED SYSTEMS AND COMPUTING**

# **Country**

Singapore

#### **Host Institution**

Singapore University of Technology and Design

# Program(s)

Singapore University of Technology and Design

#### **UCEAP Course Level**

**Upper Division** 

# **UCEAP Subject Area(s)**

**Computer Science** 

### **UCEAP Course Number**

115

### **UCEAP Course Suffix**

#### **UCEAP Official Title**

DISTRIBUTED SYSTEMS AND COMPUTING

# **UCEAP Transcript Title**

**DISTRIBUTED SYSTEMS** 

# **UCEAP Quarter Units**

6.00

### **UCEAP Semester Units**

4.00

## **Course Description**

This course introduces fundamental concepts for designing and implementing large-scale distributed systems. The course not only focuses on the design aspects of distributed systems, but also on the fundamental principles to ensure the correctness in a distributed environment. Students apply the concepts via hands on assignments using GO programming language. The course also examines specific concepts of distributed systems e.g. designing distributed file systems (such as in Google File Systems) to accommodate arbitrarily many application-level users. Finally, it discusses concepts on recovering from faults (both normal and byzantine) in a distributed system.

# Language(s) of Instruction

English

#### **Host Institution Course Number**

50.041

#### **Host Institution Course Title**

DISTRIBUTED SYSTEMS AND COMPUTING

### **Host Institution Campus**

**Host Institution Faculty** 

**Host Institution Degree** 

### **Host Institution Department**

Information Systems Technology and Design

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