# **COURSE DETAIL**

## **COMPUTATIONAL NEUROSCIENCE**

## **Country**

United Kingdom - Scotland

#### **Host Institution**

University of Edinburgh

## Program(s)

University of Edinburgh

#### **UCEAP Course Level**

**Upper Division** 

## **UCEAP Subject Area(s)**

**Computer Science** 

### **UCEAP Course Number**

163

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

COMPUTATIONAL NEUROSCIENCE

## **UCEAP Transcript Title**

**COMPUTATIONAL NEURO** 

## **UCEAP Quarter Units**

4.00

#### **UCEAP Semester Units**

2.70

#### **Course Description**

This course focuses on computation in the nervous system. Students are introduced to basic neuroscience concepts, learn about how computational models are used to simulate processes in the brain, and learn about theories for how the brain processes information and performs computations. Topics include an introduction to basic neuroscience concepts, models of neurons, neural encoding, neural decoding, information theory, network models, and plasticity/learning. The course is delivered through lectures and computer labs.

### Language(s) of Instruction

English

### **Host Institution Course Number**

INFR11209

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

COMPUTATIONAL NEUROSCIENCE

# **Host Institution Campus**

# **Host Institution Faculty**

School of Informatics

# **Host Institution Degree**

# **Host Institution Department**

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