# **COURSE DETAIL**

### **HIGH PERFORMANCE COMPUTING**

## **Country**

Iceland

#### **Host Institution**

University of Iceland

### Program(s)

University of Iceland

#### **UCEAP Course Level**

**Upper Division** 

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

**Computer Science** 

### **UCEAP Course Number**

132

### **UCEAP Course Suffix**

#### **UCEAP Official Title**

HIGH PERFORMANCE COMPUTING

### **UCEAP Transcript Title**

HIGH PERFORMNC COMP

## **UCEAP Quarter Units**

5.00

#### **UCEAP Semester Units**

3.30

### **Course Description**

Main topics include the design of parallel computers and parallel programming models; shared memory architecture; message passing and distributed memory architecture; parallel programming of computer clusters using MPI and multicore programming using OpenMP; parallel algorithms for sorting, searching, linear algebra, and various graph problems.

## Language(s) of Instruction

English

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

REI204M

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

HIGH PERFORMANCE COMPUTING

### **Host Institution Campus**

## **Host Institution Faculty**

**Engineering and Natural Sciences** 

## **Host Institution Degree**

## **Host Institution Department**

Print