# **COURSE DETAIL**

## **PYTHON APPLIED TO COMPUTATIONAL FLUID DYNAMICS**

## **Country**

Mexico

#### **Host Institution**

National Autonomous University of Mexico

## Program(s)

National Autonomous University of Mexico

## **UCEAP Course Level**

Graduate

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

**Physics Mathematics Engineering** 

## **UCEAP Course Number**

203

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

PYTHON APPLIED TO COMPUTATIONAL FLUID DYNAMICS

## **UCEAP Transcript Title**

PYTHON/FLUID DYNAM

## **UCEAP Quarter Units**

4.50

#### **UCEAP Semester Units**

3.00

## **Course Description**

This course offers a study of the fundamentals of Python3 programming language for scientific computation (computational fluid dynamics). Topics include: basic commands for running python routines in a jupyter environment-- manipulation of files, directories, and processes, parameters of a command in POSIX format, interactive environments, and git; numerical methods for wave field models-- finite differences, finite volume method, and finite element method.

## Language(s) of Instruction

Spanish

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

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

PYTHON APPLIED TO COMPUTATIONAL FLUID DYNAMICS

#### **Host Institution Campus**

CIUDAD UNIVERSITARIA

#### **Host Institution Faculty**

**FACULTAD DE CIENCIAS** 

#### **Host Institution Degree**

# **Host Institution Department**

INSTITUTO DE CIENCIAS APLICADAS Y TECNOLOGÍA

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