

BIOENG-601

Python Bootcamp

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Cursus	Sem.	Type
Biotechnology and Bioengineering		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Multiple
Workload	60h
Hours	40
Courses	20
Exercises	20
Number of positions	25

Frequency

Every year

Remark

Next time: July 9-13, 2018

Summary

An intensive, hands-on, pragmatic introduction to computer programming. Students learn basic concepts like data types, control structures, string processing, functions, input/output. They perform simulations, write scripts, and analyze and plot biological data. Python is the language of instruction.

Content

Greetings students and postdoctoral fellows in the biological sciences! Addressing the big questions in biology increasingly requires help from computers. We are therefore excited to offer the fifth edition of our Caltech course for graduate students, BE/Bi/NB 203: Introduction to Programming for the Biological Sciences Bootcamp. The first at EPFL! Our aim is to bring you up to speed with programming skills that you can immediately put to use in your research. Because intensive, hands on training is a great way to learn practical skills efficiently, we are offering this course as a weeklong bootcamp this summer, starting on Monday, July 9, ending on Friday, July 13. All you need to bring is yourself, your laptop, and a power supply. A typical day in the bootcamp is as follows:

8-noon (with 15 minute break in the middle): Hands-on instruction

noon-1: Lunch with research talk from EPFL faculty highlighting use of computation in biology

1-6 (with a 15 minute break in the middle): Hands-on instruction followed by exercise session

You can check out the Caltech version of the bootcamp here: <http://justinbois.github.io/bootcamp/>

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This course is for biology students who want to use Python programming in their work.

Requirements: Students should bring their own laptop for Python installation.

Minimum 10 participants

Maximum 30 participants

REGISTRATIONS: Please do not register on IS-Academia, but by contacting edbb@epfl.ch directly, as the seating is limited and split between PhD students and Master/Bachelor-6 students.

Note

Full attendance all week is required to be able to register for the course.

Keywords

Python Bootcamp

Learning Outcomes

By the end of the course, the student must be able to:

- Use python to analyze biological datasets

Resources

Websites

- <http://justinbois.github.io/bootcamp/>