EPFL

BIO-695 **Image Processing for Life Science**

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Cursus	Sem.	Type
Molecular Life Sciences		Opt.

Language of teaching	English
Credits	2
Session	
Exam	Written & Oral
Workload	60h
Hours	**42**
Courses	14
Exercises	28
Number of positions	**16**

Frequency

Every year

Remark

This course is open to max. 16 students. To register, contact EDMS program administrator.

Summary

Registration details will be announced via email. It takes place from September to December & intends to teach image processing with a strong emphasis of applications in life sciences. The idea is to enable the participants to solve image processing questions via workflows independently.

Content

Over the last decades, the images arising from microscopes in Life Sciences went from being a qualitative support of scientific evidence to a quantitative resource.
To obtain good quality data from digital images, be it from a photograph of a Western blot, a TEM slice or a multi-channel confocal time-lapse stack, scientists must understand the underlying processes leading to the extracted information. Of similar importance is the software used to obtain the data.

Keywords

Biology, Image Processing, Microscopy, ImageJ, FIJI, Macros, Data, Segmentation, Filtering Visualisation Open so

Assessment methods

Continuous
Multiple

Resources

Websites

• http://phd.epfl.ch/edms/coursebook