

COURSE DETAIL

FUNDAMENTALS OF MEDICAL IMAGING WITH HANDS-ON MRI

Country

United Kingdom - England

Host Institution

University of Sussex

Program(s)

Summer in Sussex

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Health Sciences

UCEAP Course Number

111

UCEAP Course Suffix

S

UCEAP Official Title

FUNDAMENTALS OF MEDICAL IMAGING WITH HANDS-ON MRI

UCEAP Transcript Title

MED IMAG FUNDAMENT

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

The course covers the fundamental principles of medical imaging, including the basics of the 4 major medical imaging methods: Ultrasound, X-Ray CT, PET, and MRI. The focus is on MRI and how it is used to capture the anatomy and function of the human brain. The course also provides hands-on experience with acquiring brain images using a 3T MRI scanner. Students learn how to process and characterize MRI images from healthy volunteers. Functional MRI (fMRI) data is used to learn the basics of statistical analysis used in neuroscience research. Students have the opportunity to interact with the MRI team and also with clinicians and neuroscientists who use the MRI for research.

Language(s) of Instruction

English

Host Institution Course Number

IS453

Host Institution Course Title

FUNDAMENTALS OF MEDICAL IMAGING WITH HANDS-ON MRI

Host Institution Campus

University of Sussex

Host Institution Faculty

Undergraduate Summer School

Host Institution Degree

Host Institution Department

Brighton and Sussex Medical School (BSMS)

[Print](#)