COURSE DETAIL

ADVANCED MEDICAL IMAGING
Country Ireland
Host Institution Trinity College Dublin
Program(s) Trinity College Dublin
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Bioengineering
UCEAP Course Number 175
UCEAP Course Suffix
UCEAP Official Title ADVANCED MEDICAL IMAGING
UCEAP Transcript Title ADV MEDICAL IMAGING
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

The course equips students with an understanding of engineering approaches to advanced biomedical imaging. It strongly focuses understanding the physical processes that occur between a particular imaging modality and the biological material being investigated. This course introduces the physical concepts of advanced medical imaging via lectures focused on specific imaging modalities. Lectures cover various imaging techniques to provide an advanced understanding of the physics of the signal and its interaction with biological tissue; image formation or reconstruction; modality-specific issues for image quality; clinical applications; and biological effects and safety. This course uses state-of-the-art emerging imaging modalities in research and engineering approaches to advance such techniques to the clinic.

Language(s) of Instruction
English

Host Institution Course Number
ME5BIO7

Host Institution Course Title
ADVANCED MEDICAL IMAGING

Host Institution Course Details
https://www.tcd.ie/media/tcd/biomedical-engineering/pdfs/2425-ME5BIO7_Advanced-...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Engineering

Course Last Reviewed

2024-2025

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