

COURSE DETAIL

ELECTROMAGNETISM II

Country

Brazil

Host Institution

Pontifical Catholic University of Rio de Janeiro

Program(s)

Pontifical Catholic University of Rio de Janeiro

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

116

UCEAP Course Suffix**UCEAP Official Title**

ELECTROMAGNETISM II

UCEAP Transcript Title

ELECTROMAGNETISM II

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course covers solutions to Maxwell's equations and the wave equation, including plane waves, reflection, and refraction. Topics also include the Poynting vector, radiation-matter interactions, and models of conductivity and refractive index. The course further examines radiation from an oscillating dipole and from point charges.

Language(s) of Instruction

Portuguese

Host Institution Course Number

FIS1302

Host Institution Course Title

ELETROMAGNETISMO II

Host Institution Course Details

<https://www.puc-rio.br/ferramentas/ementas/ementa.aspx?cd=FIS1302>

Host Institution Campus

PUC-Rio

Host Institution Faculty

Host Institution Degree

Host Institution Department

PHYSICS

Course Last Reviewed

2025-2026

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