

COURSE DETAIL

MATHEMATICAL METHODS FOR PHYSICS II

Country

Spain

Host Institution

University of Barcelona

Program(s)

University of Barcelona

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Physics

UCEAP Course Number

104

UCEAP Course Suffix

B

UCEAP Official Title

MATHEMATICAL METHODS FOR PHYSICS II

UCEAP Transcript Title

MATH METHOD PHYS II

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

Know how to solve second-order ordinary linear differential equations using the series expansion method. Understand the utility of series developments of orthogonal functions and apply them to a series of partial differential equations of utility in physics. Understand the importance of contour conditions and their role in determining a discrete spectrum of eigenvalues and applying them to a series of partial differential equations useful in physics. Acquire ease in the use of Fourier and Laplace transforms in the resolution of differential and linear integral equations.

Language(s) of Instruction

Host Institution Course Number

360578

Host Institution Course Title

MÈTODES MATEMÀTICS PER A LA FÍSICA II

Host Institution Course Details

https://www.ub.edu/pladocent/?cod_giga=360578&curs=2025&idioma=CAT

Host Institution Campus

Campus Diagonal

Host Institution Faculty

Facultat de Física

Host Institution Degree

Física/Physics

Host Institution Department

Departament de Física de la Matèria Condensada

Course Last Reviewed

2025-2026

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