

COURSE DETAIL

ORDINARY DIFFERENTIAL EQUATIONS

Country

Ireland

Host Institution

Trinity College Dublin

Program(s)

Trinity College Dublin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

178

UCEAP Course Suffix**UCEAP Official Title**

ORDINARY DIFFERENTIAL EQUATIONS

UCEAP Transcript Title

ORDINARY DIFF EQUAT

UCEAP Quarter Units

4.00

UCEAP Semester Units

2.70

Course Description

Students learn how to apply various standard methods (separation of variables, integrating factors, reduction of order, undetermined coefficients) to solve certain types of differential equations (separable, first-order linear, linear with constant coefficients); give examples of differential equations for which either existence or uniqueness of solutions fails; compute the exponential of a square matrix; and use either linearization or the Lyapunov theorems to check the stability of critical points for a given autonomous system.

Language(s) of Instruction

English

Host Institution Course Number

MAU23205

Host Institution Course Title

ORDINARY DIFFERENTIAL EQUATIONS

Host Institution Course Details

<https://www.maths.tcd.ie/undergraduate/modules/MAU23205.php>

Host Institution Campus

Trinity College Dublin

Host Institution Faculty

Host Institution Degree

Host Institution Department

Mathematics

Course Last Reviewed

2023-2024

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