COURSE DETAIL

DIFFERENTIAL GEOMETRY 2

Country
Korea, South

Host Institution
Yonsei University

Program(s)
Yonsei University

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Mathematics

UCEAP Course Number
100

UCEAP Course Suffix
B

UCEAP Official Title
DIFFERENTIAL GEOMETRY 2

UCEAP Transcript Title
DIFFERENTL GEOMETRY

UCEAP Quarter Units
4.50

UCEAP Semester Units

3.00

Course Description

This course studies geometric properties of curves and surfaces in the 3-dimensional Euclidean space, applying tools of multivariable, and vector calculus.Topics include covariant derivatives, frame fields, connection forms, structural equations, normal curvaure, gaussian curvature, computational techniques, special curves in a surface, form computation, isometries and local isometries, intrinsic geometry, orthogonal coordinates, integration and orientation, total curvature, geodesics, the gauss-bonnet, application of gauss-bonnet theorem.

Language(s) of Instruction
English

Host Institution Course Number
MAT3102

Host Institution Course Title
DIFFERENTIAL GEOMETRY (2)

Host Institution Course Details

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department
Mathematics

Course Last Reviewed
2022-2023

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