COURSE DETAIL

GEOMETRIC DIMENSIONING AND TOLERANCING FOR MANUFACTURING

Country
Germany

Host Institution
Technical University Berlin

Program(s)
Technical University Summer

UCEAP Course Level
Upper Division

UCEAP Subject Area(s)
Mechanical Engineering

UCEAP Course Number
115

UCEAP Course Suffix

UCEAP Official Title
GEOMETRIC DIMENSIONING AND TOLERANCING FOR MANUFACTURING

UCEAP Transcript Title
DIMENSION&TOLERANCE

UCEAP Quarter Units
4.00

UCEAP Semester Units

2.70

Course Description
This course covers the fundamentals of Geometric Dimensioning and Tolerancing (GD&T) and delves into some of the practical implications and effects that drawing notations have on actual production parts. This course covers the following: methods for determining tolerances and manufacturing precision; pros and cons of using GD&T to specify dimensions and tolerances of parts and/or assemblies; general understanding of how to dimension a part and assembly drawing with GD&T; knowledge of how GD&T usage affects part production and assembly. The course is comprised of four lecture days per week consisting of traditional classroom instruction intermixed with faculty-accompanied engineering tours. Students receive a more in-depth practical overview of GD&T and have opportunity to see the effects of tolerance selection in person. Faculty-led discussions and group assignments/projects help to reinforce the topics covered. Tours on this course include the BMW Plant and a tour of Berlin. Students need a laptop computer with current versions of Microsoft Word, Excel, and PowerPoint, or equivalent software, to complete course assignments. Additionally, students should have taken classes in: Calculus, Physics, Any engineering drawing/CAD course.

Language(s) of Instruction
English

Host Institution Course Number

Host Institution Course Title
GEOMETRIC DIMENSIONING AND TOLERANCING FOR MANUFACTURING

Host Institution Course Details

Host Institution Campus
TUBS

Host Institution Faculty

Host Institution Degree

Host Institution Department
Course Last Reviewed

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