# 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 Campus**
TUBS

**Host Institution Faculty**

**Host Institution Degree**

**Host Institution Department**

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