



Syllabus

MET 221 Machine Design II

General Information

Date

January 11th, 2019

Author

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Department

Science and Technology

Course Prefix

MET

Course Number

221

Course Title

Machine Design II

Course Information

Credit Hours

3

Lecture Contact Hours

2

Lab Contact Hours

3

Other Contact Hours

0

Catalog Description

Advance study in the design of machine elements. Topics include power transmission shafting, mechanical clutches and brakes, springs, welded and riveted connections, power screws, and working stresses.

Key Assessment

This course does not contain a Key Assessment for any programs

Prerequisites

None

Co-requisites

None

Grading Scheme

Letter

First Year Experience/Capstone Designation

This course DOES NOT satisfy the outcomes applicable for status as a FYE or Capstone.

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category

None

FLCC Values

Institutional Learning Outcomes Addressed by the Course

Course Learning Outcomes

Course Learning Outcomes

1. Design and analyze power transmission components such as bearings, keys pins, brakes and clutches
2. Analyze loads and stresses for fasteners and springs
3. Design and analyze linkage systems

Program Affiliation

This course is required as a core program course in the following program

AAS Mechanical Technology

Outline of Topics Covered

- a. Parallel keys
- b. Woodruff keys
- c. Shear pins
- d. Linkage systems
- e. Mechanical fasteners
- f. Rolling contact bearings
- g. Plain surface bearings
- h. Full-film bearings
- i. Tension springs
- j. Compression springs
- k. Clutches
- l. Brakes