

Engineering 1, 2, 3 & 4 Four one semester courses for juniors and seniors. SC343, SC353, SC443, SC453

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Course Information:

- Engineering 1-4 are preparatory classes to help students be prepared for majors in engineering at college. The classes are listed as science classes at Moeller.
- 2. Engineering 1 is fall course for juniors and seniors and they may continue with Engineering 2. Juniors who complete Engineering 1 & 2, may take 3 & 4 as seniors.
- 3. All 4 classes are Honors level courses-Engineering 1 is a dual credit and may receive college credit
- Students who are progressing to take pre-calculus or higher as seniors are eligible for Engineering 1.



Engineering 1

- Comments on Dual Credit-during the past two years many students at Moeller choose to pay a \$220 fee get two semester hours of University of Cincinnati college credit from Engineering 1. They did not have to complete anything extra to get the credit. The credit is transferrable to all Ohio state schools (and most private schools).
- The Engineering Models I-Matlab is a programming open to students that are juniors or seniors that want to pursue engineering-it is also dual credit.



Course Description: Engineering 1-4 are courses designed to help students learn about how engineers solve problems (the design process) and to help them lean about engineering careers and engineering fundamentals.

Students complete a large number of group projects ranging from building cardboard chair to design bridges or other projects.



Academic Requirements:

- 1. A major focus of the class is methodical problem solving and the design process.
- 2. Students learn about different engineering disciplines and complete projects in various disciplines.
- 3. Students do project work in groups in class
- 4. About 1-2 major projects per quarter
- 5. Homework overall is about 2-4 hours per week.



 Engineering students at college have Calculus as their first math class so it is important that students work as hard as possible and learn as much as possible to make a smooth transition to college. Students need to be progressing take pre-calculus during their senior year in order to qualify for Engineering 1-4. Seniors need to be taking Physics or AP Physics to qualify for Engineering 1-4.

