

FSE 100 - Introduction to Engineering

Spring 2016

Arizona State University
Ira A. Fulton Schools of Engineering
Schools of Computing, Informatics and Decision Systems Engineering

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Office Hours: See course Web site

Course Website: Assignments, Announcements, and other course materials will be posted to Blackboard via myASU. Grades will also be posted on Blackboard. Make sure to check Blackboard regularly.

Course Description:

Introduces the engineering design process; working in engineering teams; the profession of engineering; engineering models, written and oral technical communication skills.

Enrollment prerequisites: none

Lecture and lab

Units: 2

Textbook: none

Course materials, including lecture slides and lab tutorials will be provided in the course Web site.

Course Objectives:

1. To discover the excitement and creativity in the practice of engineering and computer science.
2. To learn and use the engineering design process.
3. To learn to work in a team environment.
4. To improve technical communication skills by writing and speaking about the projects in the course.

Course Learning Outcomes:

1. Students will, as part of a design team, use the engineering design process to create effective problem statements, and design, build, test, and analyze a prototype product that addresses realistic constraints and system requirements, while using basic project management techniques.
2. Students will use appropriate tools and software to collect and analyze data, to describe and predict the behavior of designs, and to justify design decisions based on appropriate models.
3. Students will apply basic teaming principles and team effectiveness practices, such as peer evaluation and role assignment, while working with their team.
4. Students will write a project report and give an oral/multimedia presentation following FSE-100 technical communication guidelines which include formatting, explaining and justifying aspects of the project.
5. Students will be able to identify their strengths and contributions, critique their own skills and understanding (lifelong learning), and develop identity as an engineer.

Individual:

Exam 1 (mid-term)	20%
Exam 2 (Final)	20%
Lecture and Pre-Lab Quizzes	10%

Group:

Weekly Lab Work	20%
Projects and Reports	30%

The final letter grade is decided according to the percentage points obtained as follows:

- A, A+ 89.6-94.5, 94.6-100%
- B, B+ 79.6-84.5, 84.6-89.5%
- C, C+ 69.6-74.5, 74.6-79.5%
- D 60-69.5%
- E less than 60%

The grade of "I" (incomplete) can be given ONLY when a student, who is doing otherwise acceptable work (passing grade), is unable to complete a part of work (e.g., the final exam) because of documented illness or other conditions beyond the student's control. In the latter case, the student must discuss with the instructor and complete an application form from the department before the part of work is due or as soon as the circumstances are known. Please see ASU grading policies at: <http://students.asu.edu/grades-grading-policies>

Extra Credit and Alternative Activity

Missing a graded activity will be given zero credit. No makeup activities can be given. No extra credit-activities will be given to any individual. Extra credit-activities may be given to the entire class. The lowest quiz score will be dropped. An alternative to the grade activities can be arranged if the absence is caused by documented illness or personal emergency that made the completion/attending impossible. A written explanation (including supporting documentation) must be submitted to the instructor before the part of work is due or as soon as the circumstances are known.

Grading Appeals

Any inquires or appeals on grades of homework, projects, or tests must be done in writing by completing the "Grade Inquiry Form" within a week from the day the assignment was returned or comments were published on-line. State the problem and the rationale for any change in grade in your appeal.

Academic Integrity and Honor Code

You are encouraged to cooperate in study group on learning the course materials. However, you may not cooperate on preparing the individual assignments. Anything that you turn in must be your own work: You must write up your own solution with your own understanding. If you use an idea that is found in a book or from other sources, or that was developed by someone else or jointly with some group, make sure you acknowledge the source and/or the names of the persons in the write-up for each problem. When you help your peers, you should never show your work to them. All assignment questions must be asked in the course discussion board. Asking assignment questions or making your assignment available in the public websites before the assignment due will be considered cheating. All individual tests must be done independently. Working together during tests is not permitted.

The instructor and the TA will **CAREFULLY** check any possible proliferation or plagiarism by comparing among the student submissions, previous student submissions, and the publications in the public Web sites. We will use the document/program comparison tools like MOSS (Measure Of Software Similarity: <http://moss.stanford.edu/>) to check all assignments and tests that you submitted for grading.

The Ira A. Fulton Schools of Engineering expect all students to adhere to ASU's policy on Academic Dishonesty. These policies can be found in the Code of Student Conduct:

http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm

ALL cases of cheating or plagiarism will be handed to the Dean's office. Penalties include a failing grade in the class, a note on your official transcript that shows you were punished for cheating, suspension, expulsion and revocation of already awarded degrees.

Fulton Schools of Engineering Honor Code (<http://engineering.asu.edu/integrity/honor-code/>)

1. Seek out, acquaint myself with, and obey the instructor's rules concerning the materials I am allowed to use and the types of collaboration in which I am permitted to engage in each of my courses.
2. Help my fellow engineering students to succeed both academically and professionally, while both following the instructor's guidelines on collaboration and encouraging my classmates to behave ethically.
3. Ensure that all of my individual work products reflect my own abilities and not those of someone else. I will never copy the work of others or give others the opportunity to copy mine.
4. Contribute a fair share of work to all teamwork in which I participate, and acknowledge the contributions of others. I will accept responsibility for the integrity of all work submitted by my team.
5. Use only aids authorized by the instructor during all examinations, quizzes, projects, assignments and other evaluations.
6. Provide aid to, or receive aid from other students only as permitted by the instructor.
7. Give full credit to others for their words and ideas, whether directly quoted or paraphrased, using proper citation practices in all of my work, including text, figures and computer code, and all materials obtained from the Internet.
8. Never act dishonestly including lying, cheating, stealing, or attempting to corrupt the academic enterprise in any way.
9. Ensure that all data I record or report are objective, true, accurate and properly documented.
10. Treat all students, faculty and staff with respect, courtesy and dignity, the way I would like to be treated myself.
11. Recognize that it is how I act when no one else is watching that defines my true character.
12. Act at all times with integrity, as the true professional that I am to become.

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <http://sexualviolenceprevention.asu.edu/faqs/students>.