

# CSE 101 Introduction to Computer Science and Engineering

## Syllabus and Additional Course Information

Dr. Yinong Chen

### Catalog Description

Introduction to topics in Computer Science and Computer Engineering; familiarization with CSE curriculum sub-disciplines and topics; Design of computer software and systems; exploring and experimenting with systems; teamwork; professional opportunities; computer models and programming; communication skills; Lecture, Lab.

### Textbooks (not required)

*Computer Science – An Overview, J. Glenn Brookshear, 10th ed., Addison Wesley, 2009, ISBN: 0-321-52403-9.*

### Course Objective

1. To discover the excitement and creativity in the practice of electrical engineering and computer engineering.
2. To learn to work in a team environment, using engineering models and design methods, to address engineering design problems in computer based disciplines.
3. To learn to improve technical communication skills by writing and speaking about the design work being undertaken

### Course Outcomes

Students who complete this course can

1. demonstrate knowledge of computer science and engineering topics and areas
2. design and implement computing projects
3. demonstrate elementary computer programming skills
4. demonstrate project teaming and management skills
5. apply software tools to the design process
6. communicate technical material in oral and written forms
7. understand the scope of the CSE discipline and its impact and possibilities
8. have an understanding of the concepts of CSE including programming, design, theory and implementations
9. understand the sub-disciplines of CSE and what they relate to
10. define career opportunities in Computer Science and Computer Systems Engineering

### Major Topics Covered

- Computer Science and Engineering basics with some exposure to advanced ideas (3 weeks)
- Basic programming techniques and tools
- Project design and management
- Project work – implementation, evaluation and testing
- Experimentation
- Career options

## Additional Course Information

### Weight and Grading Scale

Your performance will be assessed by assignments, programming projects, quizzes, a Mid-Term Exam and a Final Exam. Their weights are:

Weekly pre-Lab quizzes (individual)	12%
Weekly lab Assignments (group)	40%
Design project (group)	16%
In-class exercises (group or individual)	8%
Exams I, II, and III (individual)	24% (8% each)
Total	100%

Your final letter grade is decided according to your percentage points as follows (tentative):

A-, A, A+	90-92, 93-95, 96-100%
B-, B, B+	80-82, 83-86, 86-89%
C, C+	70-75, 76-79%
D	60-69%
E	less than 60%

The grade of "I" (incomplete) can ONLY be given 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>

### Zero Credit, Extra Credit, and Alternative Activities

Missing tests and exams will be giving zero credit and may not be made up. Missing the submission deadline will result in grade deduction. You may submit incomplete assignments for partial credit.

No extra credit-activities will be given to any individual. Extra credit-activities may be given to the entire class. An alternative to a graded activity may be arranged if a student misses a graded activity and the absence is caused by documented illness or personal emergency. 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.

### Cooperation

It is a part of the course to work in a team. You are required to cooperate with your team member on the group assignments and projects. However, the contribution and possibly the weight of individual team members must be acknowledged/specified in the work handed in for grades. Anything you turn in must be your (or the team's) own work: You (or the team) must write up your own solution with your own understanding. If a team uses an idea that is found in a book or other sources, or that was developed by someone outside the team, make sure you acknowledge the source and/or the names of the persons in the write-up for each

problem.

You are also encouraged to work with any member in the class to study for the tests and exams.

The instructor and the TAs will CAREFULLY check any possible proliferation or plagiarism. We may also use the software tools like MOSS (Measure Of Software Similarity) to check any assignment that you submitted for grading. The university expects all students to adhere to ASU's policy on academic integrity. These policies can be found in the Code of Student Conduct:

[http://www.asu.edu/studentaffairs/studentlife/judicial/academic\\_integrity.htm](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.