

RCEAS - CSE
Proposed Program Change- Fall 2008

Minor in Computer Science

Name and summary of current program:

Minor in Computer Science

Proposed program changes (as they will appear in the catalog):

Current catalog entry:

Minor in Computer Science.

The minor in computer science provides a basic familiarity with software development and programming, computer organization, and essential elements of computer science. This minor is not available to students of the CSE or ECE departments. Engineering students should note that ENGR 1 plus CSE 16 is a substitute for CSE 15. The minor requires 16 credit hours, consisting of the following:

- | | |
|--------|--|
| CSE 15 | Introduction to Computing (4) |
| CSE 17 | Structured Programming and Data Structures (3) |

Plus any three CSE courses, EXCEPT CSE 130, Technical Presentation, and CSE 252, Computers, the Internet, and Society.

Proposed catalog entry:

Minor in Computer Science.

The minor in computer science provides a basic familiarity with software development and programming, computer organization, and essential elements of computer science. This minor is not available to majors in Computer Science or Computer Science and Business. Engineering students should note that ENGR 1 plus CSE 16 is a substitute for CSE 15. The minor requires 16 credit hours, consisting of the following:

- | | |
|--------|--|
| CSE 15 | Introduction to Computing (4) |
| CSE 17 | Structured Programming and Data Structures (3) |

Plus any three CSE courses, EXCEPT CSE 42, Principles of Computer Game Design, CSE 130, Technical Presentation, and CSE 252, Computers, the Internet, and Society.

Description of proposed change(s):

The (underlined) changes are: (1) Reduce the restrictions on access to the minor, thus enabling Computer Engineering and Electrical Engineering majors to minor in computer science. (2) Not allow CSE 42 to be counted toward the minor.

Rationale for proposed change(s):

(1) The computer science minor substantially enhances the Computer Engineering and Electrical Engineering majors and enables these majors to highlight the minor on their resumes.

RCEAS: CSE Department
Proposed Change in Course Description – Fall 2008

Course number and course description (as it currently appears in course catalog):

CSE 327 Artificial Intelligence Theory and Practice(3)

Introduction to the field of artificial intelligence: Problem solving, knowledge representation, reasoning, planning and machine learning. Use of AI systems or languages. Advanced topics such as natural language processing, vision, robotics, and uncertainty. Prerequisite: CSE 15 or 17.

Course number and course description (as is it will appear in course catalog):

CSE 327 (COGS 327) Artificial Intelligence Theory and Practice(3)

Introduction to the field of artificial intelligence: Problem solving, knowledge representation, reasoning, planning and machine learning. Use of AI systems or languages. Advanced topics such as natural language processing, vision, robotics, and uncertainty. Prerequisite: CSE 15 or 17.

Nature of change.

Cross list with COGS 327

Rationale for change:

CSE 327 is required in the COGS curriculum. Cross listing it gives it greater visibility.

RCEAS: CSE Department
Propose Change in Course Description – Fall 2008

Course number and course description (as it currently appears in course catalog):

CSE 308. Bioinformatics: Issues and Algorithms (3)

Computational problems and their associated algorithms arising from the creation, analysis, and management of bioinformatics data. Generic sequence comparison and alignment, physical mapping, genome sequencing and assembly, clustering of DNA microarray results in gene expression studies, computation of genomic rearrangements and evolutionary trees. Credit will not be given for both CSE 308 and CSE 408. No prior background in biology assumed. Prerequisites: CSE 340 or IE 170 or permission of the instructor.

Course number and course description (as is it will appear in course catalog):

CSE 308. Bioinformatics: Issues and Algorithms (3)

Computational problems and their associated algorithms arising from the creation, analysis, and management of bioinformatics data. Generic sequence comparison and alignment, physical mapping, genome sequencing and assembly, clustering of DNA microarray results in gene expression studies, computation of genomic rearrangements and evolutionary trees. Credit will not be given for both CSE 308 and CSE 408. No prior background in biology assumed. Prerequisites: CSE 17 or permission of the instructor.

Nature of change.

Change prerequisite from “CSE 340 or IE 170 or permission of instructor” to “CSE 17 or permission of instructor”

Rationale for change:

CSE 17 is a more suitable prerequisite for the course. At the same time, the change makes the course more widely accessible.