

CSE 4689 (Approved): Professional Practice in Industry

Course Description

Preparation and submission of a comprehensive report based on actual employment experience in a co-op job in industry.

Prior Course Number: 489

Transcript Abbreviation: Prof Experience

Grading Plan: Progress - S/U

Course Deliveries: Classroom

Course Levels: Undergrad

Student Ranks: Freshman, Sophomore, Junior, Senior

Course Offerings: Autumn, Spring, May, Summer

Flex Scheduled Course: Always

Course Frequency: Every Year

Course Length: 14 Week

Credits: 0.0

Repeatable: Yes

Maximum Repeatable Credits: 0.0

Total Completions Allowed: 8

Allow Multiple Enrollments in Term: No

Time Distribution:

Expected out-of-class hours per week: 0.0

Graded Component: Lecture

Credit by Examination: No

Admission Condition: No

Off Campus: Never

Campus Locations: Columbus

Prerequisites and Co-requisites: Permission of the CSE Advising Office

Exclusions:

Cross-Listings:

The course is required for this unit's degrees, majors, and/or minors: No

The course is a GEC: No

The course is an elective (for this or other units) or is a service course for other units: Yes

Subject/CIP Code: 14.9999

Subsidy Level: Baccalaureate Course

Programs

| Abbreviation | Description |
|--------------|-------------------------------------|
| BS CSE | BS Computer Science and Engineering |

General Information

Maintains full-time student enrollment status while working. It will not maintain student athletes' full-time status at this time.
Being a full-time student while on co-op or intern work assignment ensures being able to...
Pick up or purchase athletic tickets
Get an RPAC pass at the student rate
Get an OSU golf course pass at the student rate
Obtain enrollment verification for insurance, if covered under your parents' car and/or health policies

| |
|---|
| Verifies a continuing full-time student for financial aid purposes. If a student typically receives financial aid and does not enroll in CSE 4689, the student will be placed on leave of absence status which could result in the student being required to start re-payment of their student loans before graduation. |
| Course is a prerequisite to employment for some employers, since enrollment in such a course fits the legal requirements outlined in Ohio Revised Code Section 4141.01(B)(3)(e)(ii). These employers will contact ECIP to verify enrollment. |
| Transcript formally documents co-op or internship experience. In Ohio, as in many states, co-op and internship experience counts toward the 4-year field work requirement to obtain the Professional Engineer (PE) license. Note: only experience from the junior year in major onward applies. [This is not the same as junior rank based on accumulated elective credits.] |
| Enables student to waive your residence hall contract if you are working outside of the Columbus metro area. |
| Ensures student will be eligible for student health insurance for the quarter worked -- health insurance is required to participate as a co-op or intern. |

Course Topics

| Topic | Lec | Rec | Lab | Cli | IS | Sem | FE | Wor |
|---|-----|-----|-----|-----|----|-----|----|-----|
| Students complete a cooperative assignment in private industry or for a government agency; assignments supervised by the employer and monitored and evaluated by the CSE Advising Office. | | | | | | | | |

Grades

| Aspect | Percent |
|--|---------|
| Graded S - Satisfactory or U - Unsatisfactory, based on satisfactory completion of the co-op activity and the completion of the assignment from the CSE Advising Office. | 100% |

ABET-EAC Criterion 3 Outcomes

| Course Contribution | College Outcome |
|---------------------|---|
| | a An ability to apply knowledge of mathematics, science, and engineering. |
| | b An ability to design and conduct experiments, as well as to analyze and interpret data. |
| | c An ability to design a system, component, or process to meet desired needs. |
| ** | d An ability to function on multi-disciplinary teams. |
| ** | e An ability to identify, formulate, and solve engineering problems. |
| * | f An understanding of professional and ethical responsibility. |
| * | g An ability to communicate effectively. |
| * | h The broad education necessary to understand the impact of engineering solutions in a global and societal context. |
| | i A recognition of the need for, and an ability to engage in life-long learning. |
| | j A knowledge of contemporary issues. |
| ** | k An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice. |

BS CSE Program Outcomes

| Course Contribution | Program Outcome |
|---------------------|---|
| | a an ability to apply knowledge of computing, mathematics including discrete mathematics as well as probability and statistics, science, and engineering; |
| | b an ability to design and conduct experiments, as well as to analyze and interpret data; |

| Course Contribution | | Program Outcome |
|----------------------------|---|--|
| | c | an ability to design, implement, and evaluate a software or a software/hardware system, component, or process to meet desired needs within realistic constraints such as memory, runtime efficiency, as well as appropriate constraints related to economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability considerations; |
| ** | d | an ability to function on multi-disciplinary teams; |
| ** | e | an ability to identify, formulate, and solve engineering problems; |
| * | f | an understanding of professional, ethical, legal, security and social issues and responsibilities; |
| * | g | an ability to communicate effectively with a range of audiences; |
| * | h | an ability to analyze the local and global impact of computing on individuals, organizations, and society; |
| | i | a recognition of the need for, and an ability to engage in life-long learning and continuing professional development; |
| | j | a knowledge of contemporary issues; |
| ** | k | an ability to use the techniques, skills, and modern engineering tools necessary for practice as a CSE professional; |
| * | l | an ability to analyze a problem, and identify and define the computing requirements appropriate to its solution; |
| | m | an ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices; |
| * | n | an ability to apply design and development principles in the construction of software systems of varying complexity. |

Prepared by: Neelam Soundarajan