The University of Texas at Tyler  
Bachelor of Science in Computer Science  

Course Syllabus

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>COSC 4370</th>
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<tbody>
<tr>
<td>Course Title:</td>
<td>Undergraduate Internship Program</td>
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<td>Course Description:</td>
<td>The purpose of an Internship is to provide students with an opportunity to have a professional work experience in a setting related to the student's major and/or career goals. An internship is a way for a student to gain practical, on-the-job experience in business, industry, or governmental agencies. Offered every Fall, Spring, and Summer.</td>
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<tr>
<td>Pre-requisites:</td>
<td>COSC 1337/1137</td>
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<td>Credits:</td>
<td>3 credit hours</td>
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<td>Text(s):</td>
<td>As recommended by the faculty advisor and work supervisor.</td>
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<td>Languages Used:</td>
<td>(if applicable)</td>
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<td>Topics:</td>
<td>Students are expected to work in an external company for a period of one semester on a part-time basis. The work done during the internship should provide significant practical experience for the student in computer science. The student will work under the supervision of a company supervisor and a faculty advisor from the Department of Computer Science. Before commencing the internship, a work plan needs to be submitted to the faculty member and chairperson of the department for approval. The plan needs to be signed off by the work supervisor. During the internship, the student must submit regular written reports to the faculty advisor detailing the progress of the project. At the end of the internship the student should submit the final report which will be signed off by the work supervisor. The faculty member will have sole responsibility for assigning a grade, but will be expected to consult with the student's work supervisor. Topics may include but are not limited to:</td>
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<td>I. Selection of prospective company.</td>
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<td>II. Identification of project.</td>
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<td>III. Practical work on the project.</td>
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<td>IV. Preparation of progress reports.</td>
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<td>V. Submission of final internship report.</td>
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<td>Additional Materials:</td>
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Evaluation Method: (only items in dark print apply)

1. Examination/Quiz
2. Homework
3. Paper/Report
4. Computer Program
5. Project
6. Presentation
7. Class Participation
8. Employer Review

Course Objectives\(^1\): By the end of this course students are expected to:

1. Survey computer science related companies. [3]
2. Identify a computer science related practical project. [3, 8]
3. Work in a professional environment. [3]
4. Complete the project to industry’s requirements. [3, 8]
5. Prepare written reports. [3]

\(^1\) Numbers in bracket refer to method(s) used to evaluate the course objective.

Relationship to Program Outcomes: (only items in dark print apply)\(^2\)

This course supports the following Computer Science Program Outcomes, which state that our students at the time of graduation are expected to:

1. Possesses knowledge of the fundamentals of mathematics, science, and technology.
2. Be able to use modern computational tools and techniques in the practice of computer science. [2, 3, 4]
3. Be able to develop logically sound and efficient algorithms.
4. Be prepared to implement algorithms in multiple programming languages, on multiple hardware platforms, and in multiple operating system environments.
5. Be able to perform analysis, design, implementation, testing, and maintenance of computer-based systems, stressing software engineering principles.
6. Be prepared to seek continuing professional development, graduate studies, or professional certifications related to computer science.
7. Possess a knowledge of computer security and computer security management.
8. Demonstrate effective written, visual, and oral communication skills [1, 2, 3, 4, 5]
9. Possess an educational background to understand the global context in which computer science is practiced, including:
   a. Knowledge of contemporary issues related to computer science;
   b. The impact of computers on society;
   c. The role of ethics in the practice of computer science. [1, 2, 3, 4]
10. Be able to contribute effectively as members of a project development team.
11. Recognize the need to pursue continued learning throughout their professional careers

\(^2\)Numbers in brackets refer to course objective(s) that address the Program Outcome.

Prepared By: Nary Subramanian Date: 11/7/2008
Reviewed By: Date: