### CIIC 4995 - COOP

1. **General Information:**
   - Alpha-numeric codification: CIIC 4995
   - Course Title: Engineering Practice for COOP Students
   - Number of credits: 3

2. **Course Description:**
   - **English:** Practical experience in Computer Science and Engineering in cooperation with private industry or government to be jointly supervised by the academic department, the Co-op Program Coordinator, and an official from the cooperating organization.
   - **Spanish:** Experiencia práctica en ciencia e ingeniería de computación en cooperación con la industria privada o gobierno a ser supervisada en conjunto por el departamento académico, el coordinador del programa COOP y un oficial de la organización cooperando.

3. **Pre/Co-requisites and other requirements:**
   - Pre-requisites: Authorization by the Director of the Department.

4. **Course Objectives:**
   - Students will compare and contrast the theoretical aspects of Software Engineering with real world practice. They will apply the fundamental concepts taught in the classroom and recognize their value in real practice. Students will experience and be exposed to the practical aspects of software engineering design.

5. **Instructional Strategies:**
   - ☐ conference  ☐ discussion  ☐ computation  ☐ laboratory
   - ☐ seminar with formal presentation  ☐ seminar without formal presentation  ☐ workshop
   - ☐ art workshop  ☒ practice  ☐ trip  ☐ thesis  ☐ special problems  ☐ tutoring
   - ☐ research  ☐ other, please specify:

6. **Minimum or Required Resources Available:**
   - None

7. **Course time frame and thematic outline**

<table>
<thead>
<tr>
<th>Outline</th>
<th>Contact Hours</th>
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8. Grading System
☑ Quantifiable (letters) ☐ Not Quantifiable

9. Evaluation Strategies

<table>
<thead>
<tr>
<th></th>
<th>Quantity</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress Report</td>
<td>1</td>
<td>20%</td>
</tr>
<tr>
<td>Supervisor Evaluation</td>
<td>1</td>
<td>40%</td>
</tr>
<tr>
<td>Final Report</td>
<td>1</td>
<td>40%</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td><strong>100%</strong></td>
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10. Bibliography:
No textbook required.

11. Course Outcomes

<table>
<thead>
<tr>
<th>After successfully completing the course, the student will be able to:</th>
<th>Program Student Outcomes Impacted</th>
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<tbody>
<tr>
<td>1. Identify, formulate and analyze complex computing problems by applying principles of computing, engineering, science, mathematics, and other relevant disciplines.</td>
<td>1</td>
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<td>2. Solve complex computing problems by applying principles of computing, engineering, science, mathematics, and other relevant disciplines.</td>
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<td>3. Apply engineering and computing principles to design, implement, and evaluate a computing-based solution to meet a given set of computing requirements.</td>
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<td>4. Consider public health, safety, and welfare in the solution of problems that have potential societal impact.</td>
<td>4</td>
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<tr>
<td>5. Consider global, cultural, social, environmental, and economic factors in the solution of problems that have potential societal impact.</td>
<td>4</td>
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</table>
6. Read and write technical reports or system’s documentation. & 3 \\
7. Effectively communicate ideas in oral presentations or group discussions. & 3 \\
8. Recognize ethical and professional responsibilities in engineering situations and make informed judgments. & 4 \\
9. Function effectively as part of a team. & 5 \\
10. Apply computer science theory and software development fundamentals to produce computing-based solutions. & 6 \\
11. Develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions. & 7 \\
12. Learn and apply new knowledge in engineering, science or computing-related areas. & 8 \\
13. Manage time and resources to complete assignments on time & 5 \\

### 12. According to Law 51

Students will identify themselves with the Institution and the instructor of the course for purposes of assessment (exams) accommodations. For more information please call the Student with Disabilities Office which is part of the Dean of Students office (Office #4) at (787)265-3862 or (787)832-4040 extensions 3250 or 3258.

### 13. Academic Integrity

-The University of Puerto Rico promotes the highest standards of academic and scientific integrity. Article 6.2 of the UPR Students General Bylaws (Board of Trustees Certification 13, 2009-2010) states that academic dishonesty includes, but is not limited to: fraudulent actions; obtaining grades or academic degrees by false or fraudulent simulations; copying the whole or part of the academic work of another person; plagiarizing totally or partially the work of another person; copying all or part of another person answers to the questions of an oral or written exam by taking or getting someone else to take the exam on his/her behalf; as well as enabling and facilitating another person to perform the aforementioned behavior. Any of these behaviors will be subject to disciplinary action in accordance with the disciplinary procedure laid down in the UPR Students General Bylaws.