1. General Information:

   Alpha-numeric codification: INSO 4151
   Course Title: Software Engineering Project I
   Number of credits: 3
   Contact Period: 3 hours per week

2. Course Description:

   **English**: Team project to design, implement, test, and document a system that encompasses all phases of the software engineering development process to solve an academic, governmental, commercial, or industrial problem.

   **Spanish**: Proyecto en equipo con el propósito de diseñar, implementar, probar, y documentar un sistema que conlleva todos los aspectos del proceso de desarrollo de ingeniería de software para resolver un problema académico, gubernamental, comercial o industrial.

3. Pre/Co-requisites and other requirements:

   Prerequisites: (INSO 4115 and INSO 4116 and INSO 4117 and CIIC 4025 and CIIC 4060) or DIR

4. Course Objectives:

   Students will work in teams to design, implement, test, and document a software system that solves a real-world problem from the academia, government, business sector or industry.

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:

   Students will use the Departmental computer laboratories to complete course projects.

7. Course time frame and thematic outline

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1 Incorporates changes approved on Certification #18-02 of Academic Senate at UPRM.
<table>
<thead>
<tr>
<th>Outline</th>
<th>Contact Hours</th>
</tr>
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<tbody>
<tr>
<td>Introduction and project proposal preparation</td>
<td>6</td>
</tr>
<tr>
<td>Seminars on topics such as: - Product specification - Budgeting - Ethics - IDE Tools - Environmental and social issues related to the Engineering Practice - Project Management - Any other as the design projects dictate</td>
<td>10</td>
</tr>
<tr>
<td>Design of software system and progress reports</td>
<td>26</td>
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<tr>
<td>Oral presentation of project report</td>
<td>3</td>
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</table>

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>☑ Exams</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Final Exam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Short Quizzes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☒ Oral Reports</td>
<td>1</td>
<td>30%</td>
</tr>
<tr>
<td>☐ Monographies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ Portfolio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☒ Projects</td>
<td>1</td>
<td>50%</td>
</tr>
<tr>
<td>☐ Journals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☒ Other, specify: Weekly and final reports</td>
<td>5-10</td>
<td>20%</td>
</tr>
<tr>
<td>TOTAL:</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
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10. Bibliography:

3. Other references, dependant on specific software project chosen.

11. Course Outcomes

After successful completion of the course, the student will be able to:

<table>
<thead>
<tr>
<th>Program Student Outcomes Impacted</th>
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1. Demonstrate attainment of all student outcomes of the program | E1-E7

<table>
<thead>
<tr>
<th>12. According to Law 51</th>
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<tbody>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

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<tr>
<th>13. Academic Integrity</th>
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<tr>
<td>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.—</td>
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</tbody>
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