CSCE 390 - Professional Issues in Computer Science and Engineering

- **Credit Hours:** 1 hours
- **Contact Hours:** 1 lecture hour
- **Instructor:** Dr. Marco Valtorta, Ms. Neema Kanapala
- **Required Textbooks:** N/A
- **Bulletin Description:** Professional issues in the information technology professions; history and social context of computing; professional responsibilities; privacy; intellectual property; risks and liabilities of computer-based systems. Note: Carolina Core: VSR
- **Prerequisites:** None
- **Required Course** in CE, CIS, and CS
- **Course Outcomes:** Students will be able to:
  1. Relate computing issues to philosophical systems and ethics
  2. Resolve ethical dilemmas in the field of computing
  3. Apply professional codes of conduct to realistic situations
  4. Demonstrate familiarity with current social and ethical issues related to computing
  5. Investigate different professional career paths and the lifelong learning involved
  6. Present results and opinions on ethical and professional issues in written and oral formats

- **Student Outcomes addressed by course**

<table>
<thead>
<tr>
<th>Program</th>
<th>Student Outcomes Addressed</th>
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<tbody>
<tr>
<td>Computer Engineering</td>
<td>3, 4</td>
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<tr>
<td>Computer Information Systems</td>
<td>3, 4</td>
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<tr>
<td>Computer Science</td>
<td>3, 4</td>
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</tbody>
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- **Topics covered**
  1. Social role of computing (2 hours)
  2. Professional codes of conduct (e.g., ACM Code of Ethics and Professional Conduct)(1 hour)
  3. Privacy and civil liberties (3 hours)
  4. Intellectual property (2 hours)
  5. Risks and liabilities (2 hours)
  6. Cybersecurity threats and risk management (2 hours)
  7. Professional organizations (1 hour)
  8. Career options (1 hour)