Course name | ECE 40100 Engineering Ethics and Professionalism (1 cr.)
Credit and contact hours | (1 cr.) Class 1
Course coordinator’s name | Brian King

**Course information**

2014-16 IUPUI Campus Bulletin description:
ECE 40100 Engineering Ethics and Professionalism (1 cr.) P: Senior Standing. Class 1. Some ethical, social, political, legal, and ecological issues that practicing engineers may encounter.

**Prerequisites/ Co-Requisite**
P: None  C: Senior Standing

**Required, Elective, or Selected Elective:**
EE Required, CE Required

**Goals for the course**

Upon successful completion of the course, students should be able to
1. Demonstrate a basic understanding of ethical principles such as moral autonomy, definitions of ethics and morality, ethical dilemmas, and truthfulness. [f]
2. Demonstrate an understanding of how a code of ethics can help an engineer work ethically and to determine the right actions. [f]
3. Demonstrate an understanding of models of right and wrong (utilitarianism, duty ethics, rights ethics, and virtue ethics) and their use in determining right actions. [f]
4. Demonstrate a working knowledge of a process for resolving ethical dilemmas. [f]
5. Demonstrate a working knowledge of workplace ethics, including issues such as whistle blowing, confidentiality, conflict of interest, and intellectual property. [f]
6. Demonstrate an understanding of the value of teamwork and the ability to function effectively in diverse teams. [d]
7. Demonstrate an understanding of the impact of engineering decisions on the global environment, including issues on cultural differences, safety, environmental protection, technology transfer, and infrastructure. [f, h]
8. Demonstrate knowledge of contemporary issues, particularly issues that present conflicting points of view with an ethical component. [f, j]
9. Demonstrate an understanding of engineering as a profession and engineers as professionals. [f]

**List of topics to be covered**

1. Meaning of ethics and engineering ethics (1 class)
2. Ethical theories as tools in assessing ethical dilemmas (1class)
3. Codes of ethics of engineering societies as guides in
<table>
<thead>
<tr>
<th>Course Topic</th>
<th>Number of Classes</th>
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<tbody>
<tr>
<td>Resolving ethical dilemmas</td>
<td>2 classes</td>
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<tr>
<td>4. Conflict of interest</td>
<td>2 classes</td>
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<td>5. Intellectual property, patents, trade secrets, confidentiality</td>
<td>2 classes</td>
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<td>6. Whistle blowing</td>
<td>2 classes</td>
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<td>7. Employee Rights</td>
<td>1 class</td>
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<tr>
<td>8. Global issues (ethical issues for multinational Corporations, environmental ethics, ethics of weapons development, etc.)</td>
<td>2 classes</td>
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<td>9. Discussion of cases from NSPE Opinions of the Board of Ethical Review and other case studies</td>
<td>2 classes</td>
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<tr>
<td>10. Exam</td>
<td>1 class</td>
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**Syllabi approved by**  
Brian King

**Date of approval**  
12/31/2015