AENG/CENG/EENG/MENG 0390 – ENGINEERING ETHICS AND SOCIETY

1. **Course Number and name:** AENG/CENG/EENG/MENG 0390 – Engineering, Ethics and Society

2. **Credits and contact hours:** 3 Credits and 3 Contact hours

3. **Instructors:** O. Harrison (Course-Co-Coordinator), H. Aglan, M. J. Khan, S. Begum and B. Oni

4. **Text book:** Introduction to Engineering Ethics, Second Edition, Mike W. Martin and Roland Schinzinger (ISBN 0-07-283115-4), McGraw-Hill, New York 2011.

5**. Specific course information**

- Catalog Data: CENG 0390. Engineering, Ethics and Society. 1st and 2nd Semester. Lect. 3, Lab 0, 3 credits. Engineering and moral complexity; moral reasoning; engineering as social experimentation; commitment to safety; workplace responsibility and rights; global issues; case studies; contemporary engineering issues.
- Prerequisite: Junior standing
- This is a required course

6. Specific goals for the course

a. Specific outcomes of instruction:

At the end of the course, students will:

1. Learn about the engineering code of ethics and be able to apply them as necessary
2. Learn about moral complexities involved in many engineering activities and decision-making processes
3. Learn about some of the contemporary issues in the engineering professions
4. Understand the importance of life-long learning

b. Student outcomes which are addressed by the course:

Outcomes	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Objective 1				X			
Objective 2				X			
Objective 3				X			
Objective 4							X

Course objective 1 addresses criterion 4: Learn about the Engineering Code of Ethics and be able to apply it as necessary.

Course objective 2 addresses criterion 4: Learn about moral complexities involved in many engineering activities and decision-making processes.

Course objective 3 addresses criterion 4: Learn about some contemporary issues such as global, economic, environmental, and social factors in formulating engineering solutions.

Course objective 4 addresses criterion 7: Understand the importance of life-long learning.

7. **Topics Covered**

- Ethics and Professionalism, Code of Ethics, Case Study
- Commitment to Safety, Case Study
- Engineering as Social Experimentation, Case Study
- Truth and Truthfulness, Case Study
- Environmental Ethics, Global Issues, Case Study
- Life-long Learning
- Six Guest Lectures (Case Studies of Ethical Issues from Various Industry
- Perspectives)

Course Schedule is updated in every semester.