

COMPUTER SCIENCE & ENGINEERING 390
PROFESSIONAL ISSUES IN COMPUTER SCIENCE & ENGINEERING

BULLETIN INFORMATION

CSCE 390 – Professional Issues in Computer Science & Engineering (1 credit hr)

Course 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.

SAMPLE COURSE OVERVIEW

This course covers ethical issues that are raised by technologies in the field of computing, teaches students how to apply professional codes of conduct, and familiarizes students with the various professional options and activities within the field of computing.

ITEMIZED LEARNING OUTCOMES

Upon successful completion of CSCE 390, students will be able to:

1. Identify the source and function of values and ethics,
2. Demonstrate an understanding of the importance of values, ethics, and social responsibility for the self and for contemporary society,
3. Reflect on how values shape personal and community ethics and decision-making,
4. Relate computing issues to philosophical systems and ethics,
5. Solve ethical dilemmas in the field of computing,
6. Apply professional codes of conduct to realistic situations,
7. Demonstrate familiarity with current social and ethical issues related to computing,
8. Identify different professional career paths and the lifelong learning involved.

SAMPLE REQUIRED TEXTS/SUGGESTED READINGS/MATERIALS

Case Studies in Information Technology Ethics, 2nd Edition by Richard Spinello © 2003
(Publisher: Prentice-Hall) (ISBN-10: 0130991503 | ISBN-13: 978-0130991508)

SAMPLE ASSIGNMENTS AND/OR EXAMS

1. **Case Reports (2):** Students must complete and turn in two (2) of a possible five (5) Case Reports. Each case report must contain an analysis of one of the Case Studies in Information Technology Ethics, which cover a range of topics including: free speech and content controls in cyberspace, intellectual property right, regulating Internet privacy, and securing the electronic frontier.
2. **Essays (2):** Use the ethical decision-making process to analyze and solve cases provided by the instructor.

SAMPLE COURSE OUTLINE WITH TIMELINE OF TOPICS, READINGS/ ASSIGNMENTS, EXAMS/PROJECTS

Topics covered comprise 14 weeks, at 1 hour/week, for a total of 14 hours.

Weeks 1-3: Values and ethics

Week 4: Frameworks for ethical and policy analysis

Week 5: Ethics in computing

Week 6: Social role of computing

Weeks 7-9: Professional codes of conduct

Week 10: Professional organizations and career options

Week 11: Privacy and civil liberties

Week 12: Intellectual property, free speech and content controls

Week 13: Risks and liabilities

Week 14: Review for final exam