

## **MC5006 PROFESSIONAL ETHICS**

### DETAILED SYLLABUS

#### **UNIT I COMPUTER ETHICS INTRODCUTION AND COMPUTER HACKING**

A general Introduction – Computer ethics: an overview – Identifying an ethical issue – Ethics and law – Ethical theories - Professional Code of conduct – An ethical dilemma – A framework for ethical decision making - Computer hacking – Introduction – definition of hacking – Destructive programs – hacker ethics - Professional constraints – BCS code of conduct – To hack or not to hack? – Ethical positions on hacking.

#### **UNIT II ASPECTS OF COMPUTER CRIME AND INTELLECTUAL PROPERTY RIGHTS**

Aspects of computer crime - Introduction - What is computer crime – computer security measures – Professional duties and obligations - Intellectual Property Rights – The nature of Intellectual property – Intellectual Property – Patents, Trademarks, Trade Secrets, Software Issues, Copyright - The extent and nature of software piracy – Ethical and professional issues – free software and open source code.

#### **UNIT III REGULATING INTERNET CONTENT, TECHNOLOGY AND SAFETY**

Introduction – In defence of freedom expression – censorship – laws upholding free speech – Free speech and the Internet - Ethical and professional issues - Internet technologies and privacy – Safety and risk – assessment of safety and risk – risk benefit analysis – reducing risk.

#### **UNIT IV COMPUTER TECHNOLOGIES ACCESSIBILITY ISSUES**

Introduction – Principle of equal access – Obstacles to access for individuals – professional responsibility - Empowering computers in the workplace – Introduction – computers and employment – computers and the quality of work – computerized monitoring in the work place – telecommuting – social, legal and professional issues - Use of Software, Computers and Internet-based Tools - Liability for Software errors - Documentation Authentication and Control – Software engineering code of ethics and practices – IEEE-CS – ACM Joint task force.

#### **UNIT V SOFTWARE DEVELOPMENT AND SOCIAL NETWORKING**

Software Development – strategies for engineering quality standards – Quality management standards – Social Networking – Company owned social network web site – the use of social networks in the hiring process – Social Networking ethical issues – Cyber bullying – cyber stalking – Online virtual world – Crime in virtual world - digital rights management - Online defamation – Piracy – Fraud.

## REFERENCES

1. Caroline Whitback, "Ethics in Engineering Practice and Research", Cambridge University Press, 2011.
2. George Reynolds, "Ethics in Information Technology", Cengage Learning, 2011.
3. John Weckert and Douglas Adeney, Computer and Information Ethics, Greenwood Press, 1997.
4. Penny Duquenoy, Simon Jones and Barry G Blundell, "Ethical, legal and professional issues in computing", Middlesex University Press, 2008.
5. Richard Spinello, "Case Studies in Information and Computer Ethics", Prentice Hall, 1997.
6. Sara Baase, "A Gift of Fire: Social, Legal, and Ethical Issues for Computing and the Internet", 3rd Edition, Prentice Hall, 2008.
7. [http://www.infosectoday.com/Articles/Intro\\_Computer\\_Ethics.html](http://www.infosectoday.com/Articles/Intro_Computer_Ethics.html)

## OBJECTIVES

- To Understand the concepts of computer ethics in work environment.
- To understand the threats in computing environment
- To Understand the intricacies of accessibility issues
- To ensure safe exits when designing the software projects