

### **ETHICS IN TECHNOLOGY**

### **EXAM INFORMATION**

This exam was developed to enable schools to award credit to students for knowledge equivalent to that learned by students taking the course. This examination covers topics including: Cyberspace and Privacy, Domestic and International Security, Legal Issues in Cyberspace, Technological Innovation and Ethics, Professional Ethics.

The exam contains 100 questions to be answered in 2 hours. Some of these are pretest questions that will not be scored.

Form Codes: SQ302, SR302

# **CREDIT RECOMMENDATIONS**

The American Council on Education's College Credit Recommendation Service (ACE CREDIT) has evaluated the DSST test development process and content of this exam. It has made the following recommendations:

Area or Course Equivalent: Ethics in Technology

**Level:** 3 Lower Level Baccalaureate **Amount of Credit:** 3 Semester Hours

Minimum Score: 400 Source: www.acenet.edu

### **EXAM CONTENT OUTLINE**

The following is an outline of the content areas covered in the examination. The approximate percentage of the examination devoted to each content area is also noted.

## I. Cyberspace and Privacy – 21%

- a. Privacy and Security in Cyberspace
- b. Individual Conduct in Cyberspace
- c. Sharing with Online Communities and Social Networking Services
- d. Government Surveillance
- e. Corporate Uses of Personal Data

### II. Domestic and International Security – 21%

- a. Domestic and International Regulations
- b. Collection and Use of Personal Data: National Security
- c. Hacking and Counter-Hacking
- d. Information Warfare
- e. Cyberterrorism

### III. Legal Issues in Cyberspace - 21%

- a. Free Speech Issues
- b. Privacy Legislation and Industry Self-Regulation
- c. Intellectual Property
- d. Lawful Access and Encryption
- e. Cybercrimes

# IV. Technological Innovation and Ethics – 17%

- a. Biotechnologies
- b. Internet of Things
- c. Robotics and Artificial Intelligence
- d. Autonomous Vehicles
- e. Social Justice Issues

#### V. Professional Ethics – 20%

- a. Moral Obligations, Legal Liability and Accountability of Corporations
- b. Moral Responsibilities of IT Professionals
- c. The Role of the Press
- d. Social Media- Positive Re-enforcement and Dissemination of Unfounded Information
- e. Net Neutrality

#### **REFERENCES**

Below is a list of reference publications that were either used as a reference to create the exam, or were used as textbooks in college courses of the same or similar title at the time the test was developed. You may reference either the current edition of these titles or textbooks currently used at a local college or university for the same class title. It is recommended that you reference more than one textbook on the topics outlined in this fact sheet.

You should begin by checking textbook content against the content outline provided before selecting textbooks that cover the test content from which to study.

- 1. Brinkman, William John (2013). Ethics in a Computing Culture. Cengage Learning.
- 2. Packard, Ashely (2012). Digital Media Law. Wiley-Blackwell, 2<sup>nd</sup> edition.
- 3. Tavani, Herman T. (2016). *Ethics and Technology: Controversies, Questions, and Strategies for Ethical Computing.* Wiley, 5<sup>th</sup> edition.

#### SAMPLE QUESTIONS

All test questions are in a multiple-choice format, with one correct answer and three incorrect options. The following are samples of the types of questions that may appear on the exam.

- 1. The concept of cyber technology is described as
  - a. A network of unconnected computer devices
  - b. Unconnected devices within local area networks
  - c. Devices connected via government owned networks
  - d. A wide range of networked communication devices
- 2. Individuals participating in online communities can remain anonymous and create fictitious personas. The ethical concern of this anonymity is that it
  - a. Facilitates engagement in unethical behavior
  - b. Promotes free expression of ideas
  - c. Expedites government background checks
  - d. Simplifies business market research
- 3. What privacy act was put in place in response to a California stalker using Department of Motor Vehicle records to track down and kill actress Rebecca Schaefer?
  - a. Driver's Privacy Protection Act
  - b. Video Privacy Protection Act
  - c. Telephone Records and Privacy Protection Act
  - d. Privacy Protection Act
- 4. An example of a cyber exacerbated crime is
  - a. Cyber vandalism
  - b. Cyber piracy
  - c. Cyber stalking
  - d. Cyber trespass

- 5. Many sociologists are concerned with people becoming too dependent on which of the following?
  - a. Social media
  - b. Gaming
  - c. Technology
  - d. Digital assistants
- 6. What is the concept of international Net Neutrality?
  - a. Imposed limitations for end to end Internet Access
  - b. Broadband service providers can show preference to content
  - c. Unimpeded end to end Internet access and usage
  - d. All content that flows throughout the Internet should not be treated equally

Answers to sample questions:

1 - D; 2 - A; 3 - A; 4 - C; 5 - C; 6 - C