

Global Professional Practice – 3%

Domain Scope

1. Importance of identifying and understanding essential skills required for a successful career within the industry, including professional oral and written communication skills.
2. Identification of ways teamwork integrates throughout IT and ways IT supports an organization
3. Social and professional contexts of information technology and computing, and adherence to ethical codes of conduct.

Domain Competencies

- A. Analyze the importance of communication skills in a team environment and determine how these skills contribute to the optimization of organization goals. (*Communication and teamwork*)
- B. Evaluate the specific skills necessary for maintaining continued employment in an IT career that involves system development in an environmental context. (*Employability*)
- C. Develop IT policies within an organization that include privacy, legal, and ethical considerations as they relate to a corporate setting. (*Legal and ethical*)
- D. Evaluate related issues facing an IT project and develop a project plan using a cost/benefit analysis including risk considerations in creating an effective project plan from its start to its completion. (*Project management*)

Global Professional Practice Subdomains

01 Perspectives and impact

(Level 1 minimal degree of engagement)

Competencies:

- a. Describe the nature of professionalism and its place in the field of information technology.
- b. Contrast ethical and legal issues as related to information technology.
- c. Describe how IT uses or benefits from social and professional issues.

02 Professional issues and responsibilities

(Level 1 minimal degree of engagement)

Competencies:

- a. Contrast the professional context of information technology and computing and adherence to ethical codes of conduct.
- b. Describe and critique several historical, professional, ethical, and legal aspects of computing.

03 IT governance and resource management

(Level 1 minimal degree of engagement)

Competencies:

- a. Analyze the expanding role of IT governance and its effect on organizations.
- b. Be aware of management issues in IT governance.
- c. Compare and contrast organizational cultures and their impact on IT governance.
- d. Justify the appropriate resources needed to administer the system.
- e. Compare and contrast several alternative vendors of system resources.
- f. Develop naming conventions for the resources in a system.
- g. Create and justify several appropriate policies and procedures to manage resources in a system.

04 Risk identification and evaluation

(Level 1 minimal degree of engagement)

Competencies:

- a. Analyze the role of risk to an organization and ways to identify key risk factors.
- b. Evaluate various risks and appropriate actions.
- c. Design and build a risk matrix.

05 Environmental issues

(Level 1 minimal degree of engagement)

Competencies:

- a. Analyze and critique ways to develop green IT policies and standards and learn to identify green IT.
- b. Contrast several frameworks for green computing.
- c. Describe several uses of green computing for improving energy efficiency.

06 Ethical, legal, and privacy issues

(Level 1 minimal degree of engagement)

Competencies:

- a. Evaluate the role of legal, ethical, and privacy issues within IT as it relates to organizations.
- b. Reflect on whether existing laws need modification to keep up with technology.
- c. Model a computer use policy that includes privacy, legal, and ethical considerations for all employees.
- d. Contrast ethical algorithms with algorithms that are ethically neutral.

07 Intellectual property

(Level 1 minimal degree of engagement)

Competencies:

- a. Describe the foundations of intellectual property.
- b. Critique several transnational issues concerning intellectual property.
- c. Distinguish among employees, contractors, and consultants and offer the implications of each hiring class.
- d. Compare software patents and contrast with other forms of intellectual property protection.

08 Project management principles

(Level 1 minimal degree of engagement)

Competencies:

- a. Describe the key components of a project plan.
- b. Show the importance of a cost/benefit analysis to the successful implementation of a project plan.
- c. Evaluate appropriate project planning and tracking tools.
- d. Illustrate how to identify the lessons learned in a project closeout and review session.

09 Communications

(Level 1 minimal degree of engagement)

Competencies:

- a. Evaluate several strategies for effective professional communication in writing and in speaking.
- b. Create well-organized technical reports that are structured according to acceptable standards.
- c. Analyze and describe the role of communications within IT as well as in building relationships with the organizations.
- d. Illustrate several essential skills for communicating within a team environment.

10 Teamwork and conflict management

(Level 1 minimal degree of engagement)

Competencies:

- a. Analyze several skill sets needed to function effectively in a team environment.
- b. Contrast several ways in which industry approaches teamwork toward a common goal.
- c. Describe and critique several ways that conflict management aids in building stronger teams.

11 Employability skills and careers in IT

(Level 1 minimal degree of engagement)

Competencies:

- a. Evaluate viable skill sets essential to a career in IT.
- b. Illustrate the elements of a successful technical resume.
- c. Reflect on the need for industry experience within the IT field.
- d. Compare the important elements needed for a strong interview for an IT position.

12 Information systems principles

(Level 1 minimal degree of engagement)

Competencies:

- a. Critique ways in which information systems supports organizational requirements.
- b. Describe the system development life cycle, its phases, and models.
- c. Evaluate the effectiveness and efficiency of a system.
- d. Contrast several high-level IT strategies to avoid obstacles to achieve organizational goals.
- e. Illustrate the role and limitations of encryption for protecting personal information.
- f. Make sense of policies and technologies for isolating personal data from enterprise data.

Note: Level L1 (L1) used within a subdomain indicates a minimal degree of engagement associated with the learning proficiency of the fundamentals of the subdomain.

Levels 2 (L2) and 3 (L3) used within a subdomain indicate medium and large degrees of learning engagement associated with the application and transferring of learning to complex problems and situations.