INFORMATION SCIENCES AND TECHNOLOGY, B.S. (BERKS)

Begin Campus: Any Penn State Campus
End Campus: Berks

Program Learning Objectives

• Understand and apply the interdisciplinary, theoretical knowledge of the information sciences or security sciences
  • Define and explain the core concepts, principles, processes, an theories within the academic majors of IST and/or SRA
  • Apply the core concepts of the academic majors of IST and/or SRA to real-world problems
  • Apply the core concepts of information and security sciences to an extended work assignment
• Understand, apply and adopt various problem solving strategies, using appropriate technology and methods
  • Identify information problems and/or opportunities in terms of the human, informational and technology dimensions
  • Analyze issues surrounding the problem and/or opportunity in terms of the human, informational, and technology dimensions; and determine the requirements appropriate to understanding the situation
  • Design systems, architectures, processes, components, or programs to meet desired needs of the human context at varying levels of analysis
  • Deploy up-to-date and appropriate techniques, methodologies, and/or tools necessary for understanding opportunities and constraints and/or the optimal design, implementation and continuance of an information based solution
  • Evaluate the success of systems, architecture, processes, components, or programs intended to meet desired needs of the human context at varying levels of analysis
• Communicate and work effectively (both individually and in teams) with a range of perspectives and audiences through a variety of media
  • Participate effectively on teams in order to accomplish a common goal
  • Communicate effectively with a range of audiences, formally or informally, through writing and the spoken word
  • Seek out, analyze, and incorporate diverse ideas and broader perspectives represented in the diversity of people
  • Make respectful and inclusive choices in interacting with customers, peers, supervisors, and/or subordinates with a diversity of identity characteristics
• Understand professional responsibilities in terms of the ethical, legal, security and social aspects of any given problem and its solution
  • Demonstrate an understanding of the cognitive, social, legal, ethical, diversity, and security perspectives surrounding a given problem
  • Assess the impact of information, computing and technology on individuals, groups, organizations, society, and the world for the purpose of making informed decisions from a sociological, governmental, legal, and/or security perspective
• Commit to the continuous acquisition of relevant knowledge for professional development by self-teaching and/or on-going education and learning
  • Employ information-seeking strategies in pursuit of current knowledge
  • Engage in self-directed learning to meet professional goals
  • Enroll in professional development and tutoring opportunities