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

Begin Campus: Abington, Altoona, Berks, Beaver, Brandywine, DuBois,
Erie, Fayette, Greater Allegheny, Harrisburg, Hazleton, Lehigh Valley, Mont
Alto, New Kensington, Shenango, Schuylkill, University Park, Wilkes-Barre,
Scranton, York

End Campus: University Park

Program Learning Objectives

• Communication (Individual and Team): 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
  • Demonstrate respectful and inclusive choices in interacting
with customers, peers, supervisors, and/or subordinates with
a diversity of identity characteristics (e.g., age, ancestry, color,
disability or handicap, national origin, race, religious creed, sex,
sexual orientation, gender identity or veteran status)

• Knowledge/Application: Understand and apply the interdisciplinary,
theoretical knowledge of the information sciences or security
sciences
  • Define and explain the core concepts, principles, processes, and
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

• Lifelong Learning: 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 and self-directed learning
in pursuit of current knowledge
  • Enroll and participate in professional development and tutoring
opportunities

• Problem-Solving: Demonstrate, apply and adapt 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 (e.g., individual, group, organization, society,
and/or world)
  • Deploy up-to-date, relevant 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 (e.g., individual,
group, organization, society, and/or world)

• Professional Responsibilities: 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.