# INFORMATION SCIENCES AND TECHNOLOGY, A.S. (UNIVERSITY COLLEGE)

Begin Campus: DuBois, Greater Allegheny, Hazleton, Mont Alto, Wilkes-Barre, Scranton, York

**End Campus:** DuBois, Greater Allegheny, Hazleton, Mont Alto, Scranton, Wilkes-Barre, York

# **Program Description**

This associate degree major is structured to prepare graduates for immediate and continuing employment opportunities in the broad disciplines of information science and technology. This includes positions such as application programmers, associate systems designers, network managers, web designers and administrators, or information systems support specialists. Specifically, the major is designed to ensure a thorough knowledge of information systems and includes extensive practice using contemporary technologies in the creation, organization, storage, analysis, evaluation, communication, and transmission of information. The major fosters communications, interpersonal, and group interaction skills through appropriate collaborative and active learning projects and experiences. Technical material covers the structure of database systems, web and multimedia systems, and considerations in the design of information systems. Team projects in most courses, a required internship, and a second-year capstone experience provide additional, focused venues for involving students in the cutting-edge issues and technologies in the field.

The Associate of Science in IST degree will be offered at multiple campuses within the Penn State system of colleges and campuses. Note that not all options will be available at all locations.

# **Application Development Option**

Available at the following campuses: Berks, Greater Allegheny, Hazleton, Mont Alto, Scranton, World Campus, York

The Application Development option prepares students for entry level position in applications development and/or web development. It also prepares students for IST related baccalaureate degrees such as HCDD, IT, ETI, and CYBER. Students take courses such as web development and advanced java programming as well as usability.

# **Custom Option**

Available at the following campuses: Berks, DuBois, Greater Allegheny, Hazleton, Mont Alto, Scranton, Wilkes-Barre, World Campus, York

The Custom option enables students to work closely with an adviser to develop a plan of study that meets the dual objectives of allowing a flexible academic program and a specific theme related to technology. Some examples of themes are web development, psychology, and usability.

# **Cybersecurity Option**

Available at the following campuses: Berks, Greater Allegheny, Mont Alto, World Campus, York

The Cybersecurity option prepares students for an entry level position in the cyber security field. It also prepares students for IST related baccalaureate degrees such as Cybersecurity Analytics and Operations and SRA. Students take introductory courses in CYBER and SRA as well as advanced hand-on courses in these areas.

# **Generalized Business Option**

Available at the following campuses: Berks, DuBois, Greater Allegheny, Mont Alto, Scranton, World Campus, York

The Generalized Business option enables students to specialize in the general business areas of accounting, marketing, and management, and is closely aligned with the requirements of the ETI major.

# **Networking Option**

Available at the following campuses: DuBois, Mont Alto, World Campus

The Networking option prepares graduates for positions as entry-level computer network administrators. Students take courses in personal computer hardware, networking essentials, and network administration.

# What is Information Sciences and Technology?

Information Sciences and Technology is a discipline that explores how we can strengthen the power of information and technology, and use it to increase human potential. This includes focusing on creating innovative systems and technological solutions that benefit businesses, organizations, and individuals, and understanding the role of technology in how we live our lives.

# **Entrance to Major**

Students must have a minimum 2.0 GPA to change to this Associate degree after admission to the University.

# **Degree Requirements**

For the Associate in Science degree in Information Sciences and Technology, a minimum of 60 credits is required:

Requirement	Credits
General Education	21
Electives	0-5
Requirements for the Major	43-47

6-9 of the 21 credits for General Education are included in the Requirements for the Major. For all options, this includes: 3 credits of GQ courses; 3 credits of GWS courses; 0-3 credits of GS courses. (3 credits of GQ courses in Additional Courses includes MATH 21, MATH 22, MATH 110, SCM 200 or STAT 200) and 3 credits of GWS courses including ENGL 15 or CAS 100 which are Prescribed Courses. Students may also overlap 3 credits of GS if they select SRA 111 in Additional Courses for the Major or if they select ECON 102/ECON 104 in the Generalized Business Option Additional Courses.)

# **Requirements for the Major**

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (https://senate.psu.edu/policies-andrules-for-undergraduate-students/82-00-and-83-00-degree-requirements/ #82-44).

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Common Requirements for the Major (All Options)	<b>Common Re</b>	quirements	for the Ma	ajor (A	II Options)
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Code	Title	Credits
Prescribed Cours	es	
Prescribed Course	s: Require a grade of C or better	
CAS 100	Effective Speech	3
ENGL 15	Rhetoric and Composition	3
IST 140	Introduction to Application Development	3
IST 210	Organization of Data	3
IST 220	Networking and Telecommunications	3
IST 260W	Introduction to Systems Analysis and Design	3
Additional Course	es	
ENGL 202C	Effective Writing: Technical Writing	3
or ENGL 202D	Effective Writing: Business Writing	
Additional Courses	s: Require a grade of C or better	
IST 250	Introduction to Web Design and Development	3
or IST 256	Programming for the Web	
Select 3 credits fr	rom the following: <sup>1</sup>	3
CYBER 100	Computer Systems Literacy	
CYBER 100S	Computer Systems Literacy	
HCDD 113	Foundations of Human-Centered Design and Development	
HCDD 113S	Foundations of Human-Centered Design and Development FYS	
IST 110	Information, People and Technology	
SRA 111	Introduction to Security and Risk Analysis	
Select 1 credit fro	om the following:	1
IST 295A	Distributed Team Project	
IST 295B	IST Internship	
IST 495	Internship	
Select 3-4 credits	from the following:	3-4
MATH 21	College Algebra with Analytic Geometry with Applications I	
MATH 22	College Algebra With Analytic Geometry and Applications II	
MATH 26	Plane Trigonometry and Applications of Trigonometry	
MATH 110	Techniques of Calculus I	
MATH 140	Calculus With Analytic Geometry I	
SCM 200	Introduction to Statistics for Business	
STAT 200	Elementary Statistics	
Supporting Cours	es and Related Areas	
Supporting Course	es and Related Areas: Require a grade of C or better	

Any first-year seminar course. Students who complete CYBER 100S 0-1 or HCDD 113S as additional courses do not have to schedule an additional first-year seminar.

**Requirements for the Option** 

*Requirements for the Option: Require a grade of C or better* 

Select an option

<sup>1</sup> Students planning to complete the Cybersecurity option must select CYBER 100/CYBER 100S. Courses may not double count with option requirements.

### Requirements for the Option

Application Development Option (12 credits) Available at the following campuses: Berks, Greater Allegheny, Hazleton, Mont Alto, Scranton, World Campus, York

Code	Title Cred	its
Additional Course	25	
Additional Courses	s: Require a grade of C or better	
Select 12 credits	from the following:	12
IST 242	Intermediate & Object-Oriented Application Development	
IST 256	Programming for the Web <sup>1</sup>	
IST 261	Application Development Design Studio I	
IST 311	Object-Oriented Design and Software Applications	
HCDD 264	Design Practice in Human-Centered Design and Development	
or IST 331	Foundations of Human-Centered Design	
double count to Custom Option (12 Available at the for	ount in the major requirements or the option, but may r oward both requirements. 2 credits) Ilowing campuses: Berks, DuBois, Greater Allegheny, to, Scranton, Wilkes-Barre, World Campus, York	not
Cada		
Code	Title Cred	its
	Ittle Cred ses and Related Areas	its
Supporting Cours		its
Supporting Course Supporting Course Select 12 credits	eses and Related Areas es and Related Areas: Require a grade of C or better in consultation with an adviser. All courses are C- es of specific themes include: Web Development,	12
Supporting Course Supporting Course Select 12 credits required. Example Psychology, Usab Cybersecurity Opt	ses and Related Areas es and Related Areas: Require a grade of C or better in consultation with an adviser. All courses are C- es of specific themes include: Web Development, bility. ion (12 credits) llowing campuses: Berks, Greater Allegheny, Mont Alto,	
Supporting Course Supporting Course Select 12 credits required. Example Psychology, Usab Cybersecurity Opt Available at the for	ses and Related Areas es and Related Areas: Require a grade of C or better in consultation with an adviser. All courses are C- es of specific themes include: Web Development, bility. ion (12 credits) llowing campuses: Berks, Greater Allegheny, Mont Alto,	12
Supporting Course Supporting Course Select 12 credits required. Example Psychology, Usat Cybersecurity Opt Available at the for World Campus, You	ses and Related Areas es and Related Areas: Require a grade of C or better in consultation with an adviser. All courses are C- es of specific themes include: Web Development, bility. ion (12 credits) llowing campuses: Berks, Greater Allegheny, Mont Alto, rk Title Cred	12
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Supporting Course Supporting Course Select 12 credits required. Example Psychology, Usab Cybersecurity Opt Available at the fol World Campus, You Code Additional Courses	ses and Related Areas es and Related Areas: Require a grade of C or better in consultation with an adviser. All courses are C- es of specific themes include: Web Development, bility. ion (12 credits) llowing campuses: Berks, Greater Allegheny, Mont Alto, rk Title Credites	12
Supporting Course Supporting Course Select 12 credits required. Example Psychology, Usab Cybersecurity Opt Available at the fol World Campus, You Code Additional Courses	ses and Related Areas es and Related Areas: Require a grade of C or better in consultation with an adviser. All courses are C- es of specific themes include: Web Development, bility. ion (12 credits) llowing campuses: Berks, Greater Allegheny, Mont Alto, rk Title Cred es s: Require a grade of C or better	12 iits
Supporting Course Supporting Course Select 12 credits required. Example Psychology, Usat Cybersecurity Opt Available at the fol World Campus, You Code Additional Courses Select 12 credits	ses and Related Areas es and Related Areas: Require a grade of C or better in consultation with an adviser. All courses are C- es of specific themes include: Web Development, bility. ion (12 credits) llowing campuses: Berks, Greater Allegheny, Mont Alto, rk Title Cred es s: Require a grade of C or better from the following: <sup>1</sup>	12 iits
Supporting Course Supporting Course Select 12 credits required. Example Psychology, Usab Cybersecurity Opt Available at the for World Campus, You Code Additional Course Select 12 credits CYBER 262	Sees and Related Areas         es and Related Areas: Require a grade of C or better         in consultation with an adviser. All courses are C-         es of specific themes include: Web Development,         bility.         ion (12 credits) <i>llowing campuses: Berks, Greater Allegheny, Mont Alto,</i> rk         Title       Credites         s: Require a grade of C or better         from the following: 1         Cyber-Defense Studio         Intermediate & Object-Oriented Application	12 iits
Supporting Course Supporting Course Select 12 credits required. Example Psychology, Usat Cybersecurity Opt Available at the fol World Campus, You Code Additional Courses Select 12 credits CYBER 262 IST 242	Sees and Related Areas         es and Related Areas: Require a grade of C or better         in consultation with an adviser. All courses are C-         es of specific themes include: Web Development,         bility.         ion (12 credits) <i>llowing campuses: Berks, Greater Allegheny, Mont Alto, rk</i> Title       Credits         s: Require a grade of C or better         from the following: 1         Cyber-Defense Studio         Intermediate & Object-Oriented Application         Development	12 iits

<sup>1</sup> Courses may not double count with the major requirements.

#### **Generalized Business Option (12-14 credits)**

12-14

Available at the following campuses: Berks, DuBois, Greater Allegheny, Mont Alto, Scranton, World Campus, York

Code	Title	Credits
Additional Cours	ses	
Additional Cours	es: Require a grade of C or better	
Select 12-14 cre	dits from the following:	12-14

ACCTG 211	Financial and Managerial Accounting for Decision Making
BA 243	Social, Legal, and Ethical Environment of Business
or BLAW 243	3Legal Environment of Business
or BA 241 & BA 242	Legal Environment of Business and Social and Ethical Environment of Business
BA 301	Finance
or FIN 301	Corporation Finance
BA 302	Supply Chains
or SCM 301	Supply Chain Management
BA 303	Marketing
or MKTG 30	1Principles of Marketing
BA 304	Management and Organization
or MGMT 30	Basic Management Concepts
ECON 102	Introductory Microeconomic Analysis and Policy
or ECON 104	Introductory Macroeconomic Analysis and Policy

#### Networking Option (12 credits)

Available at the following campuses: DuBois, Mont Alto, World Campus

Code	Title	Credits
Prescribed Cour	ses	
Prescribed Cours	es: Require a grade of C or better	
IST 225	PC Hardware Basics	3
IST 226	Networking Essentials	3
IST 227	Network Administration	3
IST 228	Advanced Network Administration	3

### **General Education**

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all associate degree students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (https://bulletins.psu.edu/undergraduate/generaleducation/associate-degree-general-education-program/) section of the Bulletin and consult your academic adviser.

The keystone symbol appears next to the title of any course that is designated as a General Education course. Program requirements may also satisfy General Education requirements and vary for each program.

# Foundations (grade of C or better is required and Inter-Domain courses do not meet this requirement.)

- Quantification (GQ): 3 credits
- · Writing and Speaking (GWS): 3 credits

#### **Knowledge Domains**

- Arts (GA): 3 credits
- · Humanities (GH): 3 credits
- · Social and Behavioral Sciences (GS): 3 credits
- · Natural Sciences (GN): 3 credits

**Note:** Up to six credits of Inter-Domain courses may be used for any Knowledge Domain requirement, but when a course may be used to

satisfy more than one requirement, the credits from the course can be counted only once.

#### **Exploration**

Any General Education course (including GHW and Inter-Domain): 3
 credits

#### University Degree Requirements Cultures Requirement

3 credits of United States (US) or International (IL) cultures coursework are required and may satisfy other requirements

#### Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

#### **Total Minimum Credits**

A minimum of 60 degree credits must be earned for a associates degree. The requirements for some programs may exceed 60 credits. Students should consult with their college or department adviser for information on specific credit requirements.

#### **Quality of Work**

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

#### Limitations on Source and Time for Credit Acquisition

Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (https://senate.psu.edu/policies-and-rules-for-undergraduatestudents/82-00-and-83-00-degree-requirements/#83-80)). For more information, check the Suggested Academic Plan for your intended program.

# Program Learning Objectives

# **DuBois Campus**

- Know the System Development Lifecycle (SDLC): Demonstrate knowledge of the SDLC by applying its methods to information systems projects and lab exercises.
- Know Information Systems and Industry Methods: Demonstrate ability to apply various industry standards in system development, system maintenance, and ISO/IEC/IEEE standards.
- Use Information Sciences Theory/Practice: Use management theory and information technology processes in managing information systems, which include best practices for system design, development, and implementation.
- Manage Information Systems: Demonstrate knowledge and execution of designing and managing various information systems.
- Know Security Risk Factors: Demonstrate knowledge of security risk factors impacting on various system components; understand the impact of those risk factors on the larger information system; and demonstrate the ability to design, develop, and implement secure information systems, using the latest industry standards and best practices, (i.e., securing hardware, software compliance, etc.).
- Use Communication Skills: Apply written, oral, and graphic communication effectively in both technical and nontechnical environments, and use appropriate technical literature.
- Use Team Membership Skills: Function effectively as a member of a technical team.

### **Greater Allegheny Campus**

• Design and Manage Network- and Information-based systems: Demonstrate knowledge and execution of designing and managing various information systems.

### **Hazleton and York Campuses**

- Knowledge/Application: Understand and apply the interdisciplinary, theoretical knowledge of the information sciences or security science
  - 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
- **Problem-Solving:** Understand, 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 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)
- 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
  - Make 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 identify, or veteran status)
- 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.
- Lifelong Learning: Commit to the continuous acquisition of relevant knowledge for professional development by self-teaching and/or ongoing education and learning

- Employ information-seeking strategies and self-directed learning in pursuit of current knowledge
- · Enroll in professional development and tutoring opportunities

# **Mont Alto Campus**

- 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
- **Problem-Solving:** Understand, 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
- 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
  - Make 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 identify, or veteran status)
- **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.
- Lifelong Learning: Commit to the continuous acquisition of relevant knowledge for professional development by self-teaching and/or ongoing education and learning
  - Employ information-seeking strategies and self-directed learning in pursuit of current knowledge
  - · Enroll in professional development and tutoring opportunities

#### **Scranton Campus**

- **Communication:** Communicate and work effectively (both individually and in teams) with a range of perspectives and audiences through a variety of media.
- Knowledge/Application: Understand and apply the interdisciplinary, theoretical knowledge of the information sciences or security sciences

- **Problem-solving:** Understand, apply and adapt various problem solving strategies, using appropriate technology and methods.
- **Professional Responsibilities:** Understand professional responsibilities in terms of the ethical, legal, security and social aspects of any given problem and its solution.

### Wilkes-Barre Campus

 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).

# **Academic Advising**

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (https://senate.psu.edu/ policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

# DuBois

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### Hazleton

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### Scranton

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### Wilkes-Barre

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# York

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# **University Park**

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# **World Campus**

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# **Suggested Academic Plan**

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2023-24 academic year. To access previous years' suggested academic plans, please visit the archive (https:// bulletins.psu.edu/undergraduate/archive/) to view the appropriate Undergraduate Bulletin edition (*Note: the archive only contains suggested academic plans beginning with the 2018-19 edition of the Undergraduate Bulletin*).

### **DuBois Campus**

# Custom Option: Information Sciences and Technology, A.S. at DuBois Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** 

report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits
CYBER 100 or IST 110 <sup>*#</sup>	3 IST 210 <sup>*#</sup>	3
PSU 8	1 IST 220 <sup>*#</sup>	3
IST 140 <sup>*#</sup>	3 Elective	3
General Education Course (GS) (Recommend SRA 111) <sup>*†</sup>	3 Elective (Recommend IST 242) <sup>*</sup>	3
ENGL 15 or 30H (GWS) $^{\ddagger}$	3 General Education Course (GH)	3
MATH 21, 22, 26, 110, or 140 (GQ) <sup>‡</sup>	3	
	16	15
Second Year		
Fall	Credits Spring	Credits
i ali	oreunsophing	Greans
Custom Choice 1 <sup>*</sup>	3 Custom Choice 3 <sup>*</sup>	3
Custom Choice 1 <sup>*</sup>	3 Custom Choice 3 <sup>*</sup>	3
Custom Choice 1 <sup>*</sup> Custom Choice 2 <sup>*</sup> IST 260W <sup>*</sup> IST 256 <sup>*</sup>	3 Custom Choice 3 <sup>*</sup> 3 Custom Choice 4 <sup>*</sup> 3 General Education Course	3
Custom Choice 1 <sup>*</sup> Custom Choice 2 <sup>*</sup> IST 260W <sup>*</sup>	3 Custom Choice 3 <sup>*</sup> 3 Custom Choice 4 <sup>*</sup> 3 General Education Course (GA) 3 General Education Course	3 3 3 3
Custom Choice 1 <sup>*</sup> Custom Choice 2 <sup>*</sup> IST 260W <sup>*</sup> IST 256 <sup>*</sup>	3 Custom Choice 3 <sup>*</sup> 3 Custom Choice 4 <sup>*</sup> 3 General Education Course (GA) 3 General Education Course (GN)	3 3 3 3

#### **Total Credits 62**

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

#### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

 As long as two Arts (GA) and two Humanities (GH) are taken across the eight semesters, the particular order in which these courses are taken is not relevant. The course series listed above is only one of many possible ways to move through the IST curriculum.

#### **Advising Notes:**

• A student's career/graduate school plans should be considered in developing an individual academic plan. Be sure to consult an adviser in this department when scheduling courses.

#### Generalized Business Option: Information Sciences and Technology, A.S. at DuBois Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Credits Spring	Credits
3 IST 210 <sup>*#</sup>	3
1 IST 220 <sup>*#</sup>	3
3 Elective	3
3 Elective (Recommend IST 242) <sup>*</sup>	3
3 General Education Course (GH)	3
3	
16	15
Credits Spring	Credits
3 Business Choice $3^{\star}$	3
3 Business Choice $4^*$	3
3 General Education Course (GA)	3
3 General Education Course (GN)	3
3 ENGL 202C or 202D (GWS) $^{\ddagger\dagger}$	3
IST 495 (Taken Any Time)	1
15	16
	<ul> <li>1 IST 220<sup>*#</sup></li> <li>3 Elective</li> <li>3 Elective (Recommend IST 242)<sup>*</sup></li> <li>3 General Education Course (GH)</li> <li>3</li> <li>16</li> <li>Credits Spring <ul> <li>3 Business Choice 3<sup>*</sup></li> <li>3 Business Choice 4<sup>*</sup></li> <li>3 General Education Course (GA)</li> <li>3 General Education Course (GN)</li> <li>3 ENGL 202C or 202D (GWS)<sup>‡†</sup></li> <li>IST 495 (Taken Any Time)</li> </ul> </li> </ul>

Total Credits 62

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

#### **University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

 As long as two Arts (GA) and two Humanities (GH) are taken across the eight semesters, the particular order in which these courses are taken is not relevant. The course series listed above is only one of many possible ways to move through the IST curriculum.

#### Advising Notes:

- A student's career/graduate school plans should be considered in developing an individual academic plan. Be sure to consult an adviser in this department when scheduling courses.
- Business Choices:
  - ACCTG 211
  - ECON 102 or ECON 104
  - SCM 301
  - BA 243
  - FIN 301
  - MKTG 301
  - MGMT 301
  - IB 303

# Networking Option: Information Sciences and Technology, A.S. at DuBois Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits
CYBER 100 or IST 110 <sup>*#</sup>	3 IST 210 <sup>*#</sup>	3
PSU 8	1 IST 220 <sup>*#</sup>	3
IST 140 <sup>*#</sup>	3 Elective	3
General Education Course (GS) (Recommend SRA 111) <sup>*†</sup>	3 Elective (Recommend IST 242) <sup>*</sup>	3
ENGL 15 or 30H (GWS) <sup>‡</sup>	3 General Education Course (GH)	3
MATH 21, 22, 26, 110, or 140 (GQ) <sup>‡</sup>	3	
	16	15
Second Year		
Second Year Fall	Credits Spring	Credits
	<b>Credits Spring</b> 3 IST 227 <sup>*</sup>	Credits 3
Fall IST 225 <sup>*</sup> IST 226 <sup>*</sup>		
Fall IST 225 <sup>*</sup>	3 IST 227 <sup>*</sup>	3
Fall IST 225 <sup>*</sup> IST 226 <sup>*</sup>	3 IST 227 <sup>*</sup> 3 IST 228 <sup>*</sup> 3 General Education Course	3
Fall IST 225 <sup>*</sup> IST 226 <sup>*</sup> IST 260W <sup>*</sup>	3 IST 227 <sup>*</sup> 3 IST 228 <sup>*</sup> 3 General Education Course (GA) 3 General Education Course	3 3 3 3
Fall IST 225 <sup>*</sup> IST 226 <sup>*</sup> IST 260W <sup>*</sup>	3 IST 227 <sup>*</sup> 3 IST 228 <sup>*</sup> 3 General Education Course (GA) 3 General Education Course (GN)	3 3 3 3
Fall IST 225 <sup>*</sup> IST 226 <sup>*</sup> IST 260W <sup>*</sup>	3 IST 227 <sup>*</sup> 3 IST 228 <sup>*</sup> 3 General Education Course (GA) 3 General Education Course (GN) 3 ENGL 202C or 202D (GWS) <sup>‡†</sup>	3 3 3 3 3

#### **Total Credits 62**

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

#### **University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

• As long as two Arts (GA) and two Humanities (GH) are taken across the eight semesters, the particular order in which these courses are

taken is not relevant. The course series listed above is only one of many possible ways to move through the IST curriculum.

#### **Advising Notes:**

A student's career/graduate school plans should be considered in developing an individual academic plan. Be sure to consult an adviser in this department when scheduling courses.

### **Greater Allegheny Campus**

# All Options: Information Sciences and Technology, A.S. at Greater Allegheny Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits
ENGL 15 <sup>‡</sup>	3 CAS 100 <sup>‡</sup>	3
IST 140 <sup>*</sup>	3 IST 220 <sup>*</sup>	3
First-Year Seminar (IST 111S, CYBER 100S) <sup>*</sup>	1 STAT 200, SCM 200, DS 200, MATH 21, MATH 22, MATH 26, MATH 110, or MATH 140 <sup>‡</sup>	3-4
SRA 111, CYBER 100, CYBER 100S, IST 110, or HCDD 113S <sup>*</sup>	3 Application Focus Selection $2^*$	3
Application Focus Selection 1 <sup>*</sup>	3 General Education Course	3
General Education Course	3	
	16	15-16
Second Year		
Fall	Credits Spring	Credits
IST 210 <sup>*</sup>	3 IST 260W <sup>*</sup>	3
IST 250 or 256 <sup>*</sup>	3 IST 295A, 295B, or 495 <sup>*</sup>	1
Application Focus Selection 3 <sup>*</sup>	3 ENGL 202C or $202D^{\ddagger}$	3
Application Focus Selection 4 <sup>*</sup>	3 Elective (General Education Course, US/IL Course)	3
<b>General Education Course</b>	<b>3</b> General Education Course	3
	15	13
Total Credits 59-60		

#### Total Credits 59-60

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

#### **University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### Advising Notes:

· Application Focus Areas (12 credits from each area):

- Application Development: IST 242, IST 256, IST 261, IST 311, IST 331
- Business: ACCTG 211, BA 242/BA 243/BA 301/BA 302/BA 303, BLAW 243, FIN 301, ECON 102/ECON 104, MKTG 301, MGMT 301, SCM 301
- Cybersecurity: SRA 211, CYBER 262, IST 242, SRA 111, SRA 221
- Custom: A coherent sequence of courses that provides context for the student in terms of IT content.

### **Hazleton Campus**

# Application Development Option: Information Sciences and Technology, A.S. at Hazleton Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits
IST 110 or SRA 111 <sup>*</sup>	3 IST 210 <sup>*</sup>	3
IST 140 <sup>*</sup>	3 IST 220 <sup>*</sup>	3
ENGL 15 or 30H <sup>‡†</sup>	3 CAS 100 <sup>‡†</sup>	3
General Education Course (GQ) <sup>†</sup>	3 IST 242	3
General Education Course $^{\dagger}$	3 General Education Course	3
PSU 8	1	
	16	15
Second Year		
Second Year Fall	Credits Spring	Credits
	Credits Spring 3 IST 261	Credits 3
Fall		
Fall IST 250 <sup>*</sup>	3 IST 261	3
Fall IST 250 <sup>*</sup> IST 311	3 IST 261 3 IST 331	3
<b>Fall</b> IST 250 <sup>*</sup> IST 311 IST 260W <sup>*</sup>	3 IST 261 3 IST 331 3 IST 295A or 295B <sup>*</sup>	3 3 1
Fall IST 250 <sup>*</sup> IST 311 IST 260W <sup>*</sup> General Education Course <sup>†</sup>	3 IST 261 3 IST 331 3 IST 295A or 295B <sup>*</sup> 3 ENGL 202C or 202D <sup>‡†</sup>	3 3 1 3

**Total Credits 60** 

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

+ Course satisfies General Education and degree requirement

#### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

# Custom Option: Information Sciences and Technology, A.S. at Hazleton Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits	
IST 110 <sup>*</sup>	3 IST 210 <sup>*</sup>	3	
IST 140 <sup>*</sup>	3 IST 220 <sup>*</sup>	3	
ENGL 15 or 30H <sup>‡†</sup>	3 CAS 100 <sup>‡†</sup>	3	
General Education Course (GQ) <sup>†</sup>	3 Approved Supporting Course <sup>1</sup>	3	
PSU 8	1 General Education Course	3	
	13	15	
Second Year			
Fall	Credits Spring	Credits Summer	Credits
Approved Supporting Course <sup>1</sup>	3 Approved Supporting Course <sup>1</sup>	3 IST 295A or 295B <sup>*</sup>	1
Approved Supporting Course <sup>1</sup>	3 ENGL 202C or 202D <sup>‡†</sup>	3	
IST 260W <sup>*</sup>	3 General Education Course	3	
IST 250 <sup>*</sup>	3 General Education Course	3	
General Education Course <sup>†</sup>	3 Elective	4	
	15	16	1

**Total Credits 60** 

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

+ Course satisfies General Education and degree requirement

<sup>1</sup> Consult IST Program Coordinator for a list of course selections.

#### **University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures). W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

### **Mont Alto Campus**

# Application Development Option: Information Sciences and Technology, A.S. at Mont Alto Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year			
Fall	Credits Spring	Credits	
CYBER 100 <sup>*1</sup>	3 IST 210 <sup>*2</sup>	3	
IST 111S <sup>1</sup>	1 IST 220 <sup>*2</sup>	3	
IST 140 <sup>*1</sup>	3 IST 242 <sup>*2,3</sup>	3	
ENGL 15 (GWS) <sup>*‡†</sup>	3 General Education Course (GA) <sup>#</sup>	3	
MATH 21, 22, 110, or STAT 200 (GQ) <sup>*‡†</sup>	3 General Education Course (GH) <sup>#</sup>	3	
General Education Course (GS) <sup>#</sup> (SRA 111) <sup>†1,5</sup>	3		
、 <i>、</i> /			
× ,	16	15	
Second Year	16	15	
Second Year Fall	Credits Spring	15 Credits Summer	Credits
Second Year			Credits 1
Second Year Fall IST 260W <sup>*1</sup> IST 256 <sup>*1</sup>	Credits Spring	Credits Summer 3 IST 295B or 495 (Take Any	
Second Year Fall IST 260W <sup>*1</sup>	<b>Credits Spring</b> 3 IST 331 <sup>*2,3</sup>	<b>Credits Summer</b> 3 IST 295B or 495 (Take Any Time) <sup>*</sup>	
Second Year Fall IST 260W <sup>*1</sup> IST 256 <sup>*1</sup>	<b>Credits Spring</b> 3 IST 331 <sup>*2,3</sup> 3 IST 311 <sup>*3,4</sup> 3 ENGL 202C or	Credits Summer 3 IST 295B or 495 (Take Any Time)* 3	
Second Year Fall IST 260W <sup>*1</sup> IST 256 <sup>*1</sup> IST 261 <sup>*3,4</sup> CAS 100	Credits Spring 3 IST 331 <sup>*2,3</sup> 3 IST 311 <sup>*3,4</sup> 3 ENGL 202C or 202D (GWS) <sup>*‡†</sup> 3 General Education	Credits Summer 3 IST 295B or 495 (Take Any Time)* 3 3	

**Total Credits 62** 

- \* Course requires a grade of C or better for the major
- ‡ Course requires a grade of C or better for General Education
- # Course is an Entrance to Major requirement
- † Course satisfies General Education and degree requirement
- <sup>1</sup> Fall only course
- <sup>2</sup> Spring only course
- <sup>3</sup> Choose from: IST 242, IST 256, IST 261, IST 311, IST 331
- <sup>4</sup> DLC course
- <sup>5</sup> Recommended Course

University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

• The course series listed above is only one of many possible ways to move through the IST curriculum.

#### **Advising Notes:**

• A student's post-graduation plans should be considered in developing an individual academic plan. Be sure to consult an adviser in this department when scheduling courses.

#### Custom Option: Information Sciences and Technology, A.S. at Mont Alto Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	<b>Credits Spring</b>	Credits	
CYBER 100 <sup>*1</sup>	3 IST 210 <sup>*2</sup>	3	
IST 111S <sup>1</sup>	1 IST 220 <sup>*2</sup>	3	
IST 140 <sup>*1</sup>	3 General Education Course (GA) <sup>#</sup>	3	
ENGL 15 (GWS) <sup>*‡†</sup>	3 General Education Course (GH) <sup>#</sup>	3	
MATH 21, 22, 110, or STAT 200 (GQ) <sup>*‡†</sup>	3 Elective (IST 242) <sup>2,4</sup>	3	
General Education Course (GS) <sup>#</sup> (SRA 111 or ECON 102/ ECON 104) <sup>*†4</sup>	3		
	16	15	
Second Year			
Fall	<b>Credits Spring</b>	Credits Summer	Credits
Option Course <sup>*3</sup>		495 (Take Any Time) <sup>*</sup>	1
Option Course <sup>*3</sup>	3 Option Course <sup>*3</sup>	3	
IST 260W <sup>*1</sup>	3 ENGL 202C or 202D (GWS) <sup>*‡†</sup>	3	
CAS 100	2 Conoral	2	

CAS 100 3 General 3 (GWS)<sup>\*‡†</sup> Education Course (GN)<sup>#</sup> IST 256<sup>\*1</sup> 3 Elective 3 15 15 1

#### **Total Credits 62**

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

+ Course satisfies General Education and degree requirement

<sup>1</sup> Fall only course

- <sup>2</sup> Spring only course
- <sup>3</sup> Consult with adviser

<sup>4</sup> Recommended course

**University Requirements and General Education Notes:** 

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

• The course series listed above is only one of many possible ways to move through the IST curriculum.

#### Advising Notes:

 A student's post-graduation plans should be considered in developing an individual academic plan. Be sure to consult an adviser in this department when scheduling courses.

# Cybersecurity Option: Information Sciences and Technology, A.S. at Mont Alto Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year			
Fall	<b>Credits Spring</b>	Credits	
CYBER 100 <sup>*1</sup>	3 IST 210 <sup>*2</sup>	3	
IST 111S <sup>1</sup>	1 IST 220 <sup>*2</sup>	3	
IST 140 <sup>*1</sup>	3 IST 242 <sup>*2,3</sup>	3	
ENGL 15 (GWS) <sup>*‡†</sup>	3 SRA 111 <sup>*2,3</sup>	3	
MATH 21, 22, 110, or STAT 200 (GQ) <sup>*‡†</sup>	3 Elective	3	
General Education Course (GS) <sup>#</sup> (ECON 102/ ECON 104) <sup>*†4</sup>	3		
	16	15	
Second Year			
Fall	<b>Credits Spring</b>	Credits Summer	Credits
IST 260W <sup>*1</sup>	3 SRA 221 <sup>*2,3</sup>	3 IST 295B or 495 (Take Any Time) <sup>*</sup>	1
CYBER 262 or SRA 211 <sup>*3,4</sup>	3 ENGL 202C or 202D (GWS) <sup>*‡†</sup>	3	
CAS 100 (GWS) <sup>*‡†</sup>	3 General Education Course (GA) <sup>#</sup>	3	
IST 256 <sup>*1</sup>	3 General Education Course (GN) <sup>#</sup>	3	
General Education Course (GH) <sup>#</sup>	3 Elective	3	
	15	15	1

#### **Total Credits 62**

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

- <sup>1</sup> Fall only course
- <sup>2</sup> Spring only course
- <sup>3</sup> Choose from: CYBER 262, IST 242, SRA 111, SRA 211, SRA 221
- <sup>4</sup> DLC course
- <sup>5</sup> Recommended course

**University Requirements and General Education Notes:** 

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

• The course series listed above is only one of many possible ways to move through the IST curriculum.

#### **Advising Notes:**

• A student's post-graduation plans should be considered in developing an individual academic plan. Be sure to consult an adviser in this department when scheduling courses.

#### Generalized Business Option: Information Sciences and Technology, A.S. at Mont Alto Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

<b>Fall</b> CYBER 100 <sup>*1</sup>	<b>Credits Spring</b> 3 IST 210 <sup>*2</sup>	Credits 3	
IST 111S <sup>1</sup>	1 IST 220 <sup>*2</sup>	3	
IST 140 <sup>*1</sup>	3 General Education Course (GA) <sup>#</sup>	3	
ENGL 15 (GWS) <sup>*‡†</sup>	3 General Education Course (GH) <sup>#</sup>	3	
MATH 21, 22, 110, or STAT 200 (GQ) <sup>*‡†</sup>	3 Elective (IST 242) <sup>2,4</sup>	3	
General Education Course (GS) <sup>#</sup> (SRA 111 or ECON 102/ ECON 104) <sup>*†4</sup>	3		
	16	15	
Second Year			
Fall	Credits Spring	Credits Summer	Credits
Option Course <sup>*3</sup>		495 (Take Any Time) <sup>*</sup>	1
Option Course*3	<sup>3</sup> 3 Option Course <sup>*3</sup>	3	
IST 260W <sup>*1</sup>	3 ENGL 202C or	3	

 $\begin{array}{cccc} 3 & \text{ENGL } 2020 & \text{or} & 3 \\ 202D & (\text{GWS})^{*\ddagger 1} & & & \\ & & \text{Education} \\ & & & \text{Course (GN)}^{\#} \\ & & & \text{IST } 256^{*1} & & 3 \\ \end{array}$ 

15

1

**Total Credits 62** 

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

15

+ Course satisfies General Education and degree requirement

- <sup>1</sup> Fall only course
- <sup>2</sup> Spring only course
- <sup>3</sup> Choose from: ACCTG 211, BA 243, ECON 102 or ECON 104, FIN 301, MGMT 301, MKTG 301, SCM 301
- <sup>4</sup> Recommended course

**University Requirements and General Education Notes:** 

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

• The course series listed above is only one of many possible ways to move through the IST curriculum.

#### Advising Notes:

 A student's post-graduation plans should be considered in developing an individual academic plan. Be sure to consult an adviser in this department when scheduling courses.

# Networking Option: Information Sciences and Technology, A.S. at Mont Alto Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits	
CYBER 100 <sup>*1</sup>	3 IST 210 <sup>*2</sup>	3	
IST 111S <sup>1</sup>	1 IST 220 <sup>*2</sup>	3	
IST 140 <sup>*1</sup>	3 General Education Course (GA) <sup>#</sup>	3	
ENGL 15 (GWS) <sup>*‡†</sup>	3 General Education Course (GH) <sup>#</sup>	3	
MATH 21, 22, 110, or STAT 200 (GQ) <sup>*‡†</sup>	3 Elective (IST 242) <sup>2,3</sup>	3	
General Education Course (GS) <sup>#</sup> (SRA 111) <sup>†1,3</sup>	3		
	16	15	
Second Year			
Fall	<b>Credits Spring</b>	Credits Summer	Credits
IST 225 <sup>*1</sup>	3 IST 227 <sup>*2</sup>	3 IST 295B or 495 (Take Any Time) <sup>*</sup>	1
IST 226 <sup>*1</sup>	3 IST 228 <sup>*2</sup>	3	
IST 260W <sup>*1</sup>	3 ENGL 202C or 202D (GWS) <sup>*‡†</sup>	3	
CAS 100 (GWS) <sup>*‡†</sup>	3 General Education Course (GN) <sup>#</sup>	3	
IST 256 <sup>*1</sup>	3 Elective	3	
	15	15	1

**Total Credits 62** 

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

<sup>1</sup> Fall only course

<sup>2</sup> Spring only course

<sup>3</sup> Recommended course

#### University Requirements and General Education Notes:

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures). W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

• The course series listed above is only one of many possible ways to move through the IST curriculum.

#### Advising Notes:

• A student's post-graduation plans should be considered in developing an individual academic plan. Be sure to consult an adviser in this department when scheduling courses.

#### **Scranton Campus**

# All Options: Information Sciences and Technology, A.S. at Scranton Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits
ENGL 15 or 30H	3 IST 210 <sup>*</sup>	3
IST 140 <sup>*</sup>	3 IST 220 <sup>*</sup>	3
CYBER 100, HCDD 113, IST 110, or SRA 111 <sup>*</sup>	3 General Education Course	3
IST 111S <sup>*</sup>	1 General Education Course	3
MATH 21, 22, 26, 110, 140, SCM 200, or STAT 200 (based on MATH placement)	3-4 Option Selection 1 <sup>*</sup>	3
	13-14	15
Second Year		
Fall	Credits Spring	Credits
CAS 100	3 IST 260W <sup>*</sup>	3
Option Selection 2 <sup>*</sup>	3 IST 256 <sup>*</sup>	3
Option Selection 3 <sup>*</sup>	3-4 ENGL 202C or 202D	3
General Education Course	3 Option Selection $4^*$	3
General Education Course	3 Elective	2-4
	IST 495, 295A, or $295B^{*}$	1
	15-16	15-17

Total Credits 58-62

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

† Course satisfies General Education and degree requirement

#### **University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### Advising Notes:

- Application Development Option:
  - Take IST 110 or SRA 111 in Semester 1
  - Take IST 242 in Semester 2

- Take IST 311 and IST 331 in Semester 3
- Take IST 261 in Semester 4
- Custom Option:
  - Select 12 credits in consultation with an adviser
- · Generalized Business Option:
  - Take ECON 102 or ECON 104 in Semester 2
  - Take ACCTG 211 and MGMT 301 in Semester 3
  - Take and MKTG 301 in Semester 4

### Wilkes-Barre Campus

# Custom Option: Information Sciences and Technology, A.S. at Wilkes-Barre Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

First Year Fall	Credits Spring	Credits	
IST 110, CYBER 100, or SRA 111 <sup>*</sup>	3 IST 210 <sup>*</sup>	3	
IST 140 <sup>*‡†</sup>	3 CAS 100A <sup>‡</sup>	3	
IST 220 <sup>*</sup>	3 MATH 21, 22, 110, STAT 200, or SCM 200 <sup>‡</sup>	3-4	
ENGL 15 <sup>‡</sup>	3 General Education Course	3	
PSU 8	1 Approved Supporting Course	3	
	13	15-16	
Second Year			
Second Year			
Fall	Credits Spring	Credits Summer	Credits
	<b>Credits Spring</b> 3 IST 256 <sup>*</sup>	Credits Summer 3 IST 295A or 295B	Credits 1-3
<b>Fall</b> Approved Supporting		3 IST 295A or	
Fall Approved Supporting Course Approved Supporting	3 IST 256 <sup>*</sup>	3 IST 295A or 295B	
Fall Approved Supporting Course Approved Supporting Course Approved Supporting	3 IST 256 <sup>*</sup> 3 IST 260W <sup>*</sup> 3 Approved Supporting	3 IST 295A or 295B 3	
Fall Approved Supporting Course Approved Supporting Course Approved Supporting Course General Education	3 IST 256 <sup>*</sup> 3 IST 260W <sup>*</sup> 3 Approved Supporting Course 3 ENGL 202C or	3 IST 295A or 295B 3 3	

**Total Credits 59-62** 

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

+ Course satisfies General Education and degree requirement

#### **University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures). W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

### **York Campus**

#### Information Sciences and Technology, A.S. at York Campus

The course series listed below provides **only one** of the many possible ways to move through this curriculum. The University may make changes in policies, procedures, educational offerings, and requirements at any time. This plan should be used in conjunction with your degree audit (accessible in LionPATH as either an **Academic Requirements** or **What If** report). Please consult with a Penn State academic adviser on a regular basis to develop and refine an academic plan that is appropriate for you.

#### First Year

Fall	Credits Spring	Credits
ENGL 15 or 30H <sup>‡</sup>	3 IST 210 <sup>*</sup>	3
IST 140 <sup>*</sup>	3 IST 220 <sup>*</sup>	3
CYBER 100, IST 110, HCDD 113, or SRA 111	3 General Education course	6
IST 111S <sup>*</sup>	1 Option Selection 1	3
MATH 21, 22, or 110 (based on math placement)	3	
	13	15
Second Year		
Fall	Credits Spring	Credits
<b>Fall</b> IST 260W <sup>*</sup>	<b>Credits Spring</b> 3 ENGL 202C or 202D <sup>‡</sup>	Credits 3
IST 260W <sup>*</sup>	3 ENGL 202C or 202D <sup>‡</sup>	3
IST 260W <sup>*</sup> CAS 100 <sup>‡</sup>	3 ENGL 202C or 202D <sup>‡</sup> 3 IST 256	3
IST 260W <sup>*</sup> CAS 100 <sup>‡</sup> Option Selection 2 General Education Course	3 ENGL 202C or 202D <sup>‡</sup> 3 IST 256 3 IST 495 or 295B 3-4 Option Selection 3 or	3 3 1
IST 260W <sup>*</sup> CAS 100 <sup>‡</sup> Option Selection 2 General Education Course (or Option Selection 3)	3 ENGL 202C or 202D <sup>‡</sup> 3 IST 256 3 IST 495 or 295B 3-4 Option Selection 3 or General Education Selection	3 3 1 3

**Total Credits 59-61** 

\* Course requires a grade of C or better for the major

‡ Course requires a grade of C or better for General Education

# Course is an Entrance to Major requirement

+ Course satisfies General Education and degree requirement

#### **University Requirements and General Education Notes:**

US and IL are abbreviations used to designate courses that satisfy Cultural Diversity Requirements (United States and International Cultures).

W, M, X, and Y are the suffixes at the end of a course number used to designate courses that satisfy University Writing Across the Curriculum requirement.

General Education includes Foundations (GWS and GQ) and Knowledge Domains (GHW, GN, GA, GH, GS) requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

#### **Program Notes:**

- Application Development Option:
  - Take IST 110 or SRA 111 in Semester 1
  - Take IST 242 in Semester 2
  - · Take IST 311 in Semester 3
  - · Take IST 261 or IST 331 in Semester 4

- Custom Option:
  - · Select 12 credits in consultation with your adviser
- Cybersecurity Option:
  - Take CYBER 100 or SRA 111 in Semester 1
  - Take IST 242 in Semester 2
  - Take SRA 111 or CYBER 100 in Semester 3 (whichever course was not taken in Semester 1)
  - Take CYBER 262 or SRA 221 in Semester 3
    - If CYBER 100 was taken in Semester 1, then take CYBER 262
       here
    - If SRA 111 was taken in Semester 1, then take SRA 221 here
  - Take SRA 211 in Semester 4
- Generalized Business Option:
  - Take ECON 102 or ECON 104 in Semester 2
  - Take ACCTG 211 in Semester 3
  - Take MGMT 301 and MKTG 301 in Semester 4

# Contact

#### DuBois

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https://dubois.psu.edu/academics/degrees/IT (https://dubois.psu.edu/academics/degrees/IT/)

### Hazleton

Kostos 117 Hazleton, PA 18202 570-450-3089 bxb30@psu.edu

https://hazleton.psu.edu/associate-science-information-sciencestechnology (https://hazleton.psu.edu/associate-science-informationsciences-technology/)

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006 Bookstore 1 Campus Drive Mont Alto, PA 17237 717-749-6048 ebd5343@psu.edu

https://montalto.psu.edu/academics/associate/associate-informationsciences-and-technology-degree (https://montalto.psu.edu/academics/ associate/associate-information-sciences-and-technology-degree/)

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### **University Park**

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### **World Campus**

COLLEGE OF INFORMATION SCIENCES AND TECHNOLOGY 411 Eric J. Barron Innovation Hub Building State College, PA 16801 814-865-3528

https://www.worldcampus.psu.edu/degrees-and-certificates/penn-stateonline-information-sciences-and-technology-associate-in-science-degree (https://www.worldcampus.psu.edu/degrees-and-certificates/pennstate-online-information-sciences-and-technology-associate-in-sciencedegree/)