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

Begin Campus: Berks
End Campus: Berks

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 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 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:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>21</td>
</tr>
<tr>
<td>Electives</td>
<td>0-5</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>43-47</td>
</tr>
</tbody>
</table>

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 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44).

Common Requirements for the Major (All Options)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS 100</td>
<td>Effective Speech</td>
<td>3</td>
</tr>
</tbody>
</table>

Prescribed Courses: Require a grade of C or better
<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 15</td>
<td>Rhetoric and Composition</td>
<td>3</td>
</tr>
<tr>
<td>IST 140</td>
<td>Introduction to Application Development</td>
<td>3</td>
</tr>
<tr>
<td>IST 210</td>
<td>Organization of Data</td>
<td>3</td>
</tr>
<tr>
<td>IST 220</td>
<td>Networking and Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>IST 260W</td>
<td>Introduction to Systems Analysis and Design</td>
<td>3</td>
</tr>
</tbody>
</table>

**Additional Courses**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 202C</td>
<td>Effective Writing: Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 202D</td>
<td>Effective Writing: Business Writing</td>
<td></td>
</tr>
</tbody>
</table>

Additional Courses: Require a grade of C or better

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST 250</td>
<td>Introduction to Web Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>or IST 256</td>
<td>Programming for the Web</td>
<td></td>
</tr>
</tbody>
</table>

Select 3 credits from the following: 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYBER 100</td>
<td>Computer Systems Literacy</td>
<td></td>
</tr>
<tr>
<td>CYBER 100S</td>
<td>Computer Systems Literacy</td>
<td></td>
</tr>
<tr>
<td>HCDD 113</td>
<td>Foundations of Human-Centered Design and Development</td>
<td></td>
</tr>
<tr>
<td>HCDD 113S</td>
<td>Foundations of Human-Centered Design and Development FYS</td>
<td></td>
</tr>
<tr>
<td>IST 110</td>
<td>Information, People and Technology</td>
<td></td>
</tr>
<tr>
<td>SRA 111</td>
<td>Introduction to Security and Risk Analysis</td>
<td></td>
</tr>
</tbody>
</table>

Select 1 credit from the following: 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST 295A</td>
<td>Distributed Team Project</td>
<td></td>
</tr>
<tr>
<td>IST 295B</td>
<td>IST Internship</td>
<td></td>
</tr>
<tr>
<td>IST 495</td>
<td>Internship</td>
<td></td>
</tr>
</tbody>
</table>

Select 3-4 credits from the following: 3-4

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 21</td>
<td>College Algebra I</td>
<td></td>
</tr>
<tr>
<td>MATH 22</td>
<td>College Algebra II and Analytic Geometry</td>
<td></td>
</tr>
<tr>
<td>MATH 26</td>
<td>Plane Trigonometry</td>
<td></td>
</tr>
<tr>
<td>MATH 110</td>
<td>Techniques of Calculus I</td>
<td></td>
</tr>
<tr>
<td>MATH 140</td>
<td>Calculus With Analytic Geometry I</td>
<td></td>
</tr>
<tr>
<td>SCM 200</td>
<td>Introduction to Statistics for Business</td>
<td></td>
</tr>
</tbody>
</table>

**Supporting Courses and Related Areas**

Supporting Courses 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 12-14

1 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYBER 262</td>
<td>Cyber-Defense Studio</td>
<td>12</td>
</tr>
<tr>
<td>IST 242</td>
<td>Intermediate &amp; Object-Oriented Application Development</td>
<td></td>
</tr>
</tbody>
</table>

Additional Courses: Require a grade of C or better

Select 12 credits from the following: 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 211</td>
<td>Financial and Managerial Accounting for Decision Making</td>
<td></td>
</tr>
<tr>
<td>BA 243</td>
<td>Social, Legal, and Ethical Environment of Business</td>
<td></td>
</tr>
<tr>
<td>or BLAW 243</td>
<td>Legal Environment of Business</td>
<td></td>
</tr>
<tr>
<td>or BA 241</td>
<td>Legal Environment of Business</td>
<td></td>
</tr>
<tr>
<td>or BA 242</td>
<td>Social and Ethical Environment of Business</td>
<td></td>
</tr>
<tr>
<td>BA 301</td>
<td>Finance</td>
<td></td>
</tr>
<tr>
<td>or FIN 301</td>
<td>Corporation Finance</td>
<td></td>
</tr>
<tr>
<td>BA 302</td>
<td>Supply Chains</td>
<td></td>
</tr>
<tr>
<td>or SCM 301</td>
<td>Supply Chain Management</td>
<td></td>
</tr>
<tr>
<td>BA 303</td>
<td>Marketing</td>
<td></td>
</tr>
</tbody>
</table>
or MKTG 301 Principles of Marketing
BA 304 Management and Organization
or MGMT 303 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

<table>
<thead>
<tr>
<th>Code</th>
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</tr>
</thead>
<tbody>
<tr>
<td>IST 225</td>
<td>PC Hardware Basics</td>
<td>3</td>
</tr>
<tr>
<td>IST 226</td>
<td>Networking Essentials</td>
<td>3</td>
</tr>
<tr>
<td>IST 227</td>
<td>Network Administration</td>
<td>3</td>
</tr>
<tr>
<td>IST 228</td>
<td>Advanced Network Administration</td>
<td>3</td>
</tr>
</tbody>
</table>

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/general-education/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.)**
- 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 is used to satisfy more than one requirement, the credits from the course can be counted only once.

**Foundations or Knowledge Domains**
- Any General Education course: 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 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80)). For more information, check the Suggested Academic Plan for your intended program.

**Program Learning Objectives**
- **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
  - 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

**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/)

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wpc2@psu.edu

**Suggested Academic Plan**

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2022-23 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).

**Application Development Option: Information Sciences and Technology, A.S. at Berks 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

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 15 or 30T (GWS)†</td>
<td>3</td>
<td>CAS 100 (GWS)†</td>
<td>3</td>
</tr>
<tr>
<td>IST 110, CYBER 100, HCDD 113, or SRA 111†</td>
<td>3</td>
<td>IST 220*</td>
<td>3</td>
</tr>
<tr>
<td>IST 140*</td>
<td>3</td>
<td>IST 242*</td>
<td>3</td>
</tr>
<tr>
<td>MATH 21, 22, 26, 110, 140, SCM 200, or STAT 200 (GQ)†</td>
<td>3-4 IST 250 (or General Education Course (GN or GA or GH or GS))†</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>First-Year Seminar (IST 111S)</td>
<td>1</td>
<td>General Education Course (GN or GA or GH or GS)</td>
<td>3</td>
</tr>
<tr>
<td>General Education Course (GN or GA or GH or GS)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>16-17</td>
<td></td>
<td>15</td>
</tr>
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</table>

### Second Year

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST 210*</td>
<td>3</td>
<td>ENGL 202C or 202D (GWS)†</td>
<td>3</td>
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<tr>
<td>Option Requirement*</td>
<td>3</td>
<td>IST 260W†</td>
<td>3</td>
</tr>
<tr>
<td>Option Requirement*</td>
<td>3</td>
<td>Option Requirement†</td>
<td>3</td>
</tr>
<tr>
<td>General Education Course (GN or GA or GH or GS)</td>
<td>3 IST 256 (or General Education Course (GN or GA or GH or GS))†</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3-4 IST 295A, 295B, or 495*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-16</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

**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 University 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.

GWS, GQ, GN, GA, GH, and GS are abbreviations used to identify General Education program courses. General Education includes Foundations (GWS and GQ) and Knowledge Domains (GN, GA, GH, and GS). Foundations courses (GWS and GQ) require a grade of ‘C’ or better.

**Advising Notes:**

- Business Selection Courses (cannot double count with other Additional or Option requirements)
  - ACCTG 211
  - BA 100
  - ECON 102
  - ECON 104

- MGMT 301
- MKTG 301

- Networking Selection Courses (cannot double count with other Additional or Option requirements)
  - CYBER 262
  - IST 226
  - IST 451
  - IST 454

- Option Courses:
  - Application Development:
    - Select 12 credits, with at least 3 credits at the 400 level from:
      IST 261, IST 311, IST 361, IST 411, IST 412, IST 413
  - Business Applications:
    - ACCTG 211
    - Select 3 credits from: FIN 301, MGMT 301, MKTG 301, SCM 301
    - Select 6 credits, with at least 3 credits at the 400 level from:
      ACCTG, BA, BLAW, EBF, ECON, ENTR, FIN, FINSV, HPA, IB, LER, MIS, MGMT, MKTG, RM, SCM, or STAT
  - Cybersecurity:
    - Select 12 credits, with at least 3 credits at the 400 level from:
      CYBER 262, IST 451, IST 454, IST 456, SRA 472, or any 300 or 400 level CYBER course.
  - Security and Risk Analysis:
    - Select 12 credits, with at least 3 credits at the 400 level from:
      SRA 211, SRA 231, SRA 311, SRA 365, IST 432, IST 452, IST 456

- Networking Selection Courses (cannot double count with other Additional or Option requirements)

- Option Courses:

- Option Courses:

- Option Courses:
Custom Option: Information Sciences and Technology, A.S. at Berks 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.

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<th>First Year</th>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<tr>
<td>IST 110, CYBER 100, HCDD 113, or SRA 111 *</td>
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<td>IST 220*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>IST 140*</td>
<td>3</td>
<td>IST 250*</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>MATH 21, 22, 26, 110, 140, SCM 200, or STAT 200 (GQ)‡</td>
<td>3-4</td>
<td>Option Requirement*</td>
<td>3</td>
<td></td>
</tr>
<tr>
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<td>1</td>
<td>General Education Course (GN or GA or GH or GS)</td>
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<td>General Education Course (GN or GA or GH or GS)</td>
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<td>Spring</td>
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<td>Option Requirement*</td>
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<td>IST 260W*</td>
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<td>Option Requirement*</td>
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<td>Elective</td>
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<td>IST 295A, 295B, or 495*</td>
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<td>Total Credits</td>
<td>59-61</td>
<td>15-16</td>
<td>13</td>
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</tbody>
</table>

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Advising Notes:

- Business Selection Courses (cannot double count with other Additional or Option requirements)
  - ACCTG 211
  - BA 100
- ECON 102
- ECON 104
- MGMT 301
- MKTG 301
- Networking Selection Courses (cannot double count with other Additional or Option requirements)
  - CYBER 262
  - IST 226
  - IST 451
  - IST 454
- Option Courses:
  - Application Development:
    - Select 12 credits, with at least 3 credits at the 400 level from: IST 261, IST 311, IST 361, IST 411, IST 412, IST 413
  - Business Applications:
    - ACCTG 211
    - Select 3 credits from: FIN 301, MGMT 301, MKTG 301, SCM 301
    - Select 6 credits, with at least 3 credits at the 400 level from: ACCTG, BA, BLAW, EBF, ECON, ENTR, FIN, FINSV, HPA, IB, LER, MIS, MGMT, MKTG, RM, SCM, or STAT
  - Cybersecurity:
    - Select 12 credits, with at least 3 credits at the 400 level from: CYBER 262, IST 451, IST 454, IST 456, SRA 472, or any 300 or 400 level CYBER course.
  - Security and Risk Analysis:
    - Select 12 credits, with at least 3 credits at the 400 level from: SRA 211, SRA 231, SRA 311, SRA 365, IST 432, IST 452, IST 456
Cybersecurity Option: Information Sciences and Technology, A.S. at Berks 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**

<table>
<thead>
<tr>
<th>Fall</th>
<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 15 or 30T (GWS)‡</td>
<td>3</td>
<td>CAS 100 (GWS)‡</td>
<td>3</td>
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<tr>
<td>IST 110, CYBER 100, HCDD 113, or SRA 111*</td>
<td>3</td>
<td>IST 220*</td>
<td>3</td>
</tr>
<tr>
<td>IST 140*</td>
<td>3</td>
<td>IST 250*</td>
<td>3</td>
</tr>
<tr>
<td>MATH 21, 22, 26, 110, 140, SCM 200, or STAT 200 (GQ)‡</td>
<td>3-4</td>
<td>SRA 111*</td>
<td>3</td>
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<tr>
<td>First-Year Seminar (IST 111S)</td>
<td>1</td>
<td>General Education Course (GN or GA or GH)</td>
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<tr>
<td>General Education Course (GN or GA or GH)</td>
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<td></td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td>16-17</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

| Second Year                       |         |                                      |         |
| Fall                              | Credits | Spring                               | Credits |
| IST 210*                          | 3       | ENGL 202C or 202D (GWS)‡             | 3       |
| Option Requirement*               | 3       | IST 260W*                            | 3       |
| Option Requirement*               | 3       | Option Requirement*                  | 3       |
| General Education Course (GN or GA or GH) | 3       | Elective                             | 3       |
| Elective                          | 3-4     | IST 295A, 295B, or 495*              | 1       |
| **Total Credits**                 | 15-16   |                                      | 13      |

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**Advising Notes:**

- ECON 102
- ECON 104
- MGMT 301
- MKTG 301
- Networking Selection Courses (cannot double count with other Additional or Option requirements)
  - CYBER 262
  - IST 226
  - IST 451
  - IST 454
- Option Courses:
  - Application Development:
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    - BA 100
Generalized Business Option: Information Sciences and Technology, A.S. at Berks Campus

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<td><strong>Total Credits 16-17</strong></td>
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<tr>
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<th>Credits</th>
<th>Spring</th>
<th>Credits</th>
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<tbody>
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<td>ENGL 202C or 202D (GWS)‡</td>
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<tr>
<td>Option Requirement*</td>
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<td>IST 260W*</td>
<td>3</td>
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<td>3-4</td>
<td>IST 295A, 295B, or 495*</td>
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<tr>
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### Contact

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University Park
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814-865-3528

https://www.worldcampus.psu.edu/degrees-and-certificates/information-sciences-and-technology-associates/overview

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717-771-4143
wpc2@psu.edu

http://york.psu.edu/academics/baccalaureate/information-sciences-and-technology