INFORMATION TECHNOLOGY, B.S. (ABINGTON)

Begin Campus: Any Penn State Campus

End Campus: Abington

Program Description

This degree is a new broad based technical and theoretical degree that will prepare students to implement and use information technology to realize a variety of goals within and between all types of organizations and businesses (e.g., reliability, accessibility, efficiency, cost reduction, and revenue enhancement). The emphasis is on providing the student with the theoretical frameworks needed to use information technology to solve problems while also providing a set of applied, real-world experiences. Students will acquire a broad set of skills across many areas of information technology, including programming and systems development, networking, databases, project management, and information security. Students will consider how the implementation of information technology in organizations affects social change and the delivery of information to the consumer. Upper-level course selections allow for specific advanced options including but not limited to application development, networking, cybersecurity, and business. Project-oriented, team-based projects that include significant writing and presentation components will be integrated throughout the curriculum.

Application Development Option

Available at the following campuses: Abington, Altoona, Beaver, Berks, Brandywine, Lehigh Valley, Schuylkill, Scranton, York

This option prepares students for the design and development of complex object-oriented programming and technical skills to succeed in a fast-paced development and operations environment.

Business Applications Option

Available at the following campuses: Abington, Altoona, Beaver, Berks, Brandywine, DuBois, Greater Allegheny, Hazleton, Lehigh Valley, Mont Alto, New Kensington, Schuylkill, Scranton, York

This option prepares students to pursue careers in Information technology solving business organizational problems with an emphasis on the systems processes and business operations integration.

Custom Information Technology Option

Available at the following campuses: Altoona, Berks, Brandywine, Greater Allegheny, Hazleton, Lehigh Valley, Mont Alto, New Kensington, Schuylkill, Scranton, Wilkes-Barre, York

This option provides the opportunity for students to pursue an approved information technology interdisciplinary or exploratory program of study.

Cybersecurity Option

Available at the following campuses: Altoona, Beaver, Berks, Brandywine, Lehigh Valley, Mont Alto, New Kensington, Schuylkill, Scranton, York

This option will provide students with the knowledge and cyber defense skills needed to critically assess and respond to modern information security threats. They will be prepared to protect information infrastructure and data from attacks and unauthorized access.

Networking Option

Available at the following campuses: Abington, DuBois, Mont Alto

This option prepares students to pursue careers in the design, development, and support of complex networks and networking infrastructure.

Security and Risk Analysis Option

Available at the following campuses: Altoona, Berks, Brandywine, Lehigh Valley, Schuylkill

This option prepares students to address the current and emerging security and risk challenges that face individuals, organizations and our nation, over a variety of domains including national/homeland security, emergency and disaster management, law and crime, and enterprise risk management.

What is Information Technology?

Information Technology offers both broad organizational problem-solving skills and in-depth knowledge in current in-demand technical skills. Using technology to leverage organizational resources and address organizational challenges are at the forefront of the B.S. degree in Information Technology. The program includes required and optional courses in cybersecurity, databases, computer programming, project management, security and risk analysis, networking, web design and development, application development, and systems analysis. This broad base of skills is ideally suited for entry-level positions in all the above content areas.

You Might Like This Program If…

- You enjoy technology and working with others to build solutions.
- You want to create high-tech solutions to organizational and societal challenges.
- You are interested in application development and programming.
- You are interested in improving computer systems and enhancing their safety for individuals and corporations.
- You want to leverage current and emerging technologies to improve business processes.

Entrance to Major

To be eligible for entrance to the B.S. in Information Technology major, students must:

- achieve a minimum cumulative grade point average of 2.00
- complete the following entrance-to-major courses with grades of C or better:
    - IST 110 or CYBER 100 or CYBER 100S
    - IST 140 or CMPSC 121 or CMPSC 131
    - IST 210
    - IST 220

Degree Requirements

For the Bachelor of Science degree in Information Technology, a minimum of 120 credits is required:

Requirement	Credits
General Education	45
Electives	7-9
Requirements for the Major	87-89

21 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 9 credits of GWS courses; 6 credits of GQ courses; and 6 credits of GS 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-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44).

Common Requirements for the Major (All Options)

Code	Title	Credits
Prescribed Courses		
Prescribed Courses: Require a grade of C or better		
ETI 461	Database Management and Administration	3
IST 210	Organization of Data	3
IST 220	Networking and Telecommunications	3
IST 230	Language, Logic, and Discrete Mathematics	3
IST 242	Intermediate & Object-Oriented Application Development	3
IST 256	Programming for the Web	3
IST 260W	Introduction to Systems Analysis and Design	3
IST 302	IT Project Management	3
IST 331	Foundations of Human-Centered Design	3
IST 440W	Information Sciences and Technology Integration and Problem Solving	3
IST 495	Internship	1
SRA 111	Introduction to Security and Risk Analysis	3
SRA 221	Overview of Information Security	3
Additional Courses		
Select one of the following:		3
ECON 102	Introductory Microeconomic Analysis and Policy	
ECON 104	Introductory Macroeconomic Analysis and Policy	
PLSC 1	American Politics: Principles, Processes and Powers	
PLSC 14	International Relations	
PSYCH 100	Introductory Psychology	
SOC 5	Social Problems	
Additional Courses: Require a grade of C or better		
ENGL 15	Rhetoric and Composition	3
or ENGL 30H	Honors Rhetoric and Composition	
ENGL 202C	Effective Writing: Technical Writing	3
or ENGL 202D	Effective Writing: Business Writing	
MATH 110	Techniques of Calculus I	4
or MATH 140	Calculus With Analytic Geometry I	
Select one of the following:		3
CAS 100A	Effective Speech	
CAS 100B	Effective Speech	
CAS 100C	Effective Speech	

Select one of the following:		3
CMPSC 121	Introduction to Programming Techniques	
CMPSC 131	Programming and Computation I: Fundamentals	
IST 140	Introduction to Application Development	
Select one of the following:		3
CYBER 100	Computer Systems Literacy	
CYBER 100S	Computer Systems Literacy	
IST 110	Information, People and Technology	
Select one of the following:		4
DS 200	Introduction to Data Sciences	
STAT 200	Elementary Statistics	
SCM 200	Introduction to Statistics for Business	
Select one of the following: [1]		3-4
ACCTG 211	Financial and Managerial Accounting for Decision Making	
BA 100	Introduction to Business	
ECON 102	Introductory Microeconomic Analysis and Policy [2]	
ECON 104	Introductory Macroeconomic Analysis and Policy [2]	
MGMT 301	Basic Management Concepts	
MKTG 301	Principles of Marketing [2]	
Select one of the following: [1]		3
CYBER 262	Cyber-Defense Studio	
IST 226	Networking Essentials	
IST 451	Network Security	
IST 454	Computer and Cyber Forensics	
Requirements for the Option		
Select an option		18-19

[1] These courses may not double count with other additional or option requirements.

[2] Course does not require a grade of C or better.

Requirements for the Option

Application Development Option (18 credits)

Available at the following campuses: Abington, Altoona, Beaver, Berks, Brandywine, Lehigh Valley, Schuylkill, Scranton, York

Code	Title	Credits
Additional Courses		
Additional Courses: Require a grade of C or better		
Select 12 credits, with at least 3 credits at the 400 level, from the following:		12
IST 261	Application Development Design Studio I	
IST 311	Object-Oriented Design and Software Applications	
IST 361	Application Development Design Studio II	
IST 411	Distributed-Object Computing	
IST 412	The Engineering of Complex Software Systems	
IST 413	Usability Engineering	
Supporting Courses and Related Areas		
Supporting Courses and Related Areas: Require a grade of C or better		
Select 6 credits at the 300 or 400 level in Advanced IT courses from College approved list.		6

Business Applications Option (19 credits)
Available at the following campuses: Abington, Altoona, Beaver, Berks, Brandywine, DuBois, Greater Allegheny, Hazleton, Lehigh Valley, Mont Alto, New Kensington, Schuylkill, Scranton, York

Code	Title	Credits
Prescribed Courses		
Prescribed Courses: Require a grade of C or better		
ACCTG 211	Financial and Managerial Accounting for Decision Making	4
Additional Courses		
Additional Courses: Require a grade of C or better		
Select one of the following: [1]		3
FIN 301	Corporation Finance	
MGMT 301	Basic Management Concepts	
MKTG 301	Principles of Marketing	
SCM 301	Supply Chain Management	
Supporting Courses and Related Areas		
Supporting Courses and Related Areas: Require a grade of C or better		
Select 6 credits from ACCTG, BA, BLAW, EBF, ECON, ENTR, FIN, FINSV, HPA, IB, LER, MIS, MGMT, MKTG, RM, SCM, or STAT, including 3 credits at the 400-level.		6
Select 3 credits at the 300 or 400 level in Advanced IT Business courses from College-approved list.		3
Select 3 credits at the 300 or 400 level in Advanced IT courses from College-approved list.		3

[1] Option courses may not double count with other requirements.

Custom Information Technology Option (18 credits)
Available at the following campuses: Altoona, Berks, Brandywine, Greater Allegheny, Hazleton, Lehigh Valley, Mont Alto, New Kensington, Schuylkill, Scranton, Wilkes-Barre, York

Code	Title	Credits
Supporting Courses and Related Areas		
Supporting Courses and Related Areas: Require a grade of C or better		
Select 12 credits, with at least 3 credits at the 400 level, in consultation with an adviser that follow a coherent theme in information technology.		12
Select 6 credits at the 300 or 400 level in Advanced IT courses from College-approved list.		6

Cybersecurity Option (18 credits)
Available at the following campuses: Altoona, Beaver, Berks, Brandywine, Lehigh Valley, Mont Alto, New Kensington, Schuylkill, Scranton, York

Code	Title	Credits
Additional Courses		
Additional Courses: Require a grade of C or better		
Select 12 credits, with at least 3 credits at the 400 level, from the following:		12
CYBER 262	Cyber-Defense Studio	
IST 451	Network Security	
IST 454	Computer and Cyber Forensics	
IST 456	Information Security Management	
SRA 472	Integration of Privacy and Security	
	Any 300 or 400 Level CYBER Course	
Supporting Courses and Related Areas		
Supporting Courses and Related Areas: Require a grade of C or better		
Select 6 credits at the 300 or 400 level in Advanced IT courses from College-approved list.		6

Networking Option (18 credits)
Available at the following campuses: Abington, DuBois, Mont Alto

Code	Title	Credits
Additional Courses		
Additional Courses: Require a grade of C or better		
Select 12 credits, with at least 3 credits at the 400 level, from the following:		12
CYBER 262	Cyber-Defense Studio	
IST 225	PC Hardware Basics	
IST 226	Networking Essentials	
IST 227	Network Administration	
IST 228	Advanced Network Administration	
IST 451	Network Security	
IST 454	Computer and Cyber Forensics	
Supporting Courses and Related Areas		
Supporting Courses and Related Areas: Require a grade of C or better		
Select 6 credits at the 300 or 400 level in Advanced IT courses from College-approved list.		6

Security and Risk Analysis Option (18 credits)
Available at the following campuses: Altoona, Berks, Brandywine, Lehigh Valley, Schuylkill

Code	Title	Credits
Additional Courses		
Additional Courses: Require a grade of C or better		
Select 12 credits, with at least 3 credits at the 400 level, from the following:		12
IST 432	Legal and Regulatory Environment of Information Science and Technology	
IST 452	Legal and Regulatory Environment of Privacy and Security	
IST 456	Information Security Management	
SRA 211	Threat of Terrorism and Crime	
SRA 231	Decision Theory and Analysis	
SRA 311	Risk Analysis in a Security Context	
SRA 365	Statistics for Security and Risk Analysis	
Supporting Courses and Related Areas		
Supporting Courses and Related Areas: Require a grade of C or better		
Select 6 credits at the 300 or 400 level in Advanced IT courses from College-approved list.		6

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 baccalaureate 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/baccalaureate-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):** 6 credits
- **Writing and Speaking (GWS):** 9 credits

Breadth in the Knowledge Domains (Inter-Domain courses do not meet this requirement.)
- **Arts (GA):** 3 credits
- **Health and Wellness (GHW):** 3 credits
- **Humanities (GH):** 3 credits
- **Social and Behavioral Sciences (GS):** 3 credits
- **Natural Sciences (GN):** 3 credits

Integrative Studies
- **Inter-Domain Courses (Inter-Domain):** 6 credits

Exploration
- **GN,** may be completed with Inter-Domain courses: 3 credits
- **GA, GH, GN, GS, Inter-Domain courses.** This may include 3 credits of World Language course work beyond the 12th credit level or the requirements for the student's degree program, whichever is higher: 6 credits

University Degree Requirements

First Year Engagement
All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

Cultures Requirement
6 credits are required and may satisfy other requirements

- United States Cultures: 3 credits
- International Cultures: 3 credits

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 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 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
The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. 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-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80)). For more information, check the Suggested Academic Plan for your intended program.

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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Suggested Academic Plan

The suggested academic plan(s) listed on this page are the plan(s) that are in effect during the 2024-25 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.

Advanced IT Selection – All Options

As noted in each Suggested Academic Plan below, all options of the Information Technology, B.S. major require students to select 300 or 400 level Advanced IT courses from a College-approved list. Students in the Business Application option must select 3 credits of these Advanced IT courses. Students in all other options must select 6 credits of these Advanced IT courses. The list of Advanced IT courses that all students may choose from includes the following:

Code	Title	Credits
IST 402	Emerging Issues and Technologies	3
IST 413	Usability Engineering	3
IST 425	New Venture Creation	3
IST 431	The Information Environment	3
IST 446	An Introduction to Building Computer/Video Games	3
IST 454	Computer and Cyber Forensics	3

IST 456	Information Security Management	3
MIS 390	Foundations of Information Systems	3
MIS 404	Introduction to ERP and Business Processes	3
IST 301	Information and Organizations	3
IST 420	Fundamentals of Systems and Enterprise Integration	3
IST 421	Advanced Enterprise Integration: Technologies and Applications	3
IST 432	Legal and Regulatory Environment of Information Science and Technology	3
IST 452	Legal and Regulatory Environment of Privacy and Security	3

Application Development Option: Information Technology, B.S. at Abington 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 (GWS)‡	3	CAS 100 (GWS)‡	3
IST 110 or CYBER 100*#	3	MATH 110 or 140 (GQ)‡	4
IST 140*# or CMPSC 121 (GQ) #‡ or CMPSC 131*#	3	IST 220*#	3
SRA 111 (GS)*†	3	General Education Course (GN or GA or GH)	3
IST 111S (First-Year Seminar)	1	IST 242*	3
General Education Course (GN or GA or GH) or Elective	3		
	16		**16**

Second Year

Fall	Credits	Spring	Credits	Summer	Credits
STAT 200‡ (GQ) or SCM 200‡ (GQ) or DS 200*	4	Business Selection*	3	IST 495*	1
IST 256*	3	ENGL 202C or 202D (GWS)‡	3		
ECON 102/ ECON 104 or PSYCH 100/ SOC 5 or PLSC 1/PLSC 14 (GS)†	3	General Education Course (GN or GA or GH)	3		
Elective or General Education Course (GN/GA/ GH)	3	IST 210*#	3		
SRA 221*	3	IST 230*	3		
		IST 390	1		
	16		**16**		**1**

Third Year

Fall	Credits	Spring	Credits	Summer	Credits
IST 302*	3	IST 260W*	3	IST 495*	1
IST 331*	3	IST 311 (Option 2)*	3		
IST 261 or 361 (Option 1)*	3	Networking Selection*	3		
General Education Course (GN or GA or GH)	3	IST 402 (Advanced IT Selection 1)*	3		
General Education Course (GN or GA or GH)	3	General Education Course (GN or GA or GH)	3		
		IST 390	1		
	15		**16**		**1**

Fourth Year

Fall	Credits	Spring	Credits
ETI 461*	3	IST 440W*	3
IST 411 (Option 3)*	3	IST 412 or 413 (Option 4)*	3
General Education Course (GHW)	3	IST 446 or MIS 404 (Advanced IT Selection 2)*	3
Elective	3	General Education Course (GN or GA or GH)	3
		Elective	2
		IST 390	1
	12		**15**

Total Credits 124

* 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), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

Advising Notes:

- Advanced IT Courses (All Options) Course List:
  - IST 301
  - IST 402
  - IST 413
  - IST 420
  - IST 421
  - IST 425
  - IST 431
  - IST 432
  - IST 446
  - IST 452
  - IST 454
  - IST 456
  - ENGR 425
  - MGMT 425
  - MIS 301
  - MIS 390
  - MIS 404
  - SCM 340
  - IST 420
  - IST 421
  - IST 425
  - IST 431
  - IST 432
  - IST 446
  - IST 452
  - IST 454
  - IST 456
  - ENGR 425
  - MGMT 425
  - MIS 301
  - MIS 390
  - MIS 404
  - SCM 340
- 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

Application Development Courses: (Total 18 Credits)

- 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
- Select 6 credits, Supporting Courses from:
  - IST 301
  - IST 402
  - IST 413

Business Applications Option: Information Technology, B.S. at Abington 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 (GWS)‡	3	CAS 100 (GWS)‡	3
IST 110 or CYBER 100*#	3	MATH 110 or 140 (GQ)‡	4
IST 140*# or CMPSC 121 (GQ)#‡ or CMPSC 131*#	3	IST 220*#	3
SRA 111 (GS)*†	3	General Education Course (GN or GA or GH)	3
IST 111S (First-Year Seminar)	1	IST 242*	3
General Education Course (GN or GA or GH) or Elective	3		
	16		**16**

Second Year

Fall	Credits	Spring	Credits	Summer	Credits
IST 256*	3	Business Selection*	3	IST 495*	1
STAT 200‡ (GQ) or SCM 200‡ (GQ) or DS 200*	4	ENGL 202C or 202D (GWS)‡	3		
ECON 102/ ECON 104 or PSYCH 100/ SOC 5 or PLSC 1/PLSC 14 (GS)†	3	General Education Course (GN or GA or GH)	3		
Elective or General Education Course (GN/GA/ GH)	3	IST 210*#	3		
SRA 221*	3	IST 230*	3		
		IST 390	1		
	16		**16**		**1**

Third Year

Fall	Credits	Spring	Credits	Summer	Credits
IST 302*	3	IST 260W*	3	IST 495*	1
IST 331*	3	FIN 301, MGMT 301, MKTG 301, or SCM 301 (Option 2)*	3		
ACCTG 211 (Option 1)*	4	Advanced IT Selection - Business Option*	3		
General Education Course (GN or GA or GH)	3	Networking Selection*	3		
General Education Course (GN or GA or GH)	3	General Education Course (GN or GA or GH)	3		
		IST 390	1		
	16		**16**		**1**

Fourth Year

Fall	Credits	Spring	Credits
ETI 461*	3	IST 440W*	3
Option 3 (Business Course)*	3	400-Level Business Course (Option 4)*	3
General Education Course (GHW)	3	IST 446 or MIS 404 (Advanced IT Selection)*	3
Elective	3	General Education Course (GN or GA or GH)	3
		Elective	1
		IST 390	1
	12		**14**

Total Credits 124

* 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), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

Advising Notes:

- Advanced IT Courses (All Options) Course List:
  - IST 301
  - IST 402
  - IST 413
  - IST 420
  - IST 421
  - IST 425
  - IST 431
  - IST 432
  - IST 446
  - IST 452
  - IST 454
  - IST 456
  - ENGR 425
  - MGMT 425
  - MIS 301
  - MIS 390
  - MIS 404
  - SCM 340
- 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

- Select 3 credits, Supporting Courses- Advanced IT from course list:
  - ENGR 425
  - MGMT 425
  - MIS 301
  - MIS 345
  - MIS 390
  - MIS 404
  - MIS 431
  - SCM 340
  - IST 301
  - IST 402
  - IST 413
  - IST 420
  - IST 421
  - IST 425
  - IST 431
  - IST 432
  - IST 446
  - IST 452
  - IST 454
  - IST 456

Business Application Courses: (Total 19 Credits)

- 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
- Select 3 credits, Supporting Courses - Advanced IT - Business courses from course list:
  - ENGR 425
  - IST 425
  - IST 456
  - MGMT 425
  - MIS 301
  - MIS 345
  - MIS 390
  - MIS 404
  - MIS 431
  - SCM 340

Networking Option: Information Technology, B.S. at Abington 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 (GWS)‡	3	CAS 100 (GWS)‡	3
IST 110 or CYBER 100*#	3	MATH 110 or 140 (GQ)‡	4
IST 140*# or CMPSC 121 (GQ)#‡ or CMPSC 131*#	3	IST 220*#	3
SRA 111 (GS)*†	3	General Education Course (GN or GA or GH)	3
IST 111S (First-Year Seminar)	1	IST 242*	3
General Education Course (GN or GA or GH) or Elective	3		
	16		16

Second Year

Fall	Credits	Spring	Credits	Summer	Credits
IST 256*	3	IST 226 or CYBER 262 (Networking Selection)*	3	IST 495*	1
STAT 200‡ (GQ) or SCM 200‡ (GQ) or DS 200*	4	ENGL 202C or 202D (GWS)‡	3		
ECON 102/ECON 104 or PSYCH 100/SOC 5 or PLSC 1/PLSC 14 (GS)†	3	General Education Course (GN or GA or GH)	3		
Elective or General Education Course (GN/GA/GH)	3	IST 210*#	3		
SRA 221*	3	IST 230*	3		
		IST 390	1		
	16		16		1

Third Year

Fall	Credits	Spring	Credits	Summer	Credits
IST 302*	3	IST 260W*	3	IST 495*	1
IST 331*	3	IST 228 (Option 2)*	3		
IST 227 (Option 1)*	3	Business Selection*	3		
General Education Course (GN or GA or GH)	3	IST 402 (Advanced IT Selection 1)*	3		
General Education Course (GN or GA or GH)	3	General Education Course (GN or GA or GH)	3		
		IST 390	1		
	15		16		1

Fourth Year

Fall	Credits	Spring	Credits
ETI 461*	3	IST 440W*	3
IST 451 (Option 3)*	3	IST 454 (Option 4)*	3
General Education Course (GHW)	3	IST 446 or MIS 404 (Advanced IT Selection 2)*	3
Elective	3	General Education Course (GN or GA or GH)	3
		Elective	2
		IST 390	1
	12		15

Total Credits 124

* 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), Knowledge Domains (GHW, GN, GA, GH, GS) and Integrative Studies (Inter-domain) requirements. N or Q (Honors) is the suffix at the end of a course number used to help identify an Inter-domain course, but the inter-domain attribute is used to fill audit requirements. Foundations courses (GWS and GQ) require a grade of 'C' or better.

Advising Notes:

- Advanced IT Courses (All Options) Course List:
  - IST 301
  - IST 402
  - IST 413

- IST 420
- IST 421
- IST 425
- IST 431
- IST 432
- IST 446
- IST 452
- IST 454
- IST 456
- ENGR 425
- MGMT 425
- MIS 301
- MIS 390
- MIS 404
- SCM 340
- 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

Networking Option Courses: (Total 18 Credits)

- Select 12 credits, with at least 3 credits at the 400 level from:
  - CYBER 262
  - IST 225
  - IST 226
  - IST 227
  - IST 228
  - IST 451
  - IST 454
- Select 6 credits, Supporting Courses- Advanced IT from course list:
  - ENGR 425
  - MGMT 425
  - MIS 301
  - MIS 345
  - MIS 390
  - MIS 404
  - MIS 431
  - SCM 340
  - IST 301
  - IST 402
  - IST 413
  - IST 420
  - IST 421

- IST 425
- IST 431
- IST 432
- IST 446
- IST 452
- IST 454
- IST 456

Career Paths

With a B.S. degree in Information Technology (IT), students will develop an understanding of core information technologies and prepare for the practical application of IT. The combination of a strong technical foundation, well-developed communication and collaborative skills, business core competencies, and specialization in an area of choice produces graduates who are well-qualified to enter the IT workforce in a position that meets their interests and abilities as well as the needs of employers in industries including consulting, business, government, defense, entertainment, and medicine.

Additional information about IT careers can be found at:

- Computer and Information Technology Occupations: Occupational Outlook Handbook:: U.S. Bureau of Labor Statistics (bls.gov) (https:// www.bls.gov/ooh/computer-and-information-technology/home.htm)
- IS Job Index – AIS – Temple University Information Systems Job Index (https://isjobindex.com/)

Opportunities for Graduate Studies

A baccalaureate degree in Information Technology prepares students to pursue master's degrees in programs such as information systems or information technology and obtain admission to MBA programs and law schools, among other post-graduate opportunities.

Penn State offers graduate programs related to information technology:

- Master of Science in Information Systems at Penn State Harrisburg (https://harrisburg.psu.edu/business-administration/information-systems-ms/)
- Graduate Education Opportunities at College of Information Sciences and Technology (https://ist.psu.edu/prospective/graduate/)

Contact
Abington

DIVISION OF SCIENCE AND ENGINEERING
1600 Woodland Road
Abington, PA 19001
jul62@psu.edu

https://www.abington.psu.edu/academics/majors-at-abington/
information-technology (https://www.abington.psu.edu/academics/
majors-at-abington/information-technology/)

Altoona

DIVISION OF BUSINESS, ENGINEERING, AND INFORMATION SCIENCES & TECHNOLOGY
Penn Building, 212C
Altoona, PA 16601
814-949-5275
drb21@psu.edu

https://altoona.psu.edu/academics/bachelors-degrees/information-technology (https://altoona.psu.edu/academics/bachelors-degrees/information-technology/)

Beaver

100 University Dr.
Monaca, PA 15061
724-773-3814
rkl5137@psu.edu

https://beaver.psu.edu/academics/majors/it (https://beaver.psu.edu/academics/majors/it/)

Berks

EBC DIVISION
Gaige Building
Reading, PA 19610
610-396-6349
tkc3@psu.edu

https://berks.psu.edu/academics/baccalaureate-degrees/information-technology (https://berks.psu.edu/academics/baccalaureate-degrees/information-technology/)

Brandywine

25 Yearsley Mill Road
Media, PA 19063
610-892-1343
nxd13@psu.edu

https://www.brandywine.psu.edu/academics/bachelors-degrees/information-technology (https://www.brandywine.psu.edu/academics/bachelors-degrees/information-technology/)

DuBois

1 College Place
DuBois, PA 16823
814-372-3000
jel115@psu.edu

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

Greater Allegheny

Frable Building, 201D
4000 University Drive
McKeesport, PA 15132
412-675-9482
lmd347@psu.edu

https://greaterallegheny.psu.edu/academics/degree-programs/information-technology (https://greaterallegheny.psu.edu/academics/degree-programs/information-technology/)

Hazleton

204 Butler
Hazleton, PA 18202
570-450-3194
HNAdvising@psu.edu

https://hazleton.psu.edu/information-technology (https://hazleton.psu.edu/information-technology/)

Lehigh Valley

2809 Saucon Valley Road
Center Valley, PA 18034
610-285-5071
kmb6846@psu.edu

https://lehighvalley.psu.edu/academics/degrees/information-sciences-and-technology (https://lehighvalley.psu.edu/academics/degrees/information-sciences-and-technology/)

Mont Alto

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

https://montalto.psu.edu/academics/bachelors/information-technology (https://montalto.psu.edu/academics/bachelors/information-technology/)

New Kensington

036 Theater & IST Building
3550 Seventh Street Road
New Kensington, PA 15068
724-334-6089
hhs10@psu.edu

https://newkensington.psu.edu/4-year-information-technology (https://newkensington.psu.edu/4-year-information-technology/)

Schuylkill

200 University Drive
Schuylkill Haven, PA 17972
570-385-6076
bkg113@psu.edu

https://schuylkill.psu.edu/academics/bacc-degrees/information-technology (https://schuylkill.psu.edu/academics/bacc-degrees/information-technology/)

Scranton

114B Dawson
120 Ridge View Drive
Dunmore, PA 18512
570-963-2593
dls102@psu.edu

https://scranton.psu.edu/academics/degrees/bachelors/information-sciences-technology-degree (https://scranton.psu.edu/academics/degrees/bachelors/information-sciences-technology-degree/)

Wilkes-Barre

44 University Drive
Dallas, PA 18612
570-675-9142
weifan@psu.edu

https://wilkesbarre.psu.edu/academics/it (https://wilkesbarre.psu.edu/academics/it/)

York

1031 Edgecomb Ave.
York, PA 17403
717-771-4143
wpc2@psu.edu

https://www.york.psu.edu/academics/baccalaureate/information-technology (https://www.york.psu.edu/academics/baccalaureate/information-technology/)