



**Recommended Academic Plan for Information Sciences and Technology
Information Systems: Design and Development (ISDEV) Option**

Semester 1	Credits	Semester 2	Credits
IST 110S/110 Information, People and Technology ETM Course	3	IST 210 Organization of Data ETM Course	4
<i>MATH 110</i> or <i>140</i> (GQ)	4	Natural Sciences (GN)	3
CMPSC 101 (GQ)	3	Foreign Language 002	4
Foreign Language 001	4	<i>ECON 002</i> (GS) or <i>ECON 004</i> (GS) or <i>ECON 014</i> (GS)	3
		ENGL 015 or ENGL 030 (GWS)	3
Total Credits:	14	Total Credits:	17
Summer: IST 495 Internship (1) See details below.			
Semester 3	Credits	Semester 4	Credits
IST 220 Networking and Telecommunications ETM Course	3	IST 240 Introduction to Computer Languages	3
IST 230 Language, Logic and Discrete Mathematics	3	<i>STAT 200</i> (GQ)	4
Foreign Language 003	4	CAS 100 (GWS)	3
Humanities (GH)	3	Social and Behavioral Sciences (GS)	3
Arts (GA)	3	Natural Sciences (GN)	3
Total Credits:	16	Total Credits:	16
Summer: IST 495 Internship (1) See details below.			
Semester 5	Credits	Semester 6	Credits
IST 311 Object-Oriented Design and Software Applications	3	IST 301 Information and Organizations	3
IST 331 Organization and Design of Information Systems	3	IST 411 Distributed Object Computing or IST 412 The Engineering of Complex Software Systems or IST 413 Usability Engineering	3
Support of Option	3	Support of Option	3
Humanities (GH)	3	Foreign Culture	3
Health and Physical Activity (GHA)	3	<i>ENGL 202C</i> or <i>ENGL 202D</i> (GWS)	3
Total Credits:	15	Total Credits:	15
Summer: IST 495 Internship (1) See details below.			
Semester 7	Credits	Semester 8	Credits
IST 4XX Emerging Issues and Technologies from college-approved list	3	IST 440W IST Integration and Problem Solving	3
IST 411 Distributed Object Computing or IST 412 The Engineering of Complex Software Systems or IST 413 Usability Engineering	3	Support of Option	3
Support of Option	3	Elective	4
Foreign Culture	3	Elective	3
Arts (GA)	3	Natural Sciences (GN)	3
Total Credits:	15	Total Credits:	16

Summers:

IST 495 Internship: (1) Supervised work experience where the student is employed in an information science and technology position in industry, government, or academia. All IST students are required to take at least one internship and may take as many as three. For more information, contact the IST internship Office at 814-865-4509 or Careers@ist.psu.edu.

- **Bold type** indicates courses requiring a quality grade of C or better.
- *Italics* indicate courses that satisfy both major and General Education requirements.
- **Bold Italics** indicate courses requiring a quality grade of C or better and that satisfy both major and General Education requirements.
- GWS, GHA, GQ, GN, GA, GH, and GS are codes used to identify General Education requirements.
- US, IL, and US;IL are codes used to designate courses that satisfy University United States/International Cultures requirements.
- W is the code used to designate courses that satisfy University Writing across the Curriculum requirements.
- **ETM Course: Entrance to Major Requirements**
 - At least a 2.0 cumulative grade-point average prior to and through the end of the semester during which the entrance-to-major procedure is carried out.
 - A grade of C or better in each of these courses:
 - IST 110
 - IST 210
 - IST 220

Scheduling patterns for courses not taught each semester:

IST 412 is typically offered fall semester only at University Park.

IST 411 and IST 413 are typically offered spring semester only at University Park.

Not all courses are offered at every campus each semester. Always check the Schedule of Courses to determine availability of specific courses.

Program Notes:

For the B.S. degree in Information Sciences and Technology, a minimum of 125 credits is required.

Effective Summer 2009, students in the IST major with a program year of 2009 or later or in INFST are required to earn a “C” or better in CMPSC 101 and all IST courses required by the major and all prescribed courses required by the option. Information for the 2008 program year or earlier, can be found [here](#). If you are unsure of your program year, run a degree audit and meet with your adviser.

This Academic Plan is a general guide but can vary depending on option, course availability and previous coursework. This “guide” is a tool that should be used in combination with your Adviser and your Degree Audit.

Academic Advising Notes:

- The [amount of foreign language](#) you completed in high school, results of advanced placement exams, and results of optional proficiency exams determine what level of language you will take. See your adviser for details.
- **Foreign Culture courses** used to satisfy the Foreign Culture requirement focus on a cultural aspect (e.g., history, literature, political system, art, etc.) of other countries or geographic regions outside the borders of the United States. A course that fulfills the **General Education International Cultures (IL)** requirement must strive to increase student knowledge of the variety of international societies and may deal to some extent with U.S. culture in its international connections. **IL courses will be accepted as satisfying a Foreign Cultures requirement. If you do an Advanced Search on the Schedule of Courses, you can find a listing of IL courses. Courses fulfilling the major Foreign Culture requirement cannot double-count towards general education (GA, GH, or GS)**
- IST 4XX: Students majoring in IST must select 3 credits at the 400 level in emerging issues and technologies from the college-approved list: IST 402, IST 441, IST 446, IST 451, IST 452, IST 453, IST 454, IST 461, or IST 462.