

MAJOR MAP

BACHELOR OF SCIENCE IN INFORMATION AND COMPUTER SCIENCE – INFORMATION TECHNOLOGY

Purpose Statement: This degree equips students to apply problem-solving and critical-thinking skills and use popular computer technologies in producing technology solutions. It prepares students for a wide range of jobs in the field of information technology. In addition to learning about traditional computer-related areas, students choose two 3-course clusters in areas of interest that partner with the information technology field. For example, criminal justice and geographic information systems (GIS) are two such clusters.

Example Career Info:

- Occupational Outlook Handbook > Computer Support Specialist: <https://www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm>
- O*NET Online > Computer User Support Specialists: <https://www.onetonline.org/link/summary/15-1151.00>

	Credit Hours
University Graduation Requirements – BS	
LE 100 First-Year Seminar (<i>first-time freshman only; waived for transfer students</i>)	3
EN 306 Professional Writing in the Disciplines, or departmental equivalent	3
University Liberal Education Requirements	
EN 105 First-Year Writing Seminar I	3
EN 106 First-Year Writing Seminar II	3
CS 140 Introduction to Computers, or higher CS course, or departmental equivalent (will be satisfied in core)	*
MA 120 Basic Concepts of Statistics, MA 135 College Algebra, or higher MA course (will be satisfied in core)	*
Communication requirement (CA 103 Oral Communication, CA 105 Introduction to Human Communication, or TH 105 Oral Communication)	3
Citizenship requirement	3
Ethics requirement (will be satisfied in core)	*
Science course that has a lab	4
LE Natural and Physical Science Elective (<i>except computer science</i>)	3
LE Social Science Elective	6
LE Arts & Humanities Elective	6
LE 300 Seminar in Integrative and Interdisciplinary Learning	3
Requirements for the Major	
Core Curriculum	
CS 152 Introduction to Python Programming	3
CS 208 Discrete Mathematics	3
CS 300 Technology in a Global Society (departmental equivalent LE Ethics course)	3
CS 365 Computer Networking	3
IS 205 Managing Information Systems	3
IS 361 Data Management Concepts	3

MA 120 Basic Concepts of Statistics	3
Information Technology:	25 - 27
CS 319 Computer Architecture	3
CS 335 Introduction to Cybersecurity	3
CS 369 Operating System Administration	3
Choose 2 of these 7 clusters:	
EN 204 Writing for Online Environments EN 306a Scientific and Technical Writing EN 306b Business Communications	9
IS 310 Business Applications (only offered online) IS 315 Computer Systems Analysis and Design I IS 316 Computer Systems Analysis and Design II (only offered online)	9
CS 366 Computer Networking Laboratory (1 cr.) CS 371 Internetworking IS 370 Information Security	7
IS 141 Applied Computer Technology for Business MA 171 Finite Mathematics MG 315 Advanced Business Statistics	9
CS 240 Web Programming I CS 314 User Interface Design CS 330 Principles of Mobile Development	9
IS 362 Applied Database Management GGP 350 GIS I GGP 355 GIS II	9
MG 371 Management and Organizational Behavior CJ 233 Intro to Security CJ 333 Security Administration	9
Additional Courses	
Additional courses in or outside of the major. May need 3 cr. at 300/400-level here if you select only 9 cr. 300/400-level courses from the choose-2-cluster above. You need at least 12 cr. 300/400-level courses from those two sets combined.	32 - 34
TOTALS	120

Recommended Schedule

Plan A: you already have MA125 or equivalent, or have tested out. CS152 and CS208 require MA125>=C. Take Park's math placement test ASAP to know which math course you should start with.

First Year – Fall (15 cr.)	First Year – Spring (15 cr.)
CS152 CS208 LE100 EN105 LE elective 1*	IS205 MA120 EN106 LE elective 2 LE elective 3
Second Year – Fall (15 cr.)	Second Year – Spring (16 cr.)
CS365 CS319 LE elective 4 LE elective 5 LE elective 6	CS335 Cluster course 1 Cluster course 2 LE elective 7 LE science with a lab (4 cr.)
Third Year – Fall (15 cr.)	Third Year – Spring (15 cr.)
IS361 EN306 Cluster course 3	CS300 Cluster course 5 Cluster course 6

Cluster course 4 Additional course 1†	Additional course 2 Additional course 3
Fourth Year – Fall (15 cr.)	Fourth Year – Spring (14 cr.)
CS369 LE300 Additional course 4 Additional course 5 Additional course 6	Additional course 7 Additional course 8 Additional course 9 Additional course 10 Additional course 11

Plan B: you need to take MA125. CS152 and CS208 require MA125>=C.

First Year – Fall (15 cr.)	First Year – Spring (15 cr.)
MA125 (additional course 1†) LE100 EN105 LE elective 1* LE elective 2	CS152 CS208 EN106 LE elective 3 LE elective 4
Second Year – Fall (15 cr.)	Second Year – Spring (16 cr.)
CS365 CS319 IS205 LE elective 5 LE elective 6	CS335 MA120 Cluster course 1 LE elective 7 LE science with a lab (4 cr.)
Third Year – Fall (15 cr.)	Third Year – Spring (15 cr.)
IS361 EN306 Cluster course 2 Cluster course 3 Additional course 2	CS300 Cluster course 4 Cluster course 5 Additional course 3 Additional course 4
Fourth Year – Fall (15 cr.)	Fourth Year – Spring (14 cr.)
CS369 LE300 Cluster course 6 Additional course 5 Additional course 6	Additional course 7 Additional course 8 Additional course 9 Additional course 10 Additional course 11

* LE (Liberal Education) Elective: aside from EN105, EN106, CS300 (LE Ethics), Science course with a lab (4 hrs), you will need 7 more LE courses: 1 LE Communication, 1 LE Natural Science, 1 LE Citizenship, 2 LE Social/ADM Science (Social Science), and 2 LE Humanities. For a list of qualifying courses, see Liberal Education Requirements section in the degree description of this program in the catalog: <https://catalog.park.edu/>.

† Additional Course: any additional courses in or outside of the major. You need 32-34 hrs (11-12 additional courses) to reach 120 hrs.



B.S. in Information and Computer Science

Specialty Area – Information Technology

