

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 sequences in areas of interest that partner with the information technology field.

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>
- O*NET Online > IT Project Manager: <https://www.onetonline.org/link/summary/15-1199.09>

	Credit Hours
University Liberal Education Requirements	37
LE 100, First-Year Seminar (<i>first-time freshman only; waived for transfer students</i>)	3
EN 105 First-Year Writing Seminar I	3
EN 106 First-Year Writing Seminar II	3
Math requirement: MA 120, MA 135, or higher MA course (will be satisfied in core)	*
Ethics requirement (will be satisfied in core)	*
Humanities requirement	6
Natural Science requirement	3
Science with a lab requirement	4
Citizenship requirement	3
Communications requirement: CA 103, CA 105, or TH 105.	3
Social Science requirement	6
LE 300: Seminar in Integrative and Interdisciplinary Learning	3
University Graduation Requirements – BS	3
36 hours upper division (300 – 400) level course work	*
EN 306, Professional Writing in the Disciplines, or departmental equivalent	3
Requirements for the Major	
Core Curriculum	21
CS 152 Introduction to Python Programming	3
CS 208 Discrete Mathematics	3
CS 300 Technology in a Global Society (LE Ethics)	3
CS 365 Computer Networking	3
IS 205 Managing Information Systems	3
IS 361 Data Management Concepts	3
MA 120 Basic Concepts of Statistics (LE Math)	3

Information Technology:	27 - 30
CS 319 Computer Architecture	3
CS 335 Introduction to Cybersecurity	3
CS 369 Operating System Administration	3
<i>Choose 2 of the following sequences:</i>	
Sequence One - Applied Networking CS 366 Computer Networking Laboratory (3 cr. starting 2020-2021) CS 371 Internetworking IS 370 Information Security	9
Sequence Two - Web Development CS 130 Developing the User Experience CS 131 Introduction to Web Structures CS 206 Introduction to JavaScript	9
Sequence Three - System Analysis CS140 or IS141 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)	12
Sequence Four - Business Data Analysis IS 141 Applied Computer Technology for Business MA 171 Finite Mathematics MG 315 Advanced Business Statistics	9
Sequence Five - GIS GGP 350 GIS I GGP 355 GIS II IS 362 Applied Database Management	9
Sequence Six - Security Administration CJ 233 Intro to Security CJ 333 Security Administration MG 371 Management and Organizational Behavior	9
Sequence Seven – Technical Writing EN 204 Writing for Online Environments EN 306a Scientific and Technical Writing EN 306b Business Communications	9
Additional Courses	
Additional courses in or outside of the major. You need at least 12 credit hours of 300-400 level courses from the Additional Courses set and the Select Two Sequences set.	29 - 32
TOTALS	120

Recommended Schedule

Plan A: You already have MA125 or equivalent, or have tested out. CS152 and CS208 require a grade of C or higher in MA125. 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	CS335 Sequence course 1 Sequence course 2 LE elective 7

This guide is not a substitute for academic advisement.

LE elective 6	LE science with a lab (4 cr.)
Third Year – Fall (15 cr.)	Third Year – Spring (15 cr.)
IS361 EN306 Sequence course 3 Sequence course 4 Additional course 1†	CS300 Sequence course 5 Sequence course 6# 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 a grade of C or higher in MA125.

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 Sequence course 1 LE elective 7 LE science with a lab (4 cr.)
Third Year – Fall (15 cr.)	Third Year – Spring (15 cr.)
IS361 EN306 Sequence course 2 Sequence course 3 Additional course 2	CS300 Sequence course 4 Sequence course 5 Additional course 3 Additional course 4
Fourth Year – Fall (15 cr.)	Fourth Year – Spring (14 cr.)
CS369 LE300 Sequence 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 MA120 (Math), CS300 (Ethics), and Science with a lab (4 cr.), you will need 7 more LE courses: 2 Humanities, 1 Natural Science, 1 Citizenship, 1 Communication, and 2 Social Science. 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 29 - 32 credit hours (10 - 11 additional courses) to reach 120 credit hours.


Sequence course: you may need a 7th course if you pick sequence three. Correspondingly you will need one fewer additional course.

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B.S. in Information and Computer Science

Specialty Area – Information Technology

 Core Courses

 Specialty Area Courses

 Other Courses

