

This degree requires a minimum of 120 credit hours to graduate (at least 36 credit hours must be upper-division, 300 or 400-level) and a cumulative GPA of 2.0. A minimum of 30 credit hours must be earned at Park.

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION SYSTEMS
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Catalog AY21-22

MAJOR MAP

BACHELOR OF SCIENCE IN INFORMATION AND COMPUTER SCIENCE – NETWORKING AND SECURITY

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 jobs in the field of networking and security. Also, it prepares students for graduate school in the field of networking and security.

Example Career Info:

- Occupational Outlook Handbook > Network and Computer Systems Administrators: <https://www.bls.gov/ooh/computer-and-information-technology/network-and-computer-systems-administrators.htm>
- O*NET Online > Network and Computer Systems Administrators: <https://www.onetonline.org/link/summary/15-1142.00>
- O*NET Online > Computer Network Support Specialists: <https://www.onetonline.org/link/summary/15-1152.00>

	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	6
36 hours upper division (300 – 400) level course work	*
Writing Across the Curriculum <ul style="list-style-type: none"> • Professional Writing: EN 306a/b/c • A Writing Intensive (WI) course from the major: CSIS WI course (will be satisfied in core) • A WI course outside of the major 	3 * 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, CSIS WI course)	3

This guide is not a substitute for academic advisement.

CS 365A Computer Networking I	3
IS 205 Managing Information Systems	3
IS 361 Data Management Concepts	3
MA 120 Basic Concepts of Statistics (LE Math)	3
Networking and Security:	27
CS 319 Computer Architecture	3
CS 335 Introduction to Cybersecurity	3
CS 366A Computer Networking II	3
CS 369 Operating System Administration	3
CS 371 Internetworking	3
CS 372 Advanced Networking	3
CS 375 Secure Operation	3
CS/IS Electives: any CS/IS course at 300-400 level that is not already required by this degree	6
Additional Courses	
Additional courses in or outside of the major.	29
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 EN105 LE100 LE elective 1*	IS205 MA120 EN106 LE elective 2 LE elective 3
Second Year – Fall (15 cr.)	Second Year – Spring (16 cr.)
CS319 CS365A LE elective 4 LE elective 5 LE elective 6	CS335 CS366A LE elective 7 LE science with a lab (4 cr.) Additional course 1†
Third Year – Fall (15 cr.)	Third Year – Spring (15 cr.)
CS371 CS375 IS361 EN306 Additional course 2	CS300 CS372 CS/IS elective 1 Additional course 3 Additional course 4
Fourth Year – Fall (15 cr.)	Fourth Year – Spring (14 cr.)
CS369 CS/IS elective 2 LE300 Additional course 5 Additional course 6	A WI course outside of the major Additional course 7 Additional course 8 Additional course 9 Additional course 10

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.)
CS365A CS319 IS205 LE elective 5 LE elective 6	CS335 CS366A MA120 LE elective 7 LE science with a lab (4 cr.)
Third Year – Fall (15 cr.)	Third Year – Spring (15 cr.)
CS371 CS375 IS361 EN306 Additional course 2	CS300 CS372 CS/IS elective 1 Additional course 3 Additional course 4
Fourth Year – Fall (15 cr.)	Fourth Year – Spring (14 cr.)
CS369 CS/IS elective 2 LE300 Additional course 5 Additional course 6	A WI course outside of the major Additional course 7 Additional course 8 Additional course 9 Additional course 10

* 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 credit hours (10 additional courses) to reach 120 credit hours.



B.S. in Information and Computer Science Specialty Area – Networking and Security

