PARK UNIVERSITY
COLLEGE OF LIBERAL ARTS AND SCIENCES

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
Chair, Bin "Crystal" Peng, Ph.D. (crystal.peng@park.edu) Catalog AY19-20

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 Graduation Requirements – BS	
LE 100 First-Year Seminar *(first-time freshman only; waived for transfer students)*	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 *(except computer science)*	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	**21**
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
Networking and Security:	**25**
CS 319 Computer Architecture	3
CS 335 Introduction to Cybersecurity	3
CS 366 Computer Networking Laboratory	1
CS 369 Operating System Administration	3
CS 371 Internetworking	3
CS 372 Advanced Networking	3
CS 375 Secure Operation	3
CS 385 Modern Developments in Advanced Networking	3
CS/IS Electives (300 level or above CS/IS courses)	3
Additional Courses	
Additional courses in or outside of the major.	**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 (16 cr.)
CS152	IS205
CS208	MA120
EN105	EN106
LE100	LE elective 2
LE elective 1*	LE elective 3
Second Year – Fall (15 cr.)	**Second Year – Spring (16 cr.)**
CS365	CS335
CS366 (1 cr.)	CS371
CS319	LE elective 7
LE elective 4	LE science with a lab (4 cr.)
LE elective 5	Additional course 1†
LE elective 6	
Third Year – Fall (15 cr.)	**Third Year – Spring (15 cr.)**
CS375	CS300
IS361	CS372
EN306	300-level or above CS/IS elective
Additional course 2	Additional course 4
Additional course 3	Additional course 5
Fourth Year – Fall (15 cr.)	**Fourth Year – Spring (13 cr.)**
CS369	Additional course 8
CS385	Additional course 9
LE300	Additional course 10
Additional course 6	Additional course 11
Additional course 7	Additional course 12

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†)	CS152
LE100	CS208
EN105	EN106
LE elective 1*	LE elective 3
LE elective 2	LE elective 4
Second Year – Fall (16 cr.)	**Second Year – Spring (16 cr.)**
CS365	CS335
CS366 (1 cr.)	CS371
CS319	MA120
IS205	LE elective 7
LE elective 5	LE science with a lab (4 cr.)
LE elective 6	
Third Year – Fall (15 cr.)	**Third Year – Spring (15 cr.)**
CS375	CS300
IS361	CS372
EN306	300-level or above CS/IS elective
Additional course 2	Additional course 4
Additional course 3	Additional course 5
Fourth Year – Fall (15 cr.)	**Fourth Year – Spring (13 cr.)**
CS369	Additional course 8
CS385	Additional course 9
LE300	Additional course 10
Additional course 6	Additional course 11
Additional course 7	Additional course 12

* 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 34 hrs (11-12 additional courses) to reach 120 hrs.

Prerequisite Tree

B.S. in Information and Computer Science

Specialty Area – Networking and Security