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 AY18-19

MAJOR MAP

BACHELOR OF SCIENCE IN INFORMATION AND COMPUTER SCIENCE – COMPUTER SCIENCE

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 industry such as applications programmer, software engineer, web developer, and systems analyst. Also, it prepares students for graduate school in the field of Computer Science. Students with good aptitude in mathematics are encouraged to choose the Computer Science specialty area.

	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 151 Introduction to 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
Computer Science:	**36 - 37**
CS 219 Programming Fundamentals	3
CS 225 Programming Concepts	3
CS 319 Computer Architecture	3
CS 351 Computer Operating Systems	3
CS 352 Data Structures	3

CS 373 Computer Network Security	3
CS Electives (300-level or above CS courses)	6
Choose 1 of these 2 mathematics sequences:	
MA 160 Precalculus. for Majors (5 cr.) MA 221 Calculus and Analytic Geometry for Majors I (5 cr.) MA 311 Linear Algebra (3 cr.)	13
MA 150 Precalculus Mathematics (3 cr.) (only offered online) MA 210 Calculus and Analytic Geometry I (3 cr.) (only offered online) MA 211 Calculus and Analytic Geometry II (3 cr.) (only offered online) MA 311 Linear Algebra (3 cr.)	12
Additional Courses	
Additional courses in or outside of the major.	**22 - 23**
TOTALS	**120**

Recommended Schedule

First Year – Fall (15 cr.)	First Year – Spring (14 cr.)
CS151† CS208* LE100 EN105 Pick 1 LE course.	CS219 MA160 (5 cr.) EN106 Pick 1 LE course.
Second Year – Fall (17 cr.)	**Second Year – Spring (16 cr.)**
CS300 IS361 MA120 MA221 (5 cr.) Pick 1 LE course.	CS225 CS319 MA311 IS205 Pick 1 science course that has a lab (4 cr.).
Third Year – Fall (15 cr.)	**Third Year – Spring (15 cr.)**
CS351 CS365 EN306 Pick 1 course from the Communication or Citizenship category. Pick 1 additional course.	CS373 Pick 2 LE courses. Pick 1 course from the Communication or Citizenship category. Pick 1 additional course.
Fourth Year – Fall (15 cr.)	**Fourth Year – Spring (13 cr.)**
CS352 LE300 Pick 1 300-level or above CS elective. Pick 2 additional courses.	Pick 1 300-level or above CS elective. Pick 4 additional courses.

† Take CS144 (online), CS145, or CS147 if not ready to take CS151.

* Take Park's math placement test ASAP to know whether you should start with MA125 or MA160. Take MA125 here instead if you need it; consequently, push CS208 to spring first year and move one LE course down to the last semester. MA125 may be counted as one of the additional courses.

Prerequisite Tree

B.S. in Information and Computer Science

Specialty Area - Computer Science