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 – SOFTWARE DEVELOPMENT

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 Software Development. Although a respectable mathematics aptitude is required for all of the ICS specialty areas, students who prefer more of the design and business side of things should choose the Software Development specialty area rather than 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

Software Development:	**36**
CS 219 Programming Fundamentals	3
CS 225 Programming Concepts	3
CS 240 Web Programming I	3
CS 314 User Interface Design	3
CS 322 Web Programming II	3
CS 352 Data Structures	3
IS 315 Computer Systems Analysis and Design I	3
IS 316 Computer Systems Analysis and Design II (only offered online)	3
IS 370 Information Security	3
MG 371 Management and Organizational Behavior	3
CS Elective (300 level or above CS course)	3
MA 135 College Algebra (or any MA course > MA 135, except MA 208)	3
Additional Courses	
Additional courses in or outside of the major.	**23**
TOTALS	**120**

Recommended Schedule

Plan A: you already have MA125 or equivalent, or have tested out. CS151 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.)
CS151	CS219
CS208	MA135
LE100	EN106
EN105	LE elective 2
LE elective 1*	LE elective 3
Second Year – Fall (15 cr.)	**Second Year – Spring (16 cr.)**
CS240	CS314
IS361	CS322
MG371	IS205
LE elective 4	MA120
LE elective 5	LE science with a lab (4 cr.)
Third Year – Fall (15 cr.)	**Third Year – Spring (15 cr.)**
CS225	CS300
CS365	IS316
IS315	300-level or above CS elective
EN306	LE elective 7
LE elective 6	Additional course 1†
Fourth Year – Fall (15 cr.)	**Fourth Year – Spring (14 cr.)**
CS352	Additional course 4
IS370	Additional course 5
LE300	Additional course 6
Additional course 2	Additional course 7
Additional course 3	Additional course 8

Plan B: you need to take MA125. CS151 and CS208 require MA125>=C.

First Year – Fall (15 cr.)	First Year – Spring (15 cr.)
MA125 (additional course 1†)	CS151
LE100	CS208
EN105	EN106
LE elective 1*	LE elective 3
LE elective 2	LE elective 4
Second Year – Fall (15 cr.)	**Second Year – Spring (16 cr.)**
CS219	CS314
CS240	CS322
MA135	IS205
LE elective 5	MA120
LE elective 6	LE science with a lab (4 cr.)
Third Year – Fall (15 cr.)	**Third Year – Spring (15 cr.)**
CS225	CS300
IS315	CS365
IS361	IS316
EN306	MG371
LE elective 7	300-level or above CS elective
Fourth Year – Fall (15 cr.)	**Fourth Year – Spring (14 cr.)**
CS352	Additional course 4
IS370	Additional course 5
LE300	Additional course 6
Additional course 2	Additional course 7
Additional course 3	Additional course 8

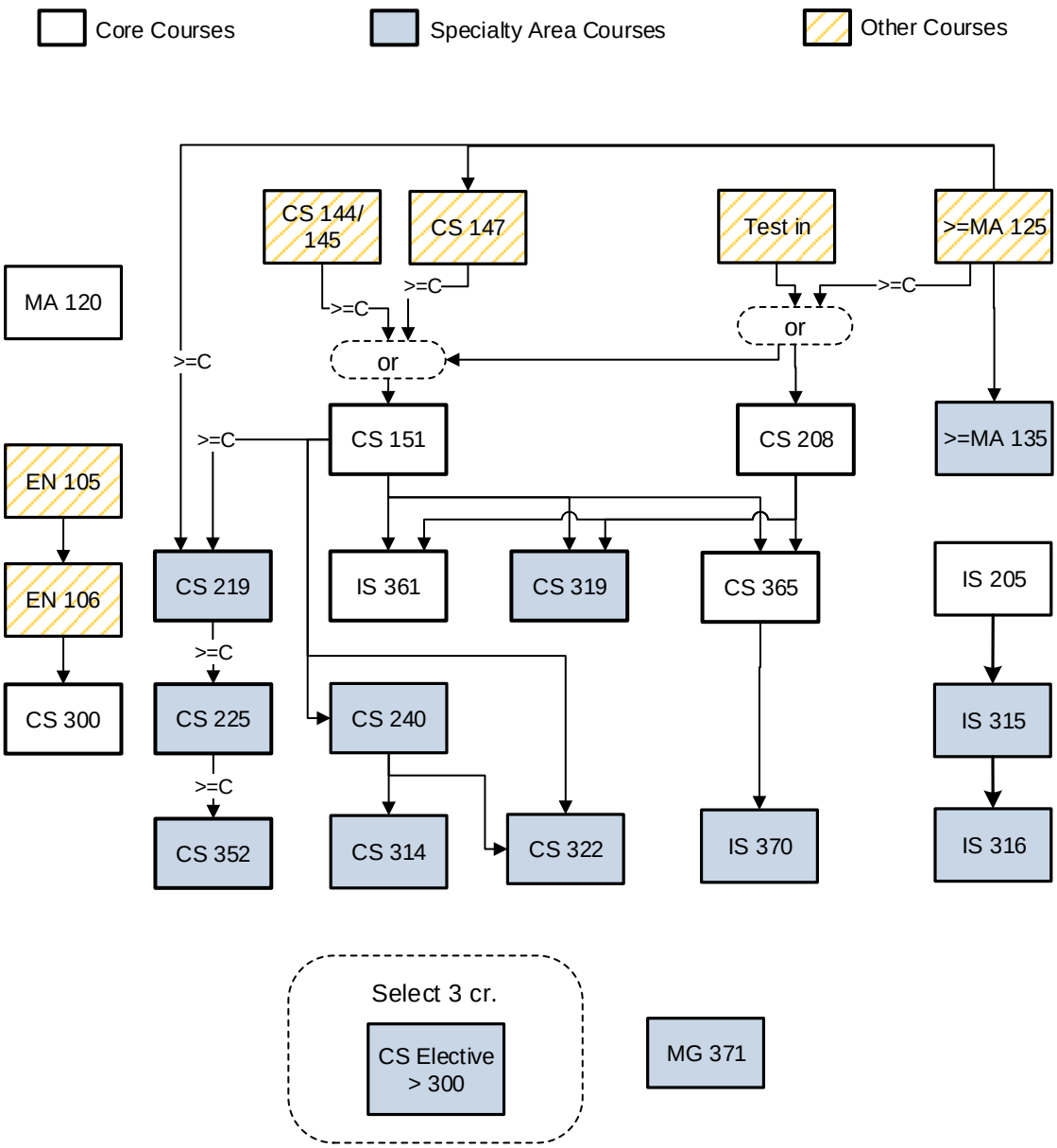
* LE (Liberal Education) Elective: aside from EN105, EN106, CS300 (LE Ethics), Science course with a lab (4 hrs), you will need 7 more LE courses: 1 LE Communication, 1 LE Natural Science, 1 LE Citizenship, 2 LE Social/ADM Science (Social Science), and 2 LE Humanities. For a list of qualifying courses go to MyPark>Resources tab>CLAS Academic Advising Resources located in "Your Personalized Resources">Handouts>Liberal Education Requirements.doc

† Additional Course: any additional courses in or outside of the major. You need 23 hrs (7-8 additional courses) to reach 120 hrs.

Prerequisite Tree

B.S. in Information and Computer Science

Specialty Area – Software Development



This guide is not a substitute for academic advisement.