

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION SYSTEMS  
Chair, Bin “Crystal” Peng, Ph.D. ([crystal.peng@park.edu](mailto:crystal.peng@park.edu))

Catalog AY19-20

## MAJOR MAP

### BACHELOR OF SCIENCES IN INFORMATION AND COMPUTER SCIENCE – DATA MANAGEMENT

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 data management. Also, it prepares students for graduate school in the field of data management.

	Credit Hours
<b>University Graduation Requirements – BS</b>	
LE 100 First-Year Seminar ( <i>first-time freshman only; waived for transfer students</i> )	3
EN 306 Professional Writing in the Disciplines, or departmental equivalent	3
<b>University Liberal Education Requirements</b>	
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 ( <i>except computer science</i> )	3
LE Social Science Elective	6
LE Arts & Humanities Elective	6
LE 300 Seminar in Integrative and Interdisciplinary Learning	3
<b>Requirements for the Major</b>	
<b>Core Curriculum</b>	
	<b>21</b>
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
<b>Data Management:</b>	
	<b>30</b>
AC 201 Principles of Financial Accounting	3
CS 219 Programming Fundamentals	3
CS 240 Web Programming I	3
CS 314 User Interface Design	3
IS 315 Computer Systems Analysis & Design I	3

IS 362 Applied Database Management	3
MG 371 Management and Organizational Behavior	3
<b>Select three courses from this list:</b>	
AC 202 Principles of Managerial Accounting	3
CA 104 Interpersonal Communication I	3
CS 322 Web Programming II	3
HR 422 Organizational Development and Change	3
IS 316 Computer Systems Analysis & Design II (only offered online)	3
MG 315 Advanced Business Statistics	3
MK 351 Principles of Marketing	3
MK 385 Consumer Behavior	3
MK 453 Marketing Research & Information Systems	3
<b>Additional Courses</b>	
Additional courses in or outside of the major. May need 6 cr. at 300/400-level if you only select 3 cr. 300/400-level course from the select-three above. You need at least 9 cr. 300/400-level courses from those two sets combined.	<b>29</b>
<b>TOTALS</b>	<b>120</b>

### 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 CS208 LE100 EN105 LE elective 1*	CS219 IS205 MA120 EN106 LE elective 2
Second Year – Fall (15 cr.)	Second Year – Spring (16 cr.)
CS240 CS365 IS315 LE elective 3 LE elective 4	CS314 AC201 Major elective 1 LE elective 5 LE science with a lab (4 cr.)
Third Year – Fall (15 cr.)	Third Year – Spring (15 cr.)
IS361 EN306 Major elective 2 LE elective 6 LE elective 7	CS300 IS362 MG371 Additional course 1† Additional course 2
Fourth Year – Fall (15 cr.)	Fourth Year – Spring (14 cr.)
LE300 Major elective 3 Additional course 3 Additional course 4 Additional course 5	Additional course 6 Additional course 7 Additional course 8 Additional course 9 Additional course 10

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

<b>First Year – Fall (15 cr.)</b>	<b>First Year – Spring (15 cr.)</b>
MA125 (additional course 1†) LE100 EN105 LE elective 1* LE elective 2	CS151 CS208 EN106 LE elective 3 LE elective 4
<b>Second Year – Fall (16 cr.)</b>	<b>Second Year – Spring (15 cr.)</b>
CS219 CS240 LE elective 5 LE elective 6 LE science with a lab (4 cr.)	CS314 MA120 AC201 Major elective 1 LE elective 7
<b>Third Year – Fall (15 cr.)</b>	<b>Third Year – Spring (15 cr.)</b>
CS365 IS315 IS361 EN306 Additional course 2	CS300 IS362 MG371 Major elective 2 Additional course 3
<b>Fourth Year – Fall (15 cr.)</b>	<b>Fourth Year – Spring (14 cr.)</b>
LE300 Major elective 3 Additional course 4 Additional course 5 Additional course 6	Additional course 6 Additional course 7 Additional course 8 Additional course 9 Additional course 10

\* 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 29 hrs (10 additional courses) to reach 120 hrs.

