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 AY20-21

MAJOR MAP

BACHELOR OF SCIENCE IN INFORMATION AND COMPUTER SCIENCE – WEB DEVELOPMENT

Purpose Statement: This degree equips students to apply problem-solving and critical-thinking skills and use popular computer technologies in producing technology solutions. This concentration is for students whose interests lean toward creating web-based and mobile applications, or designing front-end interfaces. Web development is one of the largest growing fields in tech-based industries.

Example Career info:

- Occupational Outlook Handbook > Web Developers: https://www.bls.gov/ooh/computer-and-information-technology/web-developers.htm
- O*NET online > Web Developers: https://www.onetonline.org/link/summary/15-1134.00
- O*NET online > Web Administrators: https://www.onetonline.org/link/summary/15-1199.03

	Credit Hours
University Liberal Education Requirements	**37**
LE 100, First-Year Seminar *(first-time freshman only; waived for transfer students)*	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	**3**
36 hours upper division (300 – 400) level course work	*
EN 306, Professional Writing in the Disciplines, or departmental equivalent	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)	3
CS 365 Computer Networking	3
IS 205 Managing Information Systems	3
IS 361 Data Management Concepts	3
MA 120 Basic Concepts of Statistics (LE Math)	3
Web Development:	**29**

CS 130 Developing the User Experience	3
CS 131 Introduction to Web Structures	3
CS 206 Introduction to JavaScript	3
AR 218 Graphic Design Software	3
CS 317 Web Animation	3
CS 325 Full Stack Web Development	3
CS 330 Principles of Mobile Development	3
CS 335 Introduction to Cybersecurity	3
CS 345 Web Development with Frameworks	3
CS 401 Portfolio for Web Development	2
Additional Courses	
Additional courses in or outside of the major. At least 3 credit hours of those courses need to be at 300-400 level.	**30**
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.)
CS130 Developing the User Experience	CS152
CS131 Introduction to Web Structures	CS208
EN105	AR218
LE100	EN106
LE elective 1*	LE elective 2
Second Year – Fall (15 cr.)	**Second Year – Spring (16 cr.)**
CS206 Introduction to JavaScript	CS317
IS361	IS205
MA120	LE science with a lab (4 cr.)
LE elective 3	LE elective 5
LE elective 4	LE elective 6
Third Year – Fall (15 cr.)	**Third Year – Spring (15 cr.)**
CS325 Full Stack Web Development	CS300
CS365	CS330
EN306	CS335
LE elective 7	Additional course 2
Additional course 1†	Additional course 3
Fourth Year – Fall (15 cr.)	**Fourth Year – Spring (14 cr.)**
CS345 Web Development with Frameworks	CS401 Portfolio for Web Development (2 cr.)
LE300	Additional course 7
Additional course 4	Additional course 8
Additional course 5	Additional course 9
Additional course 6	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.)
CS130 Developing the User Experience	CS152
CS131 Introduction to Web Structures	CS208
MA125 (additional course 1†)	AR218
EN105	EN106
LE100	LE elective 1*
Second Year – Fall (15 cr.)	**Second Year – Spring (16 cr.)**
CS206 Introduction to JavaScript	CS317
IS361	IS205
MA120	LE science with a lab (4 cr.)
LE elective 2	LE elective 4
LE elective 3	LE elective 5
Third Year – Fall (15 cr.)	**Third Year – Spring (15 cr.)**
CS325 Full Stack Web Development	CS300
CS365	CS330
EN306	CS335
LE elective 6	Additional course 2
LE elective 7	Additional course 3
Fourth Year – Fall (15 cr.)	**Fourth Year – Spring (14 cr.)**
CS345 Web Development with Frameworks	CS401 Portfolio for Web Development (2 cr.)
LE300	Additional course 7
Additional course 4	Additional course 8
Additional course 5	Additional course 9
Additional course 6	Additional course 10

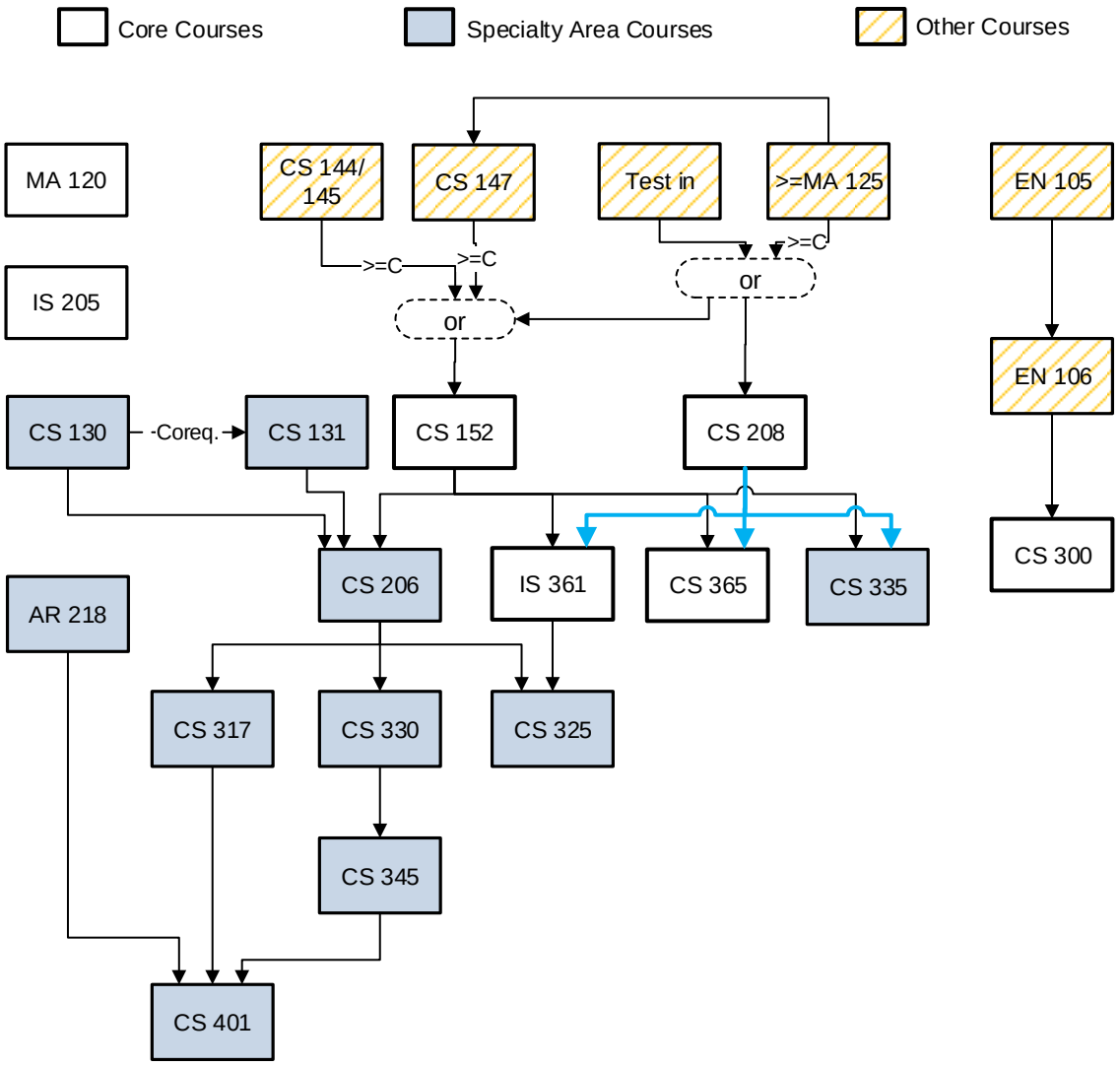
* LE (Liberal Education) Elective: Aside from MA120 (Math), CS300 (Ethics), and Science with a lab (4 cr.), you will need 7 more LE courses: 2 Humanities, 1 Natural Science, 1 Citizenship, 1 Communication, and 2 Social Science. For a list of qualifying courses, see Liberal Education Requirements section 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 30 credit hours (10 additional courses) to reach 120 credit hours.

Prerequisite Tree

B.S. in Information and Computer Science

Specialty Area – Web Development



This guide is not a substitute for academic advisement.