SAMPLE DEGREE PLAN

Bachelor of Science, Data Science, Computer Science

This degree program requires a total of 120 credit hours (CH), including 38 credit hours of the lower-division (LD) UCA Core and 40 credit hours of upper-division (3000- and 4000-level) courses. This sample degree plan demonstrates how a first-time entering freshman with no college credit can earn the degree in eight semesters. The upper-division UCA Core must be met using major, minor, or general elective courses. For general and specific degree requirements, please see the *Undergraduate Bulletin* at https://uca.edu/ubulletin. Consult your academic advisor for appropriate substitutions and additional information.

This degree is offered as an eight-semester degree completion program. Eligible students who follow this degree plan and complete all general and specific degree requirements in the *Undergraduate Bulletin* of the year in which they were admitted will earn this degree in eight semesters. For eligibility requirements, see https://uca.edu/ubulletin/degreeplans/ for more information.

Year 1

Fall — Semester 1		Spring — Semester 2	
Courses	**CH**	**Courses**	**CH**
CSCI 1470 Computer Science I	4	CSCI 1480 Computer Science II	4
WRTG 1310 Introduction to College Writing or Other approved Writing Foundation alternative	3	WRTG 1320 Academic Writing & Research or ENGL 1320 Interdisciplinary Writing & Research or Other approved Research and Writing alternative	3
LD UCA Core First Year Seminar or LD UCA Core Lab Science	3-4	LD UCA Core First Year Seminar (if not taken) or LD UCA Core Lab Science	3-4
MATH 1486 Calculus Preparation[1] or MATH 1496 Calculus I[2]	4	MATH 1496 Calculus I (if not taken) or MATH 1497 Calculus II	4
General Elective	0-1	General Elective	0-1
Total	**15**	**Total**	**15**

Year 2

Fall — Semester 3		Spring — Semester 4	
Courses	**CH**	**Courses**	**CH**
CSCI 2310 Introduction to Data Science	3	CSCI 3330 Algorithms	3
CSCI 2320 Data Structures	3	CSCI 3360 Database Systems	3
CSCI 2330 Discrete Mathematics for Computing	3	MATH 3320 Linear Algebra	3
LD UCA Core Course	3	LD UCA Core Course	3
MATH 1497 Calculus II (if not taken) or LD UCA Core Lab Science	4	LD UCA Core Lab Science (if needed) LD UCA Core Course	3-4
		General Elective	0-1
Total	**16**	**Total**	**16**

[1] MATH 1486 requires an ACT of 21 or higher, or completion of MATH 1390 College Algebra with a grade of C or higher. Students who do not meet these prerequisites prior to the first semester are ineligible for the eight-semester degree completion program.

[2] MATH 1496 requires an ACT of 27 or higher, or a C or better in MATH 1486, or a C or better in both MATH 1390 and MATH 1392, or the equivalent of these prerequisites.

Year 3

Fall — Semester 5		Spring — Semester 6	
Courses	**CH**	**Courses**	**CH**
CSCI 3381 Object-Oriented Software Development with Java	3	CSCI 3V75 Internship or Approved alternative	3
CSCI 3385 Artificial Intelligence	3	CSCI 4370 Data Mining	3
CSCI 4321 Ethical Implications	3	MATH 3381 Data Cleaning and Visualization	3
MATH 3311 Statistical Methods	3	MATH 4371 Introduction to Probability	3
LD UCA Core Course	3	LD UCA Core Course	3
Total	**15**	**Total**	**15**

Year 4

Fall — Semester 7		Spring — Semester 8	
Courses	**CH**	**Courses**	**CH**
CSCI 2335 Networking or CSCI 3345 Human-Computer Interaction or CSCI 4340 Introduction to Parallel Programming	3	CSCI 4372 Data Clustering	3
CSCI 4315 Information Security	3	CSCI 4491 Applied Data Science	4
CSCI 4371 Machine Learning	3	General Electives	6
LD UCA Core Course	3		
LD UCA Core Course (if needed) or General Elective	3		
Total	**15**	**Total**	**13**

This sample degree plan has been approved by the Department of Computer Science and Engineering in the College of Science and Engineering.

Emre Celebi	07/08/25
SIGNED – DEPARTMENT CHAIR / SCHOOL DIRECTOR	DATE
Stephen Addison	07/08/25
SIGNED – COLLEGE DEAN	DATE