SAMPLE DEGREE PLAN

Bachelor of Science, Data Science, Statistics

This degree program requires a total of <u>120</u> 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	MATH 3391 Nonparametric Statistics or MATH 4381 Special Problems in Mathematics[3]	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 4315 Information Security	3	CSCI 4491 Applied Data Science	4
MATH 3392 Multivariate Analysis	3	MATH 4391 Machine Learning	3
MATH 4373 Regression Analysis	3	MATH 4392 Time Series and Forecasting	3
MATH 3391 Nonparametric Statistics or MATH 4381 Special Problems in Mathematics[3]	3	LD UCA Core Course (if needed) or General Elective	3
LD UCA Core Course	3		
Total	**15**	**Total**	**13**

[3] The subject must be one of the following: Qualitative Data Analysis, Text Mining, or Bayesian Analysis.

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

Emre Celebi

SIGNED – DEPARTMENT CHAIR / SCHOOL DIRECTOR	07/08/25
	DATE

Stephen Addison

SIGNED – COLLEGE DEAN	07/08/25
	DATE