## SAMPLE DEGREE PLAN

## Bachelor of Science, Computer Science, Data 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 <a href="https://uca.edu/ubulletin">https://uca.edu/ubulletin</a>. 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 <a href="https://uca.edu/ubulletin/degreeplans/">https://uca.edu/ubulletin/degreeplans/</a> for more information.

#### Year 1

| Fall — Semester 1   |       | Spring — Semester 2  |     |
|---|-------|--|-----|
| Courses   | СН    | Courses  | СН  |
| CSCI 1470 Computer Science I  | 4     | CSCI 1480 Computer Science II  | 4   |
| MATH 1486 Calculus Preparation <sup>1</sup> or  |       | MATH 1496 Calculus I or  | 3-4 |
| MATH 1496 Calculus I <sup>2</sup>   | 4     | LD UCA Core Course   |     |
| WRTG 1310 Introduction to College Writing or<br>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  | 3     | MATH 2311 Elementary Statistics  | 3   |
| General Elective  | 1     | General Elective   | 1-2 |
| Tota  | ıl 15 | Total  | 15  |

### Year 2

| Fall — Semester 3                            |    | Spring — Semester 4  |    |
|--|----|--|----|
| Courses                                      | СН | Courses  | СН |
| CSCI 2320 Data Structures                    | 3  | CSCI 3360 Database Systems   | 3  |
| CSCI 2335 Networking                         | 3  | CSCI 3330 Algorithms   | 3  |
| CSCI 2330 Discrete Mathematics for Computing | 3  | MATH 3320 Linear Algebra   | 3  |
| LD UCA Core Course                           | 3  | LD UCA Core Course   | 3  |
| BIOL 1440 Principles of Biology I            | 4  | CHEM 1450 College Chemistry I or<br>PHYS 1410 College Physics I or<br>PHYS 1441 University Physics I | 4  |
| Total  | 16 | Total  | 16 |

<sup>&</sup>lt;sup>1</sup>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.

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<sup>&</sup>lt;sup>2</sup>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  | СН | Courses                                       | СН |
| CSCI 3385 Artificial Intelligence                        | 3  | CSCI 3370 Principles of Programming Languages | 3  |
| CSCI 4321 Ethical Implications                           | 3  | CSCI 3380 Computer Architecture               | 3  |
| CSCI 3381 Object-Oriented Software Development with Java | 3  | CSCI 4300 Operating Systems                   | 3  |
| LD UCA Core Course                                       | 3  | MATH 3311 Statistical Methods                 | 3  |
| LD UCA Core Course                                       | 3  | LD UCA Core Course                            | 3  |
| Total  | 15 | Total   | 15 |

# Year 4

| Fall — Semester 7              |    | Spring — Semester 8            |    |
|--------------------------------|----|--------------------------------|----|
| Courses                        | СН | Courses                        | СН |
| CSCI 4370 Data Mining          | 3  | CSCI 4490 Software Engineering | 4  |
| CSCI 4315 Information Security | 3  | Data Science Elective          | 3  |
| Data Science Elective          | 3  | Data Science Elective          | 3  |
| Data Science Elective          | 3  | General Elective               | 3  |
| LD UCA Core Course             | 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     |

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