

## SAMPLE DEGREE PLAN

### Bachelor of Science, Physics, Chemical Physics

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        |
| PHYS 1301 Introduction to Physics   | 3         | PHYS 1441 University Physics 1 or<br>PHYS 1410 College Physics 1   | 4         |
| MATH 1486 Calculus Preparation <sup>1</sup> or<br>MATH 1496 Calculus I <sup>2</sup>           | 4         | MATH 1496 Calculus I or<br>MATH 1497 Calculus II   | 4         |
| WRTG 1310 Introduction to College Writing or<br>Other approved Writing Foundation alternative | 3         | WRTG 1320 Academic Writing & Research or<br>ENGL 1320 Interdisciplinary Writing & Research or<br>Other approved Research and Writing alternative | 3         |
| LD UCA Core First Year Seminar  | 3         | CHEM 1450 College Chemistry I  | 4         |
| LD UCA Core Course  | 3         |  |           |
| <b>Total</b>  | <b>16</b> | <b>Total</b>   | <b>15</b> |

#### Year 2

| Fall — Semester 3  |           | Spring — Semester 4  |           |
|--|-----------|--|-----------|
| Courses  | CH        | Courses  | CH        |
| PHYS 1442 University Physics 2 or<br>PHYS 1420 College Physics 2 | 4         | PHYS 2443 University Physics 3 or<br>PHYS 2430 College Physics 3 | 4         |
| MATH 1497 Calculus II or<br>MATH 2471 Calculus III               | 4         | MATH 2471 Calculus III (if not taken) or<br>LD UCA Core Course   | 3-4       |
| LD UCA Core Course   | 3         | MATH 3331 Ordinary Differential Equations                        | 3         |
| CHEM 1451 College Chemistry II                                   | 4         | CHEM 2401 Organic Chemistry I                                    | 4         |
|  |           | General Elective   | 0-1       |
| <b>Total</b>   | <b>15</b> | <b>Total</b>   | <b>15</b> |

<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 the prerequisites prior to the first semester are ineligible for the eight-semester degree completion program.

<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                            | CH        | Courses   | CH        |
| PHYS 3210 Experiments in Physics 1 | 2         | PHYS 3220 Experiments in Physics 2                    | 2         |
| PHYS 3342 Mechanics                | 3         | PHYS 3343 Thermal Physics                             | 3         |
| WRID 3310 Technical Writing        | 3         | PHYS 3341 Mathematical Methods in Physics             | 3         |
| LD UCA Core Course                 | 3         | CHEM 3520 Quantitative Analysis                       | 5         |
| LD UCA Core Course                 | 3         | LD UCA Core Course (if needed) or<br>General Elective | 3         |
| LD UCA Core Course                 | 3         |   |           |
| <b>Total</b>                       | <b>17</b> | <b>Total</b>  | <b>16</b> |

**Year 4**

| Fall — Semester 7              |           | Spring — Semester 8          |           |
|--------------------------------|-----------|------------------------------|-----------|
| Courses                        | CH        | Courses                      | CH        |
| PHYS 4111 Senior Capstone      | 1         | PHYS 4211 Senior Capstone 2  | 2         |
| PHYS 3353 Quantum Theory 1     | 3         | PHYS 3361 Electromagnetism 2 | 3         |
| PHYS 3360 Electromagnetism 1   | 3         | General Electives            | 7         |
| CHEM 4450 Physical Chemistry 1 | 4         |                              |           |
| General Elective               | 3         |                              |           |
| <b>Total</b>                   | <b>14</b> | <b>Total</b>                 | <b>12</b> |

This sample degree plan has been approved by the Department of Physics, Astronomy & Engineering in the College of Science and Engineering.



SIGNED – DEPARTMENT CHAIR / SCHOOL DIRECTOR

06/18/25

DATE



SIGNED – COLLEGE DEAN

06/18/25

DATE