

SAMPLE DEGREE PLAN

Bachelor of Science, Physics, Mathematical 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 PHYS 1410 College Physics 1	4
MATH 1486 Calculus Preparation ¹ or MATH 1496 Calculus I ²	4	MATH 1496 Calculus I or MATH 1497 Calculus 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 Other LD UCA Core Course	3	LD UCA Core First Year Seminar (if not taken) or Other LD UCA Core Course	3
LD UCA Core Course	3	General Elective	1
Total	16	Total	15

Year 2

Fall — Semester 3		Spring — Semester 4	
Courses	CH	Courses	CH
PHYS 1442 University Physics 2 or PHYS 1420 College Physics 2	4	PHYS 2443 University Physics 3 or PHYS 2430 College Physics 3	4
MATH 1497 Calculus II or MATH 2471 Calculus III	4	MATH 2471 Calculus III (if not taken) or LD UCA Core Lab Science	4
LD UCA Core Course	3	MATH 3331 Ordinary Differential Equations	3
LD UCA Core Course	3	LD UCA Core Course	3
General Elective	1	General Elective	1
Total	15	Total	15

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 the 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
PHYS 3210 Experiments in Physics 1	2	PHYS 3220 Experiments in Physics 2	2
PHYS 3342 Mechanics	3	PHYS 3341 Mathematical Methods in Physics	3
LD UCA Core Lab Science (if not taken) or General Elective(s)	4	PHYS 3343 Thermal Physics	3
MATH 4371 Introduction to Probability	3	MATH Major Elective	3
WRID 3310 Technical Writing	3	LD UCA Core Course	3
		General Elective	1
Total	15	Total	15

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 3354 Quantum Theory 2	3
PHYS 3360 Electromagnetism 1	3	PHYS 3361 Electromagnetism 2	3
MATH Major Elective	3	MATH Major Elective	3
General Electives	5	General Elective	3
Total	15	Total	14

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



06/18/25

SIGNED – DEPARTMENT CHAIR / SCHOOL DIRECTOR

DATE



06/18/25

SIGNED – COLLEGE DEAN

DATE