### SAMPLE DEGREE PLAN

## **Bachelor of Science, Mathematics, Pure Mathematics**

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
MATH 1486 Calculus Preparation <sup>1</sup> or MATH 1496 Calculus I <sup>2</sup>	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	3	LD UCA Core Lab Science	4
LD UCA Core Course	3	LD UCA Core Lab Science	4
LD UCA Core Course	3		
Total	16	Total	15

#### Year 2

Fall — Semester 3		Spring — Semester 4	
Courses	СН	Courses	СН
MATH 2341 Mathematical Computation	3	MATH 2335 Transition to Advanced Mathematics	3
MATH 1497 Calculus II or MATH 2471 Calculus III	4	MATH 3331 Ordinary Differential Equations	3
LD UCA Core Course	3	MATH 3311 Statistical Methods	3
LD UCA Core Course	3	MATH 2471 Calculus III (if not taken) or General Elective(s)	4
LD UCA Core Course	3	LD UCA Core Course	3
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 the 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
MATH 3360 Introduction to Rings and Fields	3	MATH Major Elective		3
MATH 4371 Introduction to Probability	3	MATH 3362 Introduction to Group Theory or MATH 4362 Advanced Calculus I <sup>3</sup>		3
MATH 3320 Linear Algebra	3	Minor Courses or General Electives		9
Minor Courses or General Electives	6			
Total	15		Total	15

# Year 4

Fall — Semester 7		Spring — Semester 8	
Courses	СН	Courses	CH
MATH Major Elective	3	MATH 3362 Introduction to Group Theory or MATH 4362 Advanced Calculus I <sup>3</sup>	;
Minor Courses (if needed) or	40	Minor Courses (if needed) or	
General Electives	12	General Electives	9
Total	15	Tot	al 1

<sup>&</sup>lt;sup>3</sup>MATH 4362 is only offered in the spring of even numbered years.

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

Loi Booher	06/17/25	
SIGNED – DEPARTMENT CHAIR / SCHOOL DIRECTOR	DATE	
Stephen Addison	06/17/25	
SIGNED – COLLEGE DEAN	DATE	

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