REQUIREMENTS FOR THE BACHELOR OF SCIENCE
DODGE FAMILY COLLEGE OF ARTS AND SCIENCES
THE UNIVERSITY OF OKLAHOMA

Academic Year	General Requirements	Program
For Students Entering the Oklahoma State System for Higher Education **Summer 2024 through Spring 2025**	Minimum Total Credit Hours ..... **120** Minimum Upper-Division Hours ..... **48** Major Hours ..... **39** **Minimum Retention/Graduation Grade Point Averages:** Overall - Combined and OU ..... **2.00** Major - Combined and OU **2.00**	**Mathematics (Professional Option)** **B671** Bachelor of Science

OU encourages students to complete at least 30 hours of applicable coursework each year to have the opportunity to graduate in 4 years.

Minimum Total Credit Hours: 120
Major Hours: 39
Minimum Upper-Division Hours: 48

Overall GPA - Combined and OU: 2.00
Major GPA - Combined and OU: 2.00

Program Code: B671

General Education and College Requirements

Courses for fulfillment of General Education and Dodge College of Arts & Sciences requirements must be from the approved General Education course list published in the Class Schedule or at http://www.ou.edu/gened/courses. **Courses graded P/NP will not apply.**

UNIVERSITY-WIDE GENERAL EDUCATION (MINIMUM 40 HOURS) AND COLLEGE REQUIREMENTS

Code	Title	Credit Hours
Core Area I: Symbolic and Oral Communication		
English Composition (6 hours)		
ENGL 1113	Principles of English Composition	3
ENGL 1213	Principles of English Composition	3
or EXPO 1213	Expository Writing	
Language (0-13 hours in the same language)		
The college requirement cannot be met by high school coursework.		
Beginning Course		0-5
Beginning Course, continued		0-5
Intermediate Course (2000 level) [1,2]		0-3
Mathematics (3 hours)		
Choose one course from the General Education Mathematics list		3
Core Area II: Natural Science (7 hours, including one laboratory component)		
Biological Science		
Choose an approved General Education Natural Science course with one of the following prefixes: BIOL, HES, MBIO, or PBIO [1]		3-4
Physical Science		
Choose an approved General Education Natural Science course with one of the following prefixes: AGSC, ASTR, CHEM, GEOG, GEOL, GPHY, METR, or PHYS [1]		3-4
Core Area III: Social Science (6 hours)		
P SC 1113	American Federal Government	3
Choose one course from the General Education Social Science list		3
Core Area IV: Arts and Humanities (18 hours)		
Artistic Forms		
Choose one course from the General Education Artistic Forms list		3
Western Culture		
HIST 1483	United States to 1865	3
or HIST 1493	United States, 1865 to the Present	
Choose one course from the General Education Western Culture list (excluding HIST 1483/1493)		3
World Culture		
Choose one course from the General Education World Culture list		3
Additional Core IV Upper-Division Arts & Humanities courses		
Choose one course from Artistic Forms, Western Culture, or World Culture [1,3]		3
Choose one course from Artistic Forms, Western Culture, or World Culture [1,3]		3
Core Area V: First Year Experience (3 hours)		
Choose one course		3
Total Credit Hours		**56**

1 College of Arts and Sciences Requirements: college requirements are not automatically fulfilled by a previous degree.
2 One course at the intermediate level or demonstrated competency at that level
3 6 upper-division hours, 2 courses, at the 3000- 4000-level. ***Must be outside the major.***

Free Electives

Electives to bring total applicable hours to the minimum total required for the degree including 48 upper-division hours.

Major Requirements

- **Some courses required for the major may also fulfill University General Education and/or Dodge College of Arts & Sciences Requirements.**
- **Students must earn a grade of C or better in all MATH courses at the 3000-level or higher.**

Code	Title	Credit Hours
Choose one of the following calculus sequences:		12
Sequence A:		
MATH 1823	Calculus and Analytic Geometry I	
MATH 2423	Calculus and Analytic Geometry II	
MATH 2433	Calculus and Analytic Geometry III	
MATH 2443	Calculus and Analytic Geometry IV	
Sequence B:		
MATH 1914	Differential and Integral Calculus I	
MATH 2924	Differential and Integral Calculus II	
MATH 2934	Differential and Integral Calculus III	
MATH 2513	Discrete Mathematical Structures	3
MATH 3333	Linear Algebra I	3
MATH 4323	Introduction to Abstract Algebra I	3
MATH 4373	Abstract Linear Algebra	3
MATH 4433	Introduction to Analysis I	3
MATH 4853	Introduction to Topology	3
MATH 3113	Introduction to Ordinary Differential Equations [1]	3
or MATH 3413	Physical Mathematics I	
MATH 4333	Introduction to Abstract Algebra II	3
or MATH 4443	Introduction to Analysis II	
MATH 4513	Senior Mathematics Seminar	3
Total Credit Hours		**39**

[1] MATH 3113 and MATH 3413 overlap by 2 hours. Students who take both will earn only 4 hours of credit.

More information in the catalog: (http://ou-public.courseleaf.com/dodge-arts-sciences/proctor-mathematics/mathematics-professional-option-bachelor-science/).

Information Concerning General Rules, Regulations and Minimum Requirements

Arts and Sciences Hours: At least 80 semester hours of liberal arts and sciences courses are required for a BA degree. At least 55 semester hours of liberal arts and sciences courses are required for a BS degree.
Pass/No Pass Enrollment: A maximum of 16 semester hours of free elective credit may be attempted under this option.
Individual Studies (e.g., courses titled "Independent Study"): A maximum of 12 total semester hours may be counted toward graduation, excluding Honors Reading and Honors Research.
P.E. Courses: No physical education activity courses will be counted toward the 120 semester hours of acceptable credit for graduation.
Senior Institution Hours: A minimum of 60 semester hours applied toward graduation must be earned at senior (4-year) institutions.
Residency:

- At least 15 of the final 30 hours applied toward the degree or at least 50 percent of the hours required by the institution in the major field must be satisfactorily completed at the awarding institution.
- At least 15 semester hours of upper-division major work must be completed in residence at OU.
- OU correspondence courses are ***not*** considered resident credit.

Grade Point Averages: Students must earn a minimum over all 2.00 for each of the following: Combined Retention GPA (all college grades), OU Retention GPA, GPA for all major courses, and GPA for all major courses taken at OU. Some schools and departments of the College have higher minimum grade point averages required for their students.

Suggested Semester Plan of Study

This plan shows one possible grouping of courses that would allow students to graduate in four years. Please refer to the front of the degree checksheet for official requirements. Students must consult with Dodge College of Arts and Sciences and/or Department of Mathematics academic advisors to verify that courses selected each semester fulfill the recommended plan and satisfy University, College of Arts and Sciences, and Mathematics major requirements.

Year		FIRST SEMESTER	Hours		SECOND SEMESTER	Hours
FRESHMAN	ENGL 1113	Principles of English Composition (Core I)	3	ENGL 1213 or EXPO 1213	Principles of English Composition (Core I) or Expository Writing	3
	MATH 1823	Calculus and Analytic Geometry I (Core I)	3	HIST 1483 or HIST 1493	United States to 1865 (Core IV) or United States, 1865 to the Present	3
	P SC 1113	American Federal Government (Core III)	3	MATH 2423	Calculus and Analytic Geometry II	3
		Beginning Language (Core I)	5		Beginning Language continued (Core I)	5
		First Year Experience (Core V)	3			
		CREDIT HOURS	**17**		**CREDIT HOURS**	**14**
SOPHOMORE	MATH 2433	Calculus and Analytic Geometry III	3	MATH 2443	Calculus and Analytic Geometry IV	3
	MATH 2513	Discrete Mathematical Structures	3	MATH 3333	Linear Algebra I	3
		Intermediate Language	3		Natural Science with lab (Core II)	4
		Natural Science without lab (Core II)	3		Social Science (Core III)	3
		Western Culture (Core IV)	3		Artistic Forms (Core IV)	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**16**
JUNIOR	MATH 4323	Introduction to Abstract Algebra I	3	MATH 3113 or MATH 3413	Introduction to Ordinary Differential Equations or Physical Mathematics I	3
	MATH 4433	Introduction to Analysis I	3	MATH 4333 or MATH 4443	Introduction to Abstract Algebra II or Introduction to Analysis II	3
		Free Elective, lower- or upper-division	2		Arts & Humanities, upper-division, outside major (Gen. Ed.)	3
		Free Elective, upper-division (3000-4000-level)	3		World Culture (Core IV)	3
		Free Elective, upper-division (3000-4000-level)	3		Free Elective, upper-division (3000-4000-level)	3
		CREDIT HOURS	**14**		**CREDIT HOURS**	**15**
SENIOR	MATH 4373	Abstract Linear Algebra	3	MATH 4513	Senior Mathematics Seminar	3
		Arts & Humanities, upper-division, outside major (Gen. Ed.)	3	MATH 4853	Introduction to Topology	3
		Free Elective, lower- or upper-division	3		Free Elective, lower- or upper-division	2
		Free Elective, upper-division (3000-4000-level)	3		Free Elective, upper-division (3000-4000-level)	3
		Free Elective, upper-division (3000-4000-level), MATH is recommended	3		Free Elective, upper-division (3000-4000-level)	3
		CREDIT HOURS	**15**		**CREDIT HOURS**	**14**