REQUIREMENTS FOR THE BACHELOR OF ARTS/MASTER OF SCIENCE

DODGE FAMILY COLLEGE OF ARTS AND SCIENCES

THE UNIVERSITY OF OKLAHOMA

Academic Year

For Students Entering the Oklahoma State System for Higher Education Summer 2024 through Spring 2025

| General Requirements | |
|--|------|
| Minimum Total Credit Hours | 140 |
| Minimum Upper-Division Hours | 48 |
| Major Hours | 36 |
| Minimum Retention/Graduation Grade Point Averages: | |
| Overall - Combined and OU | 3.00 |
| Major - Combined and OU | 3.00 |
| | |

Program

Mathematics/Finance

A670/F435 Q439

Bachelor of Arts/Master of Science

OU encourages students to complete at least 28 hours of applicable coursework each year to have the opportunity to graduate in 5 years.

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

| 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 i | n the same language) | | | |
| The college requirement | nt cannot be met by high school coursework. | | | |
| Beginning Course | | 0-5 | | |
| Beginning Course, con | tinued | 0-5 | | |
| Intermediate Course (2 | 2000 level) ^{1,2} | 0-3 | | |
| Mathematics (3 hours) | | | | |
| Choose one course from | m the General Education Mathematics list | 3 | | |
| Core Area II: Natural | Science (7 hours, including one laboratory component) | | | |
| Biological Science | - | | | |
| Choose an approved G | eneral Education Natural Science course with one of the | 3-4 | | |
| | OL, HES, MBIO, or PBIO ¹ | | | |
| Physical Science | | | | |
| Choose an approved G | eneral Education Natural Science course with one of the | 3-4 | | |
| following prefixes: AG | SC, ASTR, CHEM, GEOG, GEOL, GPHY, METR, or PHYS $^{\mathrm{1}}$ | | | |
| Core Area III: Social S | Science (6 hours) | | | |
| P SC 1113 | American Federal Government | 3 | | |
| Choose one course from | 3 | | | |
| Core Area IV: Arts an | d Humanities (18 hours) | | | |
| Artistic Forms | | | | |
| Choose one course from | m 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 HIST 1483/1493) | m the General Education Western Culture list (excluding | 3 | | |
| World Culture | | | | |
| Choose one course from | m the General Education World Culture list | 3 | | |
| Additional Core IV Up | per-Division Arts & Humanities courses | | | |
| Choose one course from Artistic Forms, Western Culture, or World Culture ^{1,3} | | | | |
| Choose one course from | m Artistic Forms, Western Culture, or World Culture ^{1,3} | 3 | | |
| | ar 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.

UNDERGRADUATE 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 follo | 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 3113 | Introduction to Ordinary Differential Equations ¹ | 3 |
| or MATH 3413 | Physical Mathematics I | |
| Choose four additional | math courses at the 3000-level or higher, including nine | 12 |
| hours at the 4000-level | or higher ² | |
| Graduate Level Math co | ourse | 3 |
| Total Credit Hours | | 36 |

- 1 MATH 3113 and MATH 3413 overlap by 2 hours. Students who take both will earn only 4 hours of credit.
- 2 $\,$ No more than 6 hours may be from MATH 4733, MATH 4743, MATH 4753, MATH 4773, and MATH 4793.

M.S. IN FINANCE COMPONENT

| Code | Title | Credit Hours |
|--|------------------------------------|--------------|
| Core Courses (8 hours |) | |
| FIN 5322 | Financial Derivatives | 2 |
| Graduate Electives | | |
| 30 Graduate level election and approved by the Grand approved by t | 30 | |
| can be shared between t | he Math and MS Finance Programs. 1 | |

32

Shared Courses: Up to 12 hours of graduate level courses from a list maintained by the department and approved by the graduate liaison can be shared between BS and MS- FIN programs.

Total Credit Hours

More information in the catalog: (http://ou-public.courseleaf.com/dodge-arts-sciences/proctor-mathematics/mathematics-bachelor-arts-finance-master-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 BA

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.

| Fig. Principles of English Composition (Core I) 3 | Year | | FIRST SEMESTER | Hours | | SECOND SEMESTER | Hours |
|--|-------|-----------|---|-------|-----------|---|-------|
| PSC1113 | IAN | ENGL 1113 | Principles of English Composition (Core I) | 3 | | | 3 |
| Beginning Language (Core 1) 5 | | MATH 1823 | Calculus and Analytic Geometry I (Core I) | 3 | | | 3 |
| Beginning Language (Core 1) 5 | SH | P SC 1113 | American Federal Government (Core III) | 3 | MATH 2423 | Calculus and Analytic Geometry II | 3 |
| Beginning Language (Core 1) 5 | E E | | First Year Experience (Core V) | 3 | | Beginning Language continued (Core I) | 5 |
| MATH 2433 Calculus and Analytic Geometry III 3 MATH 2443 Calculus and Analytic Geometry IV 3 3 MATH 2513 Discrete Mathematical Structures 3 MATH 3333 Linear Algebra I 3 3 MATH 2513 Discrete Mathematical Structures 3 MATH 3333 Linear Algebra I 3 MATH 2513 MATH 2513 Discrete Mathematical Structures 3 MATH 3333 Linear Algebra I 3 MATH 2513 MATH | | | Beginning Language (Core I) | 5 | | | |
| MATH 2513 Discrete Mathematical Structures 3 MATH 3333 Linear Algebra 3 | | | CREDIT HOURS | 17 | | CREDIT HOURS | 14 |
| Intermediate Language 3 Natural Science with lab (Core II) 4 | | MATH 2433 | Calculus and Analytic Geometry III | 3 | MATH 2443 | Calculus and Analytic Geometry IV | 3 |
| NATH 3113 or MATH 3000 MATH 4000 NATH 4000 N | RE E | MATH 2513 | Discrete Mathematical Structures | 3 | MATH 3333 | Linear Algebra I | 3 |
| NATH 3113 or MATH 3000 MATH 4000 NATH 4000 N | 9 | | Intermediate Language | 3 | | Natural Science with lab (Core II) | 4 |
| NATH 3113 or MATH 3000 MATH 4000 NATH 4000 N | HOH | | Western Culture (Core IV) | 3 | | Social Science (Core III) | 3 |
| NATH 3113 or MATH 3000 MATH 4000 NATH 4000 N | l o | | Natural Science without lab (Core II) | 3 | | Artistic Forms (Core IV) | 3 |
| MATH 3413 Mathematics MATH 4000-level Elective 3 | , s | | CREDIT HOURS | 15 | | CREDIT HOURS | 16 |
| Bed. | UNIOR | | | 3 | | MATH 4000-level Elective ¹ | 3 |
| Free Elective, lower- or upper-division 3 Free Elective, upper-division (3000-4000-level) 3 | | | MATH 4000-level Elective ¹ | 3 | | ** | 3 |
| Free Elective, lower- or upper-division 3 Free Elective, upper-division (3000-4000-level) 3 | | | ** | 3 | | World Culture (Core IV) | 3 |
| CREDIT HOURS 13 CREDIT HOURS 15 | | | Free Elective, lower- or upper-division | 3 | | Free Elective, upper-division (3000-4000-level) | 3 |
| MATH 3000-4000-level Elective 3 Graduate Level MATH Elective 1, 2 3 | | | Free Elective, lower- or upper-division | 1 | | Free Elective, upper-division (3000-4000-level) | 3 |
| Graduate Level MATH Elective ^{1, 2} 3 FIN 5322 Financial Derivatives 2 | | | CREDIT HOURS | 13 | | CREDIT HOURS | 15 |
| Graduate Elective 3 2 Free Elective, upper-division (3000-4000-level) 3 | | | | 3 | | Graduate Level MATH Elective ^{1, 2} | 3 |
| Graduate Elective 3 2 Free Elective, upper-division (3000-4000-level) 3 | Ī | | | 3 | FIN 5322 | Financial Derivatives | 2 |
| Graduate Elective 3 2 Free Elective, upper-division (3000-4000-level) 3 | | | | 2 | | ** | 3 |
| Free Elective, upper-division (3000-4000-level) 3 Free Elective, upper-division (3000-4000-level) 3 CREDIT HOURS 15 CREDIT HOURS 17 | | | | | | * * | 3 |
| CREDIT HOURS 15 CREDIT HOURS 17 | | | | | | ** | |
| SUMMER Graduate Elective 3 2 | l ĸ | | Free Elective, upper-division (3000-4000-level) | 3 | | Free Elective, upper-division (3000-4000-level) | 3 |
| SUMMER Graduate Elective 3 2 | BMC | | CREDIT HOURS | 15 | | CREDIT HOURS | 17 |
| Graduate Elective 3 2 | 22 | | SUMMER | | | | |
| Graduate Elective 3 2 CREDIT HOURS 6 Graduate Elective 3 2 Graduate Elective 3 2 | | | Graduate Elective ³ | 2 | | | |
| CREDIT HOURS6Graduate Elective 3 2Graduate Elective 3 2 | | | Graduate Elective ³ | 2 | | | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | Graduate Elective ³ | 2 | | | |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | CREDIT HOURS | 6 | | | |
| Graduate Elective ³ 2 Graduate Elective ³ 2 | FIFTH | | Graduate Elective ³ | 2 | | Graduate Elective ³ | 2 |
| | | | Graduate Elective ³ | 2 | | Graduate Elective ³ | 2 |
| | | | Graduate Elective ³ | 2 | | Graduate Elective ³ | 2 |
| | | | CREDIT HOURS | 6 | | CREDIT HOURS | 6 |

- MATH electives are subject to the restrictions listed in the Program Requirements.
- Shared Courses between the B.S. in Math and MS in Finance Degree chosen from the approved list maintained by Mathematics and the Division of Finance.
- Choose from approved graduate elective list.