

# MATHEMATICS: PRE-LAW, BS

## Degree Requirements

**Requirements for Students Matriculating in or before Academic Year 2021-2022.** Learn more about University Academic Regulation 3.1 (<http://catalog.okstate.edu/university-academic-regulations/#matriculation>).

**Minimum Overall Grade Point Average: 2.50**

**Total Hours: 120**

Code	Title	Hours
<b>General Education Requirements</b>		
<i>English Composition</i>		
See Academic Regulation 3.5 ( <a href="http://catalog.okstate.edu/university-academic-regulations/#english-composition">http://catalog.okstate.edu/university-academic-regulations/#english-composition</a> )		
ENGL 1113	Composition I	3
or ENGL 1313	Critical Analysis and Writing I	
Select one of the following:		3
ENGL 1213	Composition II	
ENGL 1413	Critical Analysis and Writing II	
ENGL 3323	Technical Writing	
<i>American History &amp; Government</i>		
HIST 1103	Survey of American History	3
or HIST 1483	American History to 1865 (H)	
or HIST 1493	American History Since 1865 (DH)	
POLS 1113	American Government	3
<i>Analytical &amp; Quantitative Thought (A)</i>		
MATH 2144	Calculus I (A) <sup>1</sup>	4
CS 1103	Computer Programming (A) <sup>1</sup>	3
or CS 1113	Computer Science I (A)	
<i>Humanities (H)</i>		
Courses designated (H)		6
<i>Natural Sciences (N)</i>		
Must include one Laboratory Science (L) course		
PHYS 1114	College Physics I (LN) <sup>1</sup>	4
or PHYS 2014	University Physics I (LN)	
Course designated (N)		2
<i>Social &amp; Behavioral Sciences (S)</i>		
ECON 2103	Introduction to Microeconomics (S) <sup>1</sup>	3
<i>Additional General Education</i>		
Courses designated (A), (H), (N), or (S)		7
<b>Hours Subtotal</b>		<b>41</b>
<b>Diversity (D) &amp; International Dimension (I)</b>		
May be completed in any part of the degree plan		
Select at least one Diversity (D) course		
Select at least one International Dimension (I) course		
<b>College/Departmental Requirements</b>		
<i>First Year Seminar</i>		
(Transfer students with 15 hours exempt)		1
<i>Arts &amp; Humanities</i>		
See note 2.a.		3
<i>Natural &amp; Mathematical Sciences</i>		

MATH 2153	Calculus II (A)	3
MATH 2163	Calculus III	3
STAT 4013	Statistical Methods I (A)	3
or STAT 4053	Statistical Methods I for the Social Sciences (A)	

### Foreign Language

See note 3

0-6 hours

### Upper-Division General Education

Select 6 hours outside major department

See note 2.c.

**Hours Subtotal 13**

### Major Requirements

A minimum grade of "C" or "P" is required in each course.

#### Mathematics Core

MATH 2233	Differential Equations	3
MATH 3013	Linear Algebra (A)	3
MATH 3613	Introduction to Abstract Algebra	3
MATH 4023	Introduction to Analysis	3
MATH 4663	Combinatorics	3
Select 3 hours of the following:		3

MATH 3583 Introduction to Mathematical Modeling

MATH 3933 Research Methods

MATH 4423 Geometry and Algorithms in Three-Dimensional Modeling

Select 9 hours of the following: 9

MATH 4013 Calculus of Several Variables

MATH 4063 Advanced Linear Algebra

MATH 4083 Intermediate Analysis

MATH 4143 Advanced Calculus I

MATH 4153 Advanced Calculus II

MATH 4233 Intermediate Differential Equations

MATH 4263 Introduction to Partial Differential Equations

MATH 4283 Complex Variables

MATH 4343 Introduction to Topology

MATH 4403 Geometry

MATH 4423 Geometry and Algorithms in Three-Dimensional Modeling

MATH 4453 Mathematical Interest Theory

MATH 4513 Numerical Analysis

MATH 4553 Introduction to Optimization

MATH 4603 Intermediate Abstract Algebra

MATH 4613 Abstract Algebra I

MATH 4623 Abstract Algebra II

MATH 4713 Number Theory

MATH 4753 Introduction to Cryptography

MATH 4813 Groups and Representations

STAT 4203 Mathematical Statistics I

Select 3 hours of the following: 3

4000-level MATH or STAT

ECON 4213 Econometric Methods

ECON 4223 Business and Economic Forecasting

Upper-division CS or PHYS

*Pre-Law Preparation*<sup>2</sup>

ACCT 2003	Survey of Accounting	3
ENGL 3323	Technical Writing	3
SPCH 3733	Elements of Persuasion (S)	3
Select 9 hours, including 6 upper division hours, of the following:		9
AGEC 3713	Agricultural Law	
ECON 2203	Introduction to Macroeconomics	
ECON 3113	Intermediate Microeconomics	
ECON 3123	Intermediate Macroeconomics	
ECON 3213	Game Theory and Experimental Economics	
ECON 3313	Money and Banking	
ECON 3423	Public Finance	
ECON 3823	American Economic History (S)	
ENGR 4113	Intellectual Property Law for Technical Professionals (S)	
FIN 3113	Finance	
HIST 4513	American Economic History (S)	
HONR 2013	Honors Law and Legal Institutions (S)	
LSB 3213	Legal and Regulatory Environment of Business	
MGMT 3013	Fundamentals of Management (S) <sup>3</sup>	
MKTG 3213	Marketing (S) <sup>3</sup>	
PHIL 3413	Ethical Theory (H)	
PHIL 3843	Philosophy of Law (H)	
POLS 2023	The Individual And The Law	
POLS 3983	Courts and Judicial Process (S)	
POLS 3993	Legal Research And Analysis	
POLS 4963	U.S. Constitution: Civil Rights and Civil Liberties	
POLS 4973	U.S. Constitution: Separation of Powers	
PSYC 4143	Psychology and Law	
SOC 4033	Comparative Perspectives of Criminal Justice Systems (IS)	
SOC 4313	Sociology of Law	

<b>Hours Subtotal</b>	<b>48</b>
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**Electives**

Select 18 hours <sup>2</sup>	18
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May need to include 6 hours of a foreign language. See note 3

May need to include 6 hours upper-division general education outside major department (see note 2.c.)

MATH 1513 and MATH 1813 required for students who do not place directly into MATH 2144.

Recommended courses:

PSYC 1113	Introductory Psychology (S)
SOC 1113	Introductory Sociology (S)
SPCH 2713	Introduction to Speech Communication (S)

See <http://preprofessional.okstate.edu> for additional information.

<b>Hours Subtotal</b>	<b>18</b>
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<b>Total Hours</b>	<b>120</b>
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<sup>1</sup> College and Departmental Requirements that may be used to meet General Education Requirements.

<sup>2</sup> With departmental approval, up to 30 hours from an accredited doctoral law program may be substituted for these areas.

<sup>3</sup> These courses should be selected when including pre-MBA preparation.

## Other Requirements

- See the College of Arts and Sciences Requirements.
- Minimum 2.50 GPA in all required MATH courses.
- **Upper-Division Credit:** Total hours must include at least 40 hours in courses numbered 3000 or above.
- **Hours in One Department:** For B.A. and B.S. degrees, no more than 54 hours in one department may be applied to degree requirements.

## College of Arts and Sciences Requirements

### 1. General Education Requirements

No more than two courses (or eight hours) from the major department (<http://catalog.okstate.edu/college-arts-sciences-major-departments/>) may be used to meet General Education and College and Departmental Requirements. The General Education required English Composition, required U.S. History, required American Government, one required MATH or STAT course, and required foreign language for B.A. degrees do not count against the two-course maximum.

### 2. A&S College/Departmental Requirements

- Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except ENGL 3323 Technical Writing) HIST, MUSI, PHIL (except PHIL 1313 Logic and Critical Thinking (A), PHIL 3003 Symbolic Logic (A) and PHIL 4003 Mathematical Logic and Computability), REL, TH, and foreign languages.
- Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, CHEM, CS (except CS 4883 Social Issues in Computing), GEOL, MATH, MICR, PBIO, PHYS, and STAT; or courses from other departments that carry an (A) or (N) general education designation.
- The required six hours of upper-division General Education may not include courses from the student's major department. This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
- Non-Western Studies Requirement for B.A. and B.F.A.; One 3-hour course in Non-Western Studies (N.W.). This requirement may be satisfied by courses also used to satisfy any part of a student's degree program (i.e., in General Education, College Departmental Requirements, Major Requirements or Electives).
- The College of Arts & Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses applied to the degree.

### 3. Foreign Language Proficiency

- The foreign language requirement for the B.A. may be satisfied by 9 hours college credit in the same language, which must include 3 hours at the 2000-level, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement. Currently Arabic and Mvskoke are not offered at the 2000-level at OSU.

- b. The foreign language requirement for the B.S., B.M. and B.F.A. may be satisfied by presenting a high school transcript which demonstrates two years of study of a single foreign language (passing grades at second-year level of study). It may also be satisfied by 6 hours college credit in the same language, which must include language courses 1713 and 1813, or equivalent proficiency (e.g., passing an advanced standing examination; TOEFL exam; presenting a high school transcript which demonstrates the high school was primarily conducted in a language other than English; etc.). Computer Science courses may not be used to satisfy this requirement.
- c. In addition to a. and b., students pursuing teacher certification must meet novice-high foreign language proficiency by presenting a high school transcript which demonstrates two years of study of a single foreign language with no grade below B. Or, students may complete 3 hours college credit in a single language with no grade below C (or pass an advanced standing examination, College Level Examination Program (CLEP) exam, or Oral Proficiency Interview developed by the American Council on the Teaching of Foreign Languages, equivalent to 3 hours of college credit.) Or, students may meet the requirement by transfer of documentation of meeting the foreign language competency from one of the teacher education programs in the State of Oklahoma approved by the Oklahoma State Regents for Higher Education.

enrollment each semester to plan their class schedule, and students are ultimately responsible for completing all degree requirements.

Course	Title	Hours
<b>Freshman</b>		
<b>Fall</b>		
ENGL 1113 or ENGL 1313	Composition I or Critical Analysis and Writing I	3
MATH 2144	Calculus I (A)	4
General Education courses		7
		<b>Hours 14</b>
<b>Spring</b>		
ENGL 1213 or ENGL 1413	Composition II or Critical Analysis and Writing II	3
MATH 2153	Calculus II (A)	3
General Education courses		10
		<b>Hours 16</b>
<b>Sophomore</b>		
<b>Fall</b>		
MATH 2163	Calculus III	3
PHYS 1114 or PHYS 2014	College Physics I (LN) or University Physics I (LN)	4
General Education courses		9
		<b>Hours 16</b>
<b>Spring</b>		
MATH 2233	Differential Equations	3
MATH 3013	Linear Algebra (A)	3
PHYS 1214 or PHYS 2114	College Physics II (LN) or University Physics II (LN)	4
College and Elective courses		4
		<b>Hours 14</b>
<b>Junior</b>		
<b>Fall</b>		
MATH 3613	Introduction to Abstract Algebra	3
ENGL 3323	Technical Writing	3
Major, College, and Elective courses		9
		<b>Hours 15</b>
<b>Spring</b>		
MATH 4023	Introduction to Analysis	3

**4. Exclusions**

- a. Courses used to satisfy the General Education English Composition, U.S. History, American Government, and Mathematics or Statistics requirements will not count toward the 54-hour maximum allowed from one department.
- b. Courses with ATHL or LEIS prefixes and leisure activity courses may not be used for degree credit.

**5. Teacher Certification**

Students can satisfy the requirements for secondary schools teaching certification while earning a B.A. or B.S. in the College of Arts & Sciences. Those interested should see their Arts and Sciences advisor and the OSU Professional Education Unit in room 325 Willard.

## Additional State/OSU Requirements

- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 50% of the upper-division hours in the major field completed at OSU.
- Limit of: one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2027.

## Example Plan of Study

### Finish in Four Plan of Study

The plan below is an **example** of how students can successfully complete degree requirements in four years. This suggested class schedule plan may be used as a guide and can be adjusted based on individual needs. Students are required to meet with an academic advisor prior to

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MATH 4663	Combinatorics	3
Major, College, and Elective courses		9
<b>Hours</b>		<b>15</b>
<b>Senior</b>		
<b>Fall</b>		
Major, College, and Elective courses		15
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
Major, College, and Elective courses		15
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>120</b>