



College of: Arts and Sciences

Degree/Major: BS/Mathematics Option: Applied

Academic Year: 2018-19

**Proposed Four-Year Degree Plan (120 Total Hours)**

The following is an example 8-semester plan. This is used to illustrate the course sequencing and the expectations for course loading. Students may use this as a guide as they plan their undergraduate education, but should adjust it to fit their personal goals. Students are responsible for completing requirements in the official degree sheet for each major. It is mandatory for a student to meet with an academic advisor prior to course enrollment each semester.

- Assumption:** 1) Entering students have 2 years of a foreign language from high school.  
 2) Entering students meet placement requirements for MATH 2144 (Calculus I).

*Students must refer to the current course catalog for the availability of course offerings as well as visit with their academic advisor to find out about any special offerings.*

Year One					
Fall Semester			Spring Semester		
A&S	1111	First Year Seminar	ENGL	1213	Freshman Composition II
ENGL	1113	Freshman Composition I	MATH	2153	Calculus II
HIST	1103	Survey of American History	PHYS	1114 or 2014	College Physics I or University Physics I
MATH	2144	Calculus I		3 hours	Arts & Humanities
	3 hours	Humanities (H)		3 hours	Electives
Total: 14 credit hours			Total: 16 credit hours		
Get involved with student organizations to further your experiences.			Registering at Career services is free and gives you countless opportunities.		

Year Two					
Fall Semester			Spring Semester		
MATH	2163	Calculus III	MATH	2233	Differential Equations
MATH	3013	Linear Algebra	CS	1113	Computer Science I
POLS	1113	Intro to American Government		3 hours	ECON 2103 or AGECE 1113
PHYS	1214 or 2114	College Physics II or University Physics II		4 hours	Natural Sciences (N)
	3 hours	Electives		3 hours	Electives
Total: 16 credit hours			Total: 16 credit hours		
Interested in an internship or research? This is an ideal time to research possibilities and talk to faculty.			Start looking into 2nd Major or Minor; most minors are 15 - 18 hours.		

Year Three					
Fall Semester			Spring Semester		
MATH	3613	Intro to Modern Algebra	MATH	3583	Intro to Mathematical Modeling
	3 hours	Area of Application	MATH	3 hours	Approved List of Upper-Division MATH
	3 hours	4000-level MATH or STAT or Upper-Division CS		3 hours	Upper Division Humanities (H) with Diversity (D)
	3 hours	Upper-Division Additional General Education (A, H, N, or S, not MATH)	STAT	4013 or 4033 or 4053	Statistical Methods I Engineering Statistics Stat Methods for Social Sciences
	3 hours	Electives		3 hours	Electives
Total: 15 credit hours			Total: 15 credit hours		
Interested in an internship? This is an ideal time to research possibilities.			If you are interested in departmental honors, apply by this semester.		

Between Years Three and Four, contact your advisor about an official graduation check.

Year Four					
Fall Semester			Spring Semester		
	2 - 3 hours	CS 2133 or 2433 or ENGR 1412	MATH	3 hours	Approved List of Upper-Division MATH
MATH	3 hours	Approved List of Upper-Division MATH		3 hours	Area of Application
	3 hours	Additional General Education (A, H, N, o S) with International Dimension (I)	MATH	4973 or 4993 or 4590	Senior Project Senior Honors Thesis Professional Practice in Math
	1 hour	Additional General Education (A, H, N or S)	MATH	4263 or 4553	Intro to Partial Differential Equations Linear and Nonlinear Programming
MATH	4513	Numerical Mathematics: Analysis		1 hour	Elective (if needed to each 120 hours)
	3 hours	Area of Application			
Total: 15 - 16 credit hours			Total: 12-13 credit hours		
Be prepared to apply for Spring graduation this semester. Check on 2nd Major or Minor.			Celebrate your accomplishment at May Graduation with your fellow Cowboys!!		

### **OTHER REQUIREMENTS:**

**The College of Arts and Sciences requires 6 hours Upper-Division General Education outside the major department.**

**Total hours must include at least 40 hours in courses numbered 3000 or above.**

**Hours in one department in excess of 54 will be added to the minimum total of 120 required for graduation.**

**At least 60 hours must be completed at a four-year institution. At least 30 hours must be completed at OSU.**

**15 of the final 30 hours completed, or 50% of the upper-division hours in the major field must be 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.**

#### **1. GENERAL EDUCATION REQUIREMENTS**

No more than two courses (or eight hours) from the major department 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. CAS COLLEGE/DEPARTMENTAL REQUIREMENTS**

a. Arts and Humanities are defined as any course carrying an (H) designation or courses from AMST, ART, DANC, ENGL (except 3323) HIST, MUSI, PHIL (except 1313, 3003 and 4003), REL, TH, and foreign languages.

b. Natural and Mathematical Sciences are defined as any course from the following prefixes: ASTR, BIOC, BIOL, BOT, CHEM, CS (except 4883), GEOL, MATH, MICR, PHYS, and STAT; or any courses that carry an (A) or (N) general education designation.

c. 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).

d. Non-Western Studies Requirement for B.A. and B.F.A. – consult academic advisor

e. The College of Arts and Sciences requires a minimum 2.0 GPA in all major requirements and a minimum 2.0 GPA in all major-prefix courses.

#### **3. FOREIGN LANGUAGE PROFICIENCY**

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.

#### **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.