

Statistics Major with Concentration in Actuarial Science - Bachelor of Science (BS)

Major requirements

(All colleges)

53 -54 credits

Code	Title	Credits
Core		
MTH 207	Calculus I	5
MTH 208	Calculus II	4
MTH 308	Linear Algebra with Differential Equations	4
or MTH 309	Linear Algebra	
STAT 245	Probability and Statistics	4
STAT 345	Statistical Computing	3
STAT 441	Mathematical Statistics I	3
STAT 442	Mathematical Statistics II	3
STAT 445	Correlation and Regression Analysis	3
STAT 446	Analysis of Variance and Design of Experiments	3
ACC 221	Accounting Principles I	3
ACC 222	Accounting Principles II	3
ECO 110	Microeconomics and Public Policy	3
ECO 120	Global Macroeconomics	3
FIN 355	Principles of Financial Management	3
Electives		
Select one course from the following:		3-4
CST 365	Communication in Teams	
ECO 307	Introduction to Econometrics	
ENG 308	Technical Writing	
ENG 309	Writing in the Sciences	
FIN 437	Financial Modeling	
IS 320	Enterprise Systems for Decision Making and Data Analytics	
IS 360	Management of Business Analytics	
MTH 310	Calculus III: Multivariable Calculus	
PSY 420	Advanced Research Methods	
SOC 350	Methods of Social Research II	
Select one course from the following:		3
MTH 371	Numerical Methods	
MTH 407	Real Analysis I	
STAT 443	Categorical Data Analysis ¹	
STAT 444	Environmental Statistics	
STAT 447	Nonparametric Statistics ¹	
STAT 448	Operations Research	

STAT 449	Applied Multivariate Statistics ¹	
Total Credits		53-54

¹ Students considering applying to the Dual Degree in Statistics and Applied Statistics Program should consult with their advisor or the chair of the Mathematics and Statistics Department before enrolling in STAT 443, STAT 444, STAT 447, or STAT 449.

The following courses are approved by the Society of Actuaries for Validation by Educational Experience (VEE) credit:

Code	Title	Credits
STAT 442	Mathematical Statistics II	3
STAT 446	Analysis of Variance and Design of Experiments	3
ECO 110	Microeconomics and Public Policy	3
ECO 120	Global Macroeconomics	3
FIN 355	Principles of Financial Management	3

Degree requirements

All students must complete the general education, college core, major/minor, and university degree requirements in order to qualify for a degree. The easiest way to track all of these requirements is to refer to the Advisement Report (AR) found in the Student Information System (WINGS) Student Center. All enrolled students have access to the AR.

- General education (<http://catalog.uwlax.edu/undergraduate/generaleducation/>)
- College core (p. 1)
- Baccalaureate degree requirements (p. 2)

College of Science and Health (CSH) Bachelor of Science core requirements

B.S. and B.A. students graduating from the College of Science and Health are required to take two natural laboratory science courses selected from the general education laboratory science category (GE 05) and/or from BIO 203, BIO 304, BIO 210, CHM 104, GEO 221, GEO 222, PHY 104 or PHY 204, and they either must take two mathematics courses or one math course and one computer science course from the math/logical systems category of the general education requirements (GE 02). One of the two science courses must be from a department outside of the student's major department.

Note: Math courses can be pairs, i.e. 150 and 151; MTH/CS majors can use two science courses from same department.

For the Bachelor of Science degree, in addition to all other College of Science and Health core requirements, students from non-exempted programs¹ must complete one of the following options. It is recommended that courses are selected in consultation with students' academic advisor.

1. Complete a second major; or
2. Complete a minor outside the major; or
3. Complete two certificates outside the major with at least 12 combined credits at the 300/400 level; or
4. Complete an individualized option, consisting of 18 credits

- a. At least 12 credits must be earned at the 300/400 level outside the major department.
- b. The remaining six credits should come from
 - i. 100 level or higher courses outside the major (General education courses may apply provided they are not being used to fulfill minimum general education requirements.); or
 - ii. 300/400 level courses inside major not being used to fulfill major requirements.
- c. Internship credits may not count toward the individualized option.

¹ The list of exempted CSH programs is below.

Baccalaureate degree requirements

Candidates for the Bachelor of Arts or the Bachelor of Science degrees must accomplish the following:

1. Fulfill the general education requirements.
2. Complete at least one ethnic studies (diversity) course.
3. Complete the courses prescribed by the Undergraduate Curriculum Committee for the degree desired in the respective school or college.
4. Earn a minimum of 120 semester credits with at least a 2.00 cumulative GPA.^{1,2}
5. At least 40 credits must be earned in 300/400 level courses. Transfer courses earned or transferred at the 300/400 level apply to this requirement.
6. Complete major and minor requirements with at least a 2.00 GPA^{1, 2} in each major and minor (and concentration or emphasis, if selected).
7. A minimum of 30 semester credits in residence at UWL is required for graduation. (See undergraduate resident requirement (<http://catalog.uwlax.edu/undergraduate/academicpolicies/graduation/#undergraduate-residence-requirement>)).
8. Submit an application for graduation via the "Apply for Graduation" link in the WINGS Student Center as soon as the student has registered for his or her final semester or summer term in residence. December and winter intersession graduates should apply by May 1. May and summer graduates should apply by December 1.

¹ Grade point average requirements for some programs will be considerably higher than 2.00. Re-entering students may be required to earn credits in excess of the 120 needed for graduation in any curriculum in order to replace credits earned in courses in which the content has changed substantially in recent years. Each case will be judged on its own merit.

² The grade point average recorded at the time the degree is awarded will not be affected by future enrollment.

No degree will be awarded unless all requirements are fulfilled and recorded within 30 days after the official ending date of each term.

Sample degree plan

Below is a sample degree plan that can be used as a guide to identify courses required to fulfill the major and other requirements needed for degree completion. A student's actual degree plan may differ depending on the course of study selected (second major, minor, etc.). Also, this

sample plan assumes readiness for each course and/or major plan, and some courses may not be offered every term. Review the course descriptions or the class timetable (<http://www.uwlax.edu/records/registration/>) for course offering information.

The sample degree plans represented in this catalog are intended for first-year students entering UWL in the fall term. Students should use the Advisement Report (AR) in WINGS (<https://wings.uwlax.edu>) and work closely with their faculty advisor(s) and college dean's office to ensure declaration and completion of all requirements in a timely manner.

General Education Program

The general education curriculum (Gen Ed) is the common educational experience for all undergraduates at UWL. Sample degree plans include Gen Ed placeholders to ensure completion of the general education requirements. Courses may be rearranged to fit the needs or recommendations of the student's program of study. Gen Ed courses may be taken during winter term (January between the semesters) and summer to reduce the course load during regular terms (fall and spring). Students should consult with their advisor and/or the college academic services director in their college/school for assistance with course and schedule planning. Refer to the general education requirements (<http://catalog.uwlax.edu/undergraduate/generaleducation/>) for more specific details.

At least 40 credits of the 120 credits required must be earned at the 300/400-level.

Note: New students and transfer students with less than 12 credits earned are required to take FYS 100 First-Year Seminar (3 cr.) during one of their first two semesters at UWL.

This sample degree plan does not establish a contractual agreement. It identifies the minimum requirements a student must successfully complete, to qualify for a degree, in a format intended to assist the student in planning their academic career. Actual degree plans may differ.

Year 1		
Fall	Credits Spring	Credits
MTH 207 (Gen Ed Math)	5 MTH 208 (Gen Ed Math)	4
PHY 203 (or other Gen Ed Natural Lab Science)	4 PHY 204 (or other Natural Lab Science)	4
CST 110 (Gen Ed Literacy-Oral)	3 ENG 110 or 112 (Gen Ed Literacy-Written)	3
FYS 100 (Gen Ed First-Year Seminar)	3 Gen Ed Minority Cultures	3
15		14

Year 2		
Fall	Credits Spring	Credits
STAT 245	4 STAT 345	3
MTH 308 or 309	4 ECO 110 (Gen Ed Self & Society)	3
ECO 120 (Gen Ed Global Studies)	3 ACC 221	3
Gen Ed Arts	2-3 Gen Ed Arts	2-3
Gen Ed Health & Well-Being	3 University Elective	4
16		15

Year 3		
Fall	Credits Spring	Credits
STAT 441	3 STAT 442	3
ACC 222	3 CSH Core (300/400 not MTH) or Minor ¹	3
University Elective	3 FIN 355	3
Gen Ed Humanistic Studies	3 Gen Ed World Hist	3

CSH Core (300/400 not MTH) or Minor ¹	3 Stats Elective	3-4
15		15
Year 4		
Fall	Credits Spring	Credits
STAT 445	3 STAT 446	3
Stats Elective ²	3 CSH Core (300/400 not MTH) or Minor ¹	3
University Elective at 300/400 level	3 University Elective ¹	3
University Elective	3 University Elective at 300/400 level	3
University Elective	3 University Elective	3
15		15

Total Credits: 120

¹ See CSH BS Core Requirements (<http://catalog.uwlax.edu/undergraduate/scienceandhealth/#Core>) for information on completing the individualized option. 300/400 requirements for graduation may be impacted.

² Students considering applying to the Dual Degree in Statistics and Applied Statistics Program should consult with their advisor or the chair of the Mathematics and Statistics Department before enrolling in STAT 443, STAT 447, or STAT 449.