

# Dual Degree Program in Statistics and Applied Statistics

## Major requirements

The Dual Degree Program in Statistics (B.S.) and Applied Statistics (M.S.) enables a UWL student to earn both a Bachelor of Science degree with a statistics major and a Master of Science degree in applied statistics in five years. Students in this dual degree program should complete the following by the end of their junior year.

Code	Title	Credits
MTH 207	Calculus I	5
MTH 208	Calculus II	4
STAT 245	Probability and Statistics	4
MTH 309	Linear Algebra with Differential Equations	4
MTH 310	Calculus III: Multivariable Calculus	4
STAT 345	Statistical Computing	3
STAT 440	Statistical Consulting	1
STAT 445	Correlation and Regression Analysis	3
STAT 446	Analysis of Variance and Design of Experiments	3
MTH 371	Numerical Methods	3
or MTH 407	Real Analysis I	
CS 120	Software Design I	4
Total Credits		38

During the senior year, students will complete the Group I courses and 12 credits from Group II. In the fifth year, students will complete an additional 18 credits from Group II. Twelve credits of STAT 799 are required for completion of the program. Undergraduates may take up to nine graduate credits total while still undergraduate students.

Code	Title	Credits
<b>Group I</b>		
STAT 541	Mathematical Statistics I	3
STAT 542	Mathematical Statistics II	3
<b>Group II</b>		
STAT 543	Categorical Data Analysis	3
STAT 547	Nonparametric Statistics	3
STAT 549	Applied Multivariate Statistics	3
STAT 762	Bayesian Statistics	3
STAT 763	Survey of Modern Statistical Software	3
STAT 764	Statistical Learning	3
STAT 766	Biostatistics	3
STAT 799	Master's Thesis (take at least two semesters, maximum of six per semester)	12

Students may be accepted into the dual degree program anytime before they have completed 75 undergraduate credit hours. Applicants for undergraduate admission to UWL may request admission into the dual degree program. In order to remain in the program students must maintain a 2.75 GPA in all undergraduate major courses and 3.00 GPA in all graduate courses. Award of the Bachelor of Science degree will occur upon completion of 120 credits, the statistics major requirements, the CSH college core requirements, and the general university requirements.

Students must have graduate student status before registering for their fourth graduate course (normally in the second semester of their senior year). Award of the Master of Science degree in applied statistics will occur after the completion of the B.S. and the M.S. in applied statistics requirements.

Contact the M.S. in Applied Statistics Program (<https://www.uwlax.edu/grad/statistics>) Director for application information. See the online graduate catalog for more information about the Applied Statistics Master of Science Program.

## 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, ESC 221, ESC 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 programs<sup>1</sup> 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 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.

<sup>1</sup> 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. (No substitutions for graduation may be made in course requirements for a major or minor after the fourth week of the last semester of the senior year.)
4. Earn a minimum of 120 semester credits with at least a 2.00 cumulative GPA.<sup>1</sup> At least 40 credits must be earned in 300/400 (senior college) level courses. Courses earned at the 100/200 level that transferred to UWL as 300/400 level courses do not apply to this requirement nor do courses from two-year schools.
5. Complete major and minor requirements with at least a 2.00 GPA<sup>1</sup> in each major and minor (and concentration or emphasis, if selected).
6. 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>)).
7. 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.

<sup>1</sup> 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.

**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/psprod/?cmd=logIn&languageCd=ENG&>) 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.

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

*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 plan their academic career. Actual degree plans may differ.*

Year 1		Credits	Credits
Fall	Spring		
MTH 207 (Gen Ed Math) <sup>3</sup>	5 MTH 208 (Gen Ed Math) <sup>3</sup>		4
PHY 203 (or other Gen Ed Natural Lab Science)	4 CS 120 (Gen Ed Logical Systems) <sup>3</sup>		4
CST 110 (Gen Ed Literacy-Oral)	3 PHY 204 (or other Natural Lab Science)		4
HIS 101, 102, or ARC 200 (Gen Ed World Hist)	3 ENG 110 or 112 (Gen Ed Literacy-Written)		3
	Gen Ed Arts		2-3
		15	18
Year 2		Credits	Credits
Fall	Spring		
MTH 310 <sup>3</sup>	4 MTH 309 <sup>3</sup>		4
University Elective	3 STAT 345 <sup>3</sup>		3
STAT 245 <sup>3</sup>	4 Gen Ed Self & Society		3
Gen Ed Health & Well-Being	3 University Elective		3
Gen Ed Global Studies	3 Gen Ed Minority Cultures		3
		17	16
Year 3		Credits	Credits
Fall	Spring		
STAT 445	3 STAT 446 <sup>3</sup>		3
University Elective at 300/400 level	3 MTH 371 or 407 <sup>2,3</sup>		3
University Elective at 300/400 level	3 CSH Core (300/400 not MTH) or Minor		3
Gen Ed Hum-Lit	3 CSH Core (300/400 not MTH) or Minor		3
CSH Core (300/400 not MTH) or Minor	3 University Elective at 300/400 level		3
	University Elective		2

		Apply for "graduate special status" for fall semester
	15	17
<b>Year 4</b>		
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>
STAT 440	1	STAT 542 (Group I)
STAT 541 (Group I)	3	Group II non thesis graduate course work (see catalog for course listing)
Group II non thesis graduate course work (see catalog for course listing)	6	CSH Core (300/400 not MTH) or Minor
Gen Ed Arts	2-3	CSH Core or Minor <sup>1</sup>
CSH Core or Minor <sup>1</sup>	3	
Apply for "full graduate status" for spring semester		
	16	15
<b>Additional year</b>		
<b>Fall</b>	<b>Credits</b>	<b>Spring</b>
Group II non thesis graduate course work (see catalog for course listing)	3	Group II non thesis graduate course work (see catalog for course listing)
Master's Thesis	6	Master's Thesis
	9	9

Total Credits: 147

- <sup>1</sup> 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.
- <sup>2</sup> MTH 407 is offered in the **fall** whereas MTH 371 is offered in the **spring**. Plan your schedule accordingly.
- <sup>3</sup> Should be completed by the end of the junior year.