

# STATISTICS MINOR

This program is available at the following location:

- Corvallis

The Statistics minor equips students with a solid foundation in statistical methods and mathematical statistics. Students gain a comprehensive understanding of applied and mathematical principles of statistics and observe statistical consulting. Students will demonstrate proficiency in statistical data analysis, mathematical theory of statistics and quantitative reasoning. The minor degree courses foster critical thinking and problem-solving skills, positioning graduates for success in a variety of career paths and continued graduate education.

**Minor Code: 615**

Upon successful completion of the program, students will meet the following learning outcomes:

- Interpret results from statistical analysis accurately.
- Construct meaningful and accurate real-world conclusions from a statistical analysis.
- Compute the probabilities of events associated with random variables using known probability distributions.
- Construct and evaluate common estimators used for statistical inference.

Code	Title	Credits
<b>Required Core</b>		
ST 351	INTRODUCTION TO STATISTICAL METHODS	4
or ST 314	INTRODUCTION TO STATISTICS FOR ENGINEERS	
ST 352	INTRODUCTION TO STATISTICAL METHODS	4
ST 407	SEMINAR (Attendance at Consulting Practicum)	1
ST 421	INTRODUCTION TO MATHEMATICAL STATISTICS	4
ST 422	INTRODUCTION TO MATHEMATICAL STATISTICS	4
<b>Electives</b>		
Select at least 10 credits from the following approved courses: <sup>1</sup>		10
BA 375	APPLIED QUANTITATIVE METHODS	
BOT 440	FIELD METHODS IN PLANT ECOLOGY	
ECE 461	INTRODUCTION TO ANALOG AND DIGITAL COMMUNICATIONS	
ECON 424	INTRODUCTION TO ECONOMETRICS	
FOR 321	FOREST MENSURATION	
H 425	FOUNDATIONS OF EPIDEMIOLOGY	
IE 355	QUANTITATIVE METHODS FOR SYSTEM ANALYSIS AND IMPROVEMENT	
IE 356	QUANTITATIVE METHODS FOR SYSTEM MODELING AND EXPERIMENTATION	
MTH 463	PROBABILITY I	
MTH 464	PROBABILITY II	
MTH 465	PROBABILITY III	
MTH 467	ACTUARIAL MATHEMATICS	
PSY 301	*RESEARCH METHODS IN PSYCHOLOGICAL SCIENCE	
SOC 315	INTRODUCTION TO RESEARCH METHODS	
SOC 316	QUANTITATIVE DATA ANALYSIS	
ST 411	METHODS OF DATA ANALYSIS	
ST 412	METHODS OF DATA ANALYSIS	
ST 413	METHODS OF DATA ANALYSIS	
ST 415	DESIGN AND ANALYSIS OF PLANNED EXPERIMENTS	
ST 431	SAMPLING METHODS	
ST 436	R PROGRAMMING FOR DATA	

ST 437	DATA VISUALIZATION
ST 439	SURVEY METHODS
ST 441	PROBABILITY, COMPUTING, AND SIMULATION IN STATISTICS
ST 499	SPECIAL TOPICS

**Total Credits** 27

<sup>^</sup> Writing Intensive Curriculum (WIC) course

<sup>1</sup> Other statistics-related courses may be substituted, subject to departmental approval

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