

STATISTICS (MINOR)

Students should contact their faculty advisor in the Department of Mathematical Sciences to request approval.

The Statistics minor is designed for students who wish to apply advanced statistical skills to a career in engineering, physics, business, or biological science.

Students will learn statistical computation, theory, and analysis.

Course Requirements

A total of six courses are required based upon the below outline.

Course	Title	Quarter Hours
Calculus Sequence: Select one of the following sequences:		12-18
Sequence One:		
MAT 150	CALCULUS I	
MAT 151	CALCULUS II	
Sequence Two:		
MAT 147	CALCULUS WITH INTEGRATED PRECALCULUS I	
MAT 148	CALCULUS WITH INTEGRATED PRECALCULUS II	
Sequence Three: ¹		
MAT 155	SUMMER CALCULUS I	
MAT 156	SUMMER CALCULUS II	
MAT 341	STATISTICAL METHODS USING SAS	4
or MAT 348	APPLIED STATISTICAL METHODS	
MAT 349	APPLIED PROBABILITY	4
or MAT 351	PROBABILITY AND STATISTICS I	
Select two of the following:		8
MAT 326	SAMPLE SURVEY METHODS	
MAT 328	DESIGN OF EXPERIMENTS	
MAT 350	BAYESIAN STATISTICS	
MAT 356	APPLIED REGRESSION ANALYSIS	
MAT 357	NONPARAMETRIC STATISTICS	
MAT 358	APPLIED TIME SERIES AND FORECASTING	
MAT 360	GENERALIZED LINEAR MODELS	
MAT 399	INDEPENDENT STUDY ²	

¹ This Calculus sequence is offered only during the summer, in two 6-credit hour courses. Students successfully completing MAT 131, MAT 147 or MAT 150 should enroll in MAT 155; students who successfully complete MAT 148 or MAT 151 should enroll in MAT 156. Students who successfully complete MAT 155 may enroll in either MAT 151 or MAT 156.

² Must be an internship course on a Statistics-related topic.

Business students who have an exceptionally strong background in calculus, including calculus of trig functions, may be permitted by the chair to substitute MAT 135 and MAT 136 for MAT 150.

Students whose major program is in the Department of Mathematical Sciences may earn a minor in Statistics only with departmental approval, under the general principle that at least two courses taken toward the minor in Statistics are not counted towards the major program as well.