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# STATISTICS, MINOR (BEHREND)

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

# **Program Description**

The minor in Statistics provides students with a strong statistical background for careers in biology, actuarial science, engineering, mathematics; or for graduate studies in many fields. The minor is designed to make students proficient in the collection, interpretation and analysis of data.

## What is Statistics?

Statistics is the field study of that uses mathematics, computing, and analysis, to organize and understand data. Statisticians use critical and abstract thinking through the application of mathematical principles to statistical problems, and combine modeling with computational skills to analyze data.

#### You Might Like This Program If...

- You question "facts." How do we know that four out of five doctors recommend a specific type of chewing gum?
- · You enjoy working with numbers, data, and computers.
- · You enjoy flexing your analytical and critical thinking skills.
- You know that statistical skills will help you be more successful in your field of interest.

## **Program Requirements**

Requirement	Credits
Requirements for the Minor	28-30

## **Requirements for the Minor**

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Code	Title	Credits
Prescribed Courses		
Prescribed Courses: Require a grade of C or better		
MATH 140	Calculus With Analytic Geometry I	4
MATH 141	Calculus with Analytic Geometry II	4
STAT 301		3
STAT 401	Experimental Methods	3
STAT 461	Analysis of Variance	3
STAT 462	Applied Regression Analysis	3
Additional Courses		
Additional Courses: Require a grade of C or better		
MATH 230	Calculus and Vector Analysis	2-4
or MATH 231	Calculus of Several Variables	
Supporting Courses and Related Areas		

Supporting Courses and Related Areas: Require a grade of C or better Select 6 credits of 400-level STAT or related MATH courses <sup>1</sup>

No more than three credits from 495 courses can be used to satisfy this requirement.

## **Academic Advising**

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

#### **Erie**

#### **Terry Blakney**

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## Career Paths

As the world generates more and more data, there is an increase in demand for people with statistics and analytics skills. Whether you specialize in statistics or combine it with study in science, business, or the humanities, a background in statistics easily complements most fields through surveying, modeling, mapping, measuring, and predicting data. Penn State Behrend has a comprehensive support system to help you identify and achieve your goals for college and beyond. Meet with your academic adviser often and take advantage of the services offered by the Academic and Career Planning Center beginning in your first semester.

#### **Careers**

The Statistics minor can help make possible careers in statistics, actuarial sciences, bioinformatics, population studies, institutional research, investment analysis, educational assessment, engineering modeling, and thousands of other data-driven occupations.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES WITH A MINOR IN STATISTICS (https://behrend.psu.edu/school-of-science/academic-programs-1/mathematics/curriculum/statistics-minor/)

#### **Opportunities for Graduate Studies**

A minor in statistics, particularly when added to a major program that utilizes data, demonstrates to graduate school admissions committees your commitment to interdisciplinary thinking. Students

with a background in statistics are in high demand in a variety of fields, including those outside of science.

MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES (https://behrend.psu.edu/school-of-science/academic-programs-1/mathematics/curriculum/statistics-minor/)

## **Contact**

### **Erie**

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https://behrend.psu.edu/school-of-science (https://behrend.psu.edu/school-of-science/)