



# Bachelor of Science in Functional Data Analytics



**PennState**  
World Campus

**A world of possibilities.  
Online.**

# Online Functional Data Analytics

The Bachelor of Science in Functional Data Analytics, offered 100% online through Penn State World Campus, is tailored to prepare you for a successful career as a data analyst, decision-maker, and communicator in both the private and public sectors.

As a student in the program, you can gain a deep understanding of the fundamental data analysis continuum models — descriptive, diagnostic, predictive, and prescriptive. The program culminates in a two-semester capstone experience, in which you will apply your acquired skills and knowledge to real-world data analysis projects.

## Bachelor of Science in Functional Data Analytics

The Bachelor of Science in Functional Data Analytics has been designed to prepare students for success in the rapidly growing field of data analytics.

Graduates of the program can be well-prepared with the skills needed to succeed as data analysts, including problem-solving, critical thinking, statistical analysis, programming, data visualization, and communication skills required to present data insights.



## Program Curriculum

The required courses in this program equip students with the necessary mathematical, scientific, and computer competencies to perform intricate data analysis, as well as the communication skills essential to conveying data insights to diverse audiences through written, visual, and verbal formats. Courses in this program include:

### **Descriptive Analytics**

Explores descriptive analytics, where the objective is to answer “what happened” in a project.

### **Diagnostic Analytics**

Examines the relationships between variables through root cause analysis, where the objective is to answer “why it happened.”

### **Predictive Analytics**

Predicting future events (what will happen) based on historical data.

### **Prescriptive Analytics**

Introduces how data analytics assists in making decisions and advocating for a course of action (what should happen).

### **Qualitative Analytics**

Offers an overview of data analytics techniques for non-numeric data.

### **Data Visualization**

Presents techniques and software used for data visualization.

### **Social Media Management and Analytics**

In-depth analysis of social media management, digital marketing, SEO/M, and analytics.





# Begin Your Application Today

Learn what you need to apply to the Bachelor of Science in Functional Data Analytics program by clicking on the “How to Apply” button at [worldcampus.psu.edu/functional-data-analytics](https://worldcampus.psu.edu/functional-data-analytics)

## Did You Know?

- › This program is taught by highly regarded faculty from Penn State Behrend’s School of Science, School of Engineering, School of Humanities and Social Sciences, and Black School of Business.
- › Penn State credits and degrees earned online are identical to those earned on campus.
- › You can pick from three start dates each year, work on weekly assignments at your preferred pace, and create a personalized path to completion that fits into your busy schedule.



“Penn State Behrend is a multi-discipline college. Faculty from four schools (business, engineering, science, and humanities/social sciences) developed and teach this program. The interdisciplinary nature of the

program allows students to prepare for an exciting career in data analytics while maintaining their involvement in and passion for a traditional academic discipline.”

—**Pam Silver**  
**Professor**

“This hands-on, interdisciplinary program is the result of strong collaboration between faculty, directors, industry partners, and Penn State leadership.

As noted by Penn State alum Adam Haber, vice president of enterprise data

for First Citizens Bank — *“The program hits the nail on the head, training people to not only understand the numbers but to also excel in data visualization and communication. People who can analyze data and then present that data to the C-suite are unicorns!”*



—**Diane Parente**  
**Program Chair**

# Contact Us

## Admissions Questions

worldcampus@psu.edu

Phone: 814-863-5386

worldcampus.psu.edu/admissions



**PennState**  
World Campus

The Pennsylvania State University  
128 Outreach Building  
University Park, PA 16802

 @psuworldcampus

 @PSUWorldCampus

 Penn State World Campus

 @pennstateworldcampus

**This publication is available in alternative media on request.**

Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status. Produced by Outreach and Online Education Marketing U.Ed. OUT 23-WC-955873/jxt/sss Copyright © 2023 The Pennsylvania State University