The Post-Baccalaureate Certificate in Data Analytics provides professionals, who have already completed a bachelor’s degree, with a foundation in the applied practices that exist at the intersection of computer programming, statistics, and intellectual disciplines. Research questions are generated by phenomena under study, and matched with available data and appropriate empirical method(s). The curriculum is designed to provide a framework for, and basic competence in, using data to gain understanding of a research question(s).

**Admission Requirements**
To be eligible for admission to the post-baccalaureate certificate program, a student must:

1. Have earned a bachelor’s degree with a minimum GPA of 2.5.
2. Submit a Furman Undergraduate Evening Studies Application for Admission and $35 application fee.
3. Submit official transcripts from all institutions attended.
4. Submit a copy of current resume.

Post-baccalaureate students are not eligible for scholarships, state or federal financial aid. Tuition is calculated per credit hour. Majority of courses are 3 credit hours. 2015 – 2016 tuition: $432/cr. hr.

**Certificate Requirements**
The completion of course requirements is represented as a Post-Baccalaureate Certificate in Data Analytics.

- Students must complete a minimum of 18 post-baccalaureate credits (6 courses).
- Students must have earned a minimum grade of C (cumulative GPA of 2.0) in post-baccalaureate courses completed at Furman that fulfill the certificate requirements.
  
  Course credits earned appear on official Furman University transcripts and are reflected in cumulative GPA calculations.

**Course Requirements (18 credits)**

**Prerequisite Courses**
Prerequisite courses may be taken at Furman University or at any accredited institution. Students must have earned a grade of C or better and these courses do not count towards the 18 credits required for the certificate.
Prerequisite Courses continued:

1. One statistics course: BIO 222, ECN 225, MTH 241, MTH 341, PSY 202, SOC 303, or comparable.
2. One course in which students have been introduced to specific computer programming: CSC 105, CSC 121, or comparable.
3. One of the following introductory math courses: MTH 110, MTH 141, MTH 150, business calculus, or comparable.

Required Courses (6 credits)

1. CSC-272: Big Data: Mining, Analytics & Knowledge Discovery
   The foundation course represents the core knowledge, which combined with a student's coursework in their discipline or career specialization, enables a more advanced study of data analytics.
2. CSC-475: Seminar in Applied Data Science
   The capstone course will provide students with an applied experience of using the scientific method of inquiry to pose and answer an empirical question with live data matched to appropriate empirical techniques.

Elective Courses: Empirical Approaches (12 credits)
Elective courses are intended to expose students to a range of empirical methods, tools, and techniques. Wherever possible the student should be encouraged to choose electives relevant to their intellectual and occupational pursuits. Elective courses may be chosen from current course offerings, independent study, or new courses as they are approved by the faculty. Visit catalog.furman.edu to course descriptions and pre-requisite course details.

Available Elective Courses

- BUS-337 Business Analytics
- BUS-420 Marketing Research
- BUS-430 Business Process Improvement
- CSC-341 Database Management Systems
- CSC-343 Artificial Intelligence
- CSC-345 Computational Science
- EES-200 Topics in Spatial Analysis and Visualization
- ECN-331 Empirical Methods in Economics
- ECN-357 Quantitative Methods Business & Economics
- CSC-501/502 Independent Study/Research