## **B.S. in Applied Analytics CIP Code Change**

## About the Degree

Applied Analytics is a multidisciplinary degree that educates students in applying computational methods to solve problems in areas related to people analytics, consumer behavior, workplace, and society. Students pursuing a Bachelor of Science in Applied Analytics develop an understanding of:

- How to collect, curate, and analyze data
- How to manage, organize and utilize databases for large data sets
- How to communicate the implications of data to various audiences and applications
- How to apply the aforementioned skills with respect to people in the workplace, consumers, and market research

Students majoring in applied analytics complete core courses in statistics and theory, computer science, and communication. Through free electives, students tailor their focus around topics including but not limited to advanced statistics, data mining, information management systems, geographic information systems, online social networks, and psychological testing. The required capstone project is based on these core courses and electives, highlighting students' skills as well as their personal interests. Successful completion of the applied analytics degree ensures students will be able to manage and analyze data using an array of statistical approaches. They will be well prepared for the workplace and/or advanced research in statistics or fields in which knowledge of statistics is required, particularly careers in data science, market analysis, business analysis, bioinformatics, psychometrics, and public relations.

## **Proposed Minor Change**

The current CIP code for the degree is a non-STEM general Social Sciences code: 45.0102 - Research Methodology and Quantitative Methods. However, coursework, acquired skills, and students' future professions are in STEM. Therefore, we propose to change the CIP code to 27.0600 - Applied Statistics.

## **Rationale & Justification**

There are several reasons that support the proposed change:

- 1. The proposed code is described on the National Center for Education Statistics as "A program that focuses on the application of statistics to the solution of functional problems in fields such as business, engineering, medicine, and the applied sciences. Includes instruction in the principles in inference, probability theory, regression analysis, descriptive statistics, stochastic processes, Monte Carlo method, Bayesian statistics, non-parametric statistics, sampling theory, statistical computing, and statistical techniques." This description better matches the coursework students take and skillsets they develop.
- 2. The proposed STEM designated code will help students enrolled in the degree. We have received inquiries from our international students about why the degree is not already STEM designated.
- 3. To our knowledge, the proposed code is not used for any other degree program. For example, (1) the B.S., MAS, and Ph.D. in Applied Math use CIP code 27.0301 Applied

Mathematics, General, (2) the B.S. in Statistics uses CIP code 27.0503 - Mathematics and Statistics, (3) the Certificate in Data Analytics uses CIP code 11.0701 - Computer Science, and (4) the MAS in Data Science uses CIP code 30.0801 - Mathematics and Computer Science.

One final note is that we are currently unable to change the CIP code in the system. The proposed code is new and not available in the CIM program management. Once approval is received, we will work with appropriate parties to update the CIP code.