

Data Analytics Certificate

Data Analytics Certificate Requirements

21 - 24 credits

| Code | Title | Hours |
|---------------------------|--|--------------|
| CS 1400 | Fundamentals of Programming | 3 |
| ISA 2010 or ISA 2011 | Proficiency in Excel & SQL Microsoft Office Specialist (MOS) Excel Expert Certification | 0-3 |
| STAT 2040 or MATH 1040 | Business Statistics Introduction to Statistics (MA) | 3 |
| MATH 2050 | Applied Statistics with Programming | 3 |
| ISA 3020 | SQL & Python for Analytics | 3 |
| ISA 4060 or IT 4060 | Big Data Analytics Big Data Analytics | 3 |
| ISA 4070 or IT 4070 | Data Visualization and Storytelling Data Visualization and Storytelling | 3 |
| MATH 4800 | Industrial Careers in Mathematics | 3 |
| Total Hours | | 21-24 |

Completion Requirements

1. Grade C- or higher in each Discipline Core Requirement course.
2. GPA 2.5 or higher Discipline Core Requirement courses.

Data Analytics Certificate Program Learning Outcomes

At the successful completion of this certificate, students will be able to:

1. Compose solutions to computational problems using fundamental programming abstractions.
2. Apply data and statistical best practices to collect, cleanse, transform, and store data for subsequent analysis.
3. Evaluate and use appropriate statistical concepts to respond to a variety of problems/issues from various disciplines.
4. Create graphically encoded data in useful formats from previously analyzed data and demonstrate the accurate communication of the findings for data problems to decision makers with diverse skill levels.
5. Develop, test, and implement a mathematical model of their own devising by working in teams to solve interdisciplinary problems, and write a professional report describing their model and results that meets the practical constraints of a client.