

# DATA SCIENCE GRADUATE CERTIFICATE

---

In today's world, managing a business or organization is more science than art. The Data Science certificate is a post-baccalaureate certificate that equips you with a data science skill set in demand by employers. Data science and machine learning employ a collection of models, methods, and algorithms to help you making well-informed, data-driven decisions. You will learn the theoretical background of these techniques and how to implement them using common programming languages. Incorporating numerous case studies, the courses are designed to enhance your data interpretation skills.

To learn more and apply, please visit <https://www.sju.edu/degree-programs/data-science-certificate> (<https://www.sju.edu/degree-programs/data-science-certificate/>)

## Learning Goals and Outcomes

**Objective 1:** Students will demonstrate critical thinking skills, that is, the process of conceptualizing, applying, analyzing, synthesizing, and/or evaluating information as the basis for solving problems and making decisions.

**Objective 2:** Students will demonstrate the principles of a structured programming language and be able to describe, design, implement, and test programming code using current data analysis techniques and methodology to support business decision-making.

## Requirements

### Statistics Proficiency

All students in the Data Science Certificate program must demonstrate proficiency in statistics prior to the start of DSS 610 through an online learning module (ALEKS). Students with strong statistical background may test out. Students must complete 100% of the module before the start of DSS 610. Further details can be obtained from the MSBIA Program Director or HSB Graduate Program Office.

## Requirements

Code	Title	Hours
DSS 610	Business Analytics	3
DSS 615	Python Programming	3
DSS 660	Introduction to Data Mining	3
DSS 740	Analytics w/ Machine Learning	3
<b>Total Hours</b>		<b>12</b>