

# APPLIED DATA ANALYTICS, M.S.

A degree in applied data analytics provides the expertise to convert raw data into actionable insight for decision making. A data analyst can use data to determine what happened, why it happened, what will happen, and what should be done. Using modern tools and methods, a data analyst is able to create meaning from the data. In addition to creating new knowledge, the data analyst is also skilled in sharing the findings with others using visualizations and clear communications. In this applied program, students learn more than the theoretical analysis methods; they learn how to solve real-world problems. The curriculum includes the use of the R and SQL languages to prepare and analyze data, Python to conduct more complex analysis methods, and Tableau to apply higher-level tools for analysis and producing effective visualizations. Throughout the curriculum, students have opportunities to select their own data and choose problems they wish to study so that they can apply their unique expertise to study relevant data and generate meaningful insights. The curriculum concludes with a capstone project where students design and conduct their own data analytics study.

CIS 6208	IT Project Management	3
CIS 6209	Adopting a Data Analytics Practice	3
CIS 6700	Experimental Design Data Analytics	3
CIS 6780	Data Analytics Project I	2
CIS 6790	Data Analytics Project II	2
<b>Total Credits</b>		<b>37</b>

## Contact Information

cis@css.edu

The student completing the Masters Degree in Applied Data Analytics will be able to:

1. Evaluate business challenges and formulate questions leading to solutions
2. Identify data needs to answer business questions
3. Apply modern techniques to retrieve and prepare data for analysis
4. Select and apply proper tools and analytical models
5. Communicate results as action-oriented and meaningful
6. Integrate ethical considerations in data collection and reporting

## Requirements

Students must achieve the following program requirements for all courses listed under "Program Required Courses" for the M.S. in Applied Data Analytics.

### Program Requirements

**Major Credits: 37**

**Minimum GPA: 3.0**

**Minimum Grade: C**

**Foundational/Prerequisite Course Requirement: Inferential Statistics**

### Program Required Courses

Code	Title	Credits
CIS 6105	Data Analytics for Decision Making	3
CIS 6107	Data Storage and Retrieval	3
CIS 6110	Applications of Data Analytics	3
CIS 6113	Legal and Ethical Considerations of Information Technologies	3
CIS 6115	Applications in Machine Learning	3
CIS 6117	Applied Text Analytics	3
CIS 6118	Big Data Management	3
CIS 6203	Enterprise Data Strategies	3