# APPLIED STATISTICAL MODELING CERTIFICATE

#### Introduction

The Applied Statistical Modeling certificate is an ideal endorsement for those looking to learn advanced modeling skills. These classes will teach you to think and reason with quantitative data, especially using large scale datasets. You will learn to build model to test conceptual frameworks and communicate findings in a manner that is useful to those working in applied/field settings.

### **Delivery Method**

• This certificate is available fully online and in a hybrid format.

## **Program Requirements**

#### **Certificate Structure**

The certificate consists of four courses, totaling 12 credit hours, and may be earned in one year. Courses may be taken as part of the certificate as well as used toward the Master of Arts in Research and Evaluation Methods (http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/school-education-human-development/research-evaluation-methods/).

Code	Title	Hours
Required Courses	•	
RSEM 7100	Advanced Methods of Qualitative Inquiry	3
RSEM 7800	Structural Equation Modeling	3
Select two of the following:		6
RSEM 7120	Advanced Methods in Quantitative Inquiry and Measurement	
RSEM 7700	Multilevel Modeling: HLM	
RSEM 7140	Management & Secondary Analysis of Large Datasets	
RSEM 7130	Advanced Measurement: Item Response Theory	,
Total Hours		12

Note: All students are required to meet a prerequisite in introductory statistics (RSEM 5100 Basic Statistics or equivalent) prior to taking courses in the Applied Statistical Modeling Certificate.