Data Science for Chemical and Materials Engineers

The certificate in Data Science for Chemical and Materials Engineering Applications will prepare students on using data science tools for numerous applications including predicting material properties, conducting high-throughput searches for materials, optimizing experimental design, and developing machine learning models that lead to virtual screening. Students will take core courses in data science and data visualization. They will be offered a foundation in machine learning, statistical methods used in analyses, and data mining. This certificate can additionally serve as a path to the MS degrees in chemical engineering and materials engineering.

Code	Title	Credits
Core Courses		
MTEN 631 Data Science for Chemical and Materials Engineering Applications		3
CHE 632 Visual Communication with Chemical & Materials Engineering Data		3
Select Two of the Following Elective Courses		
MTEN 633 Machine Learning in Chemical and Materials Engineering		3
CS 634	Data Mining	3
MATH 661	Applied Statistics	3
MATH 662	Probability Distributions	3
MATH 678	Statistical Methods in Data Science	3