

Applied Engineering Data Analytics

ENGR 478

Spring

Dr. Erika Gallegos

Prereqs: BIOM 101 or CBE 101 or CIVE 102 or ECE 102 or ENGR 101 or MECH 103 (Engineering Fundamentals)

Dr. Erika Gallegos' research is centered on integrating humans with complex systems to enhance safety and performance in the design and valuation of new and existing infrastructure.

Learn practical applications of big data across engineering disciplines

This course introduces students to data analytics within engineering, with hands-on experience in the practical applications of big data across engineering disciplines.

Students completing this course will be able to:

- Solve complex engineering problems with straightforward statistics
- Predicting outcomes from data
- Handle complex datasets
- Program in R

Topics covered in this course:

- Data wrangling
- Visualization
- Parametric hypothesis testing
- Machine learning applications
- R programming language for real-world engineering datasets

Course is in-person only. It is for juniors, seniors, & master's students. 400-level courses may not apply to 42-credit doctoral programs.



**Real-world
engineering
data problems**

Questions?

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**We recommend registering for
Spring classes by early January**



SYSTEMS ENGINEERING
COLORADO STATE UNIVERSITY