# Quantitative Behavioral Modeling for Engineers

## Fall 2022 | ENGR581A6
## 5:15 - 8:00 p.m. Monday
## Dr. Steve Conrad

Course prerequisites: STAT 301 or equivalent

**Dr. Steve Conrad** has conducted research and consulted with the water and energy industry for over 25 years on the feedbacks between human-environmental systems through the coupling of social and engineering science to inform decision making and system optimization and resilience as applied to energy, water, and food systems.

### Gain in-depth knowledge and skills in behavioral systems modeling.

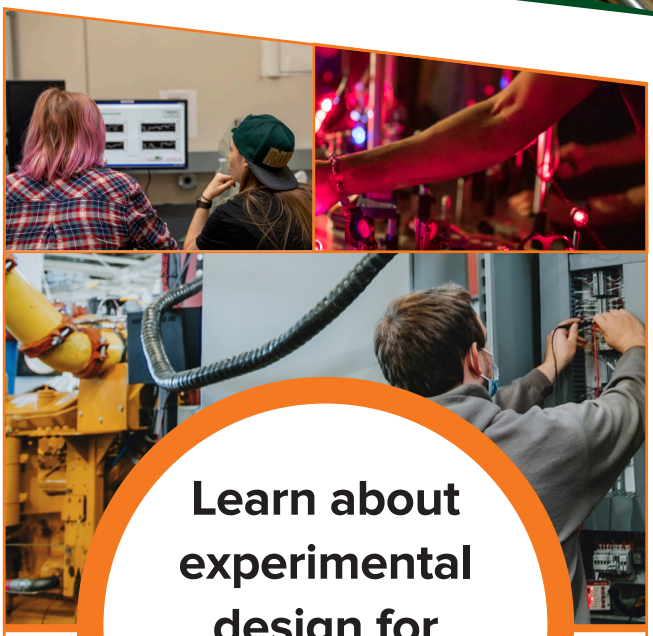
The application of quantitative methods to understand and characterize human behavior, including experimental design, survey methods, modeling, and prediction with specific application to engineering systems and decision making.

**Students completing this course will be able to:**

- Apply rigorous quantitative methods for decision making
- Decide the best quantitative research method for the project
- Acquire in-depth knowledge about developing experiments, surveys, and mathematical modeling

**Topics covered in this course:**

- Theories and models of behavior
- Discrete choice and agent-based modeling
- Data collection
- Survey design
- Application of behavioral models for analysis



**Learn about experimental design for human factors research.**

### Questions?


**Dr. Steve Conrad**
**Associate Professor**

Department of Systems Engineering

E-mail:
steve.conrad@colostate.edu

Faculty page:
www.engr.colostate.edu/se/steven-conrad/


**We recommend registering for Fall 2022 classes by August 15.**

SYSTEMS ENGINEERING
COLORADO STATE UNIVERSITY