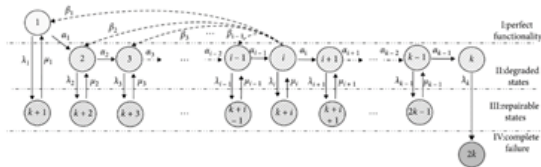


Reliability Engineering

University of Colorado Denver Microcredential

Reliability engineering is the study of how a system is designed, functions and fails and the sustainability of a system over time. It is an engineering approach employing applied mathematics and decision making, probabilistic and statistical methods and numerical analysis. Reliability engineering is critical for a wide range of technologies and industries. The CU Denver College of Engineering, Design and Computing is offering a cross-disciplinary microcredential for students and working professionals. Graduates of the course will be eligible for the industry recognized Reliability Engineer Certification <https://asq.org/cert/reliability-engineer>

Format: 3 credit cross-listed course at undergraduate and graduate level CVEN 4800; ELEC 4810/5810; MECH 4228/5228 starting Summer 2022



Civil Engineering Module

Participants will explore the optimization, the construction, the design, the maintenance, and operations of structural systems such as buildings, bridges, earth structures, offshore facilities, and nuclear structural systems.

Electrical Engineering Module

Participants will explore the design, the operation and failure of an electrical system, a subsystem or components of those system to establish best efficacy and performance. This approach also encompasses software design, security, testing and client support.

Mechanical Engineering Module

Participants will work in mechatronics to design, build a better and smarter system, and establish how to sustain the system employing sophisticated mathematical (probabilistic and statistical) methods. Reliability engineering supports all manufacturing processes through Statistical Process Control and Analysis.



Individuals completing this course will receive the Reliability Engineering Micro-Credential from the CU-Denver College of Engineering, Design and Computing and will be eligible to sit for the industry recognized Reliability Engineer Certification CRE exam (<https://asq.org/cert/reliability-engineer>)

