Sustainable Infrastructure and Building

This distance education course will be offered online (asynchronous/synchronous choice) for convenience.

Instructor
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Topics to be covered

• General
  Gain knowledge of sustainability and relevant contemporary issues, the ability to analyze and communicate data related to sustainable development, and an understanding of sustainability rating systems and third-party verification.

• LEED Rating System
  Learn how to understand and use this system in building construction, as well as the information required for the LEED BD+C system; upon course completion, pass the LEED GA exam if requisite study is completed.

• Envision Rating System
  Learn about and be able to use this system in infrastructure construction; upon course completion, pass the Envision ENV SP exam if requisite study is completed.

Prerequisites
Junior/senior standing; exceptions as provided by the course instructor.

This is an elective course for the civil engineering and environmental engineering degree programs, and can be applied as follows:

• Undergraduate CEM concentration: selected elective.
• Undergraduate sustainable energy systems minor: selected elective.
• Undergraduate architectural and facilities engineering minor: selected elective.

Learn about sustainable infrastructure and buildings and certifying them using the LEED and Envision rating systems.

A study of the use of sustainability rating systems for infrastructure and building projects. Utilizing the U.S. Green Building Council’s world leading Leadership in Energy and Environmental Design (LEED) rating system and the Institute for Sustainable Infrastructure’s Envision rating system, this course will teach the fundamentals of sustainable building and acquaint students with the processes required to certify and verify projects to meet an independent rating standard. From location and transportation through energy and atmosphere and into the natural world and climate and resilience, this course will explore all that makes a project sustainable, including asking whether the project should be done at all. This course will prepare students to take the LEED Green Associate (GA) and/or the Envision Sustainable Professional (ENV SP) exams.

Questions? Contact the Civil & Environmental Engineering Department at cee@clarkson.edu.