

Systems Engineering Practice

Graduate Certificate



COLORADO STATE UNIVERSITY
ONLINE

Overview

Systems engineering is a multi-disciplinary approach to managing complex projects that require systems thinking in order to take a product, or system, through its lifecycle, from concept to completion. Earning a systems engineering certificate online allows you to understand the way the individual pieces work together.

Develop foundational skills

Learn the concepts and practices that help systems engineers lead engineering projects from idea through development and production. The certificate is a four-course series that prepares students with the core competencies and skills needed to practice as a systems engineer.

Topics of study include foundations and processes of systems engineering, engineering risk analysis, information technology project management, and engineering program management.

Curriculum

You must be admitted to this program for the certificate to appear on your official University transcript. No course substitutions or transfer courses are permitted.

Required systems engineering courses:

- ENGR 501 – Foundations of Systems Engineering (3 cr.)
- ENGR 530 – Overview of Systems Engineering Processes (3 cr.)
- ENGR 531 – Engineering Risk Analysis (3 cr.)

Select one course from the following:

- ENGR 502 – Engineering Project and Program Management (3 cr.)
- CIS 600 – Information Technology and Project Management (3 cr.)
- CIS 670 – Advanced IT Project Management (3 cr.)

Delivery

Online; in-person attendance options available

Credits

12 credits

Tuition

\$1085 per credit

- Includes [Student Services](#)
- [Fees](#) assessed separately
- [Financial aid](#) is available; eligibility determined on an individual basis

Time frame

1 year

More info

online.colostate.edu/certificates/systems-engineering-practice

Contact

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How to Apply

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Application Deadlines

Fall semester: **July 1** Spring semester: **November 1**

1 Review Admission Requirements

Candidates for the certificate program must have completed a bachelor of science in engineering, business, life sciences, or natural sciences from an accredited institution, with a GPA of 3.0 or greater. A basic statistics course and Calculus I are recommended.

2 Prepare Application Materials

- **Resume** – Include any previous experience, along with position titles, dates of employment, institutions, and major responsibilities.

3 Complete Online Application

Complete the [online graduate application](#) and pay the nonrefundable application processing fee (payable online). As soon as you have completed the required information, please submit your application. Your application will not be reviewed until it is complete and all required materials have been received.

- Select “Systems Engineering Practice (Certificate) – Distance” when choosing the Program of Study. (Note: You must first select “Certificate” at the top.)

4 Request Transcripts

Request one official transcript of all collegiate work completed from every institution attended, whether or not you received a degree from those institutions. Transcripts from Colorado State University are not required. Official transcripts can either be mailed in or sent as e-transcripts.

Send e-transcripts to: gradadmissions@colostate.edu

Send paper copies to:
Graduate Admissions
Colorado State University – Office of Admissions
1062 Campus Delivery
Fort Collins, CO 80523-1062

Check Your Application Status

View your [application status](#) at any time to ensure your application checklist is complete or to check on updates. Once your complete application, including supporting materials, is received, the department admission committee will review your application and notify you of their decision.

Information for International Students

See [website](#) for test score and transcript requirements.

