Overview
The Graduate Certificate in Systems Engineering Practice is designed for students and working professionals in aerospace, technology, energy, government, military, biosciences and healthcare, environmental resources, and engineering related fields who are seeking an introduction to systems engineering concepts and practices.

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.

What you learn
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
- Engineering program management

Curriculum
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:
- CIS 600 – Information Technology and Project Management (3 cr.)
- CIS 670 – Advanced IT Project Management (3 cr.)
- MECH 501 – Engineering Project and Program Management (3 cr.)

Contact
(970) 492-4898
online.colostate.edu/contact

Delivery
Online; in-person attendance options available

Credits
12 credits

Tuition
$793-$1035 per credit
- Includes Student Services
- Fees assessed separately
- Financial aid is not currently available; For questions about financial aid, contact CSU’s Office of Financial Aid

Time frame
1 year

Completion requirements
Successful completion of 12 credits from the appropriate courses with a grade of B or better.

More info
online.colostate.edu/certificates/systems-engineering-practice
How to Apply
Systems Engineering Practice - Graduate Certificate

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 three semesters of calculus are recommended (Calculus I, II, & III).

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. You do not need to wait for to move your application forward.
   - 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.