Each student in the Engineering Leadership Program (ELP) is required to produce a portfolio. The portfolio will be reviewed by the Engineering Leadership Program Director and the student’s mentor at several milestone points throughout the program. The three-fold goal of the portfolio is:

1. Planning by the student for fulfillment of all the program requirements,
2. Reflection by the student on his/her leadership education and experiences, and
3. Obtaining feedback from his/her mentor, advisors, peers, subordinates, and supervisors.

All of the elements of the portfolio, as described in the following sections, must be submitted no later than three months before graduation (or completion of BS requirements, if pursuing a concurrent BS/MS degree) to the ELP Program Director (ex.: a May/August graduate must submit his/her portfolio by February 1). The ELP Program Director and ELP faculty will provide feedback to the student on the content of the portfolio, which may include required additions and/or needed improvements. An updated portfolio, incorporating the feedback received, must be provided to the ELP Program Director no later April 15 (or November 15) before graduation in order for the student to receive the Engineering Leadership Certificate.

After completing the Engineering Leadership Gateway course (or equivalent Presidents Leadership courses), each student must submit the current version of his/her portfolio by December 1 each year to the ELP Director. The student will receive feedback on the progress of his/her portfolio. Please see Appendix C, “Engineering Leadership Portfolio Checklist by Semester” for a way to track your required content.

The following documents are required components of the portfolio:

- ELP Application
- Leadership Course Elective Plan and Execution
- Leadership Experience Plan, Execution, and Reflection
- Mentorship Relationship Experience and Reflection
- Seminar Learning
- Capstone Synthesis
- Checklist of Completion of all ELP Requirements

ELP Application

Start your portfolio by copying your ELP Application, adjusting the text to fit the formatting of your portfolio. This element of your portfolio should be done by the end of your first semester in ELP.

Leadership Electives

ELP students are required to take the Engineering Leadership Gateway course and six additional credit hours of coursework with leadership components (two additional three-credit courses). Ideas for electives can be found at [http://www.colorado.edu/engineering/leadership/electives](http://www.colorado.edu/engineering/leadership/electives) or the student can find a course that will provide education in leadership topics he/she wishes personally develop. For example, if the student is interested in pursuing a career in medicine, the student may seek out a course in biomedical ethics.

If you want to take a course offered by another university, or undertake an independent study, and include it as leadership elective, please complete the Leadership Elective Petition Form (Appendix A). This form is not needed for CU Boulder courses.

Content for the portfolio:

- *(By the end of the semester you took the Engineering Leadership Gateway course or PLRC 1820)* Write your electives plan (courses and planned year/semester).
Engineering Leadership Program Portfolio

- *(Each semester)* Update your elective plan, if you determine that you want to take different electives.
- *(When you have completed an elective)* Include a summary of the leadership insights gained from the course. Why, or why not, would you recommend this course to ELP students?
- *(After completing all of your leadership electives)* Integrate the learning and insights from all of your electives.

**Leadership Experience Plan, Execution, and Reflection**

The leadership experience is a significant extracurricular experience in industry, government, or a non-profit organization that includes a leadership role in a team-based project. The student must demonstrate that she/he has undertaken a substantial leadership role. The experience should be a significant time commitment (at least one summer or one academic year and over 100 hours of dedicated work).

**Content for the portfolio:**

- *(Pre-experience, to be completed before the start of the leadership experience and provided to the ELP Program Director)* Describe your prospective leadership role. If you need to seek out the experience (ex., must run for an officer position or be hired into a position), describe how you plan to obtain the position. Describe the organization/company, your desired position, the leadership activities you will be leading, the goals you are setting, and the projected timeline for this experience. Include feedback from your mentor about this plan.
- *(During the leadership experience)* At least once a month, write down any changes to your original plan and why it changed. Include challenges you are facing, feedback/advice from your supervisor, your mentor, and/or your team, and describe how the feedback is shaping your plan.
- *(Post-experience, to be completed within three months of completion of the leadership experience or three months before graduation, whichever occurs first)* Reflect on your leadership experience, covering the following: results, successes, failures, potential or actual continuity of the project (leadership handoff), leadership lessons learned, linkages to leadership course work, and any other significant learning. **Obtain feedback from your supervisor, your mentor, and your peers of whom you led in this project.** Reflect on your learning from this feedback. See Appendix B for suggested supervisory feedback topics.

**Mentor Relationship Experience and Reflection**

Each ELP student will be matched with a mentor during the semester in which the student is enrolled in the Engineering Gateway Leadership course. Students will engage with their mentors at least twice a semester via face-to-face meetings, video conferences, emails, and/or phone calls. The mentors will provide advice and guidance to the students, primarily in the selection and execution of their leadership experience. The mentors are not responsible for finding leadership experiences for the students.

**Content for the portfolio:**

- *(Each semester)* The student should write about his/her engagement with his/her mentor and also other potential interactions/needs for future semesters.
- *(Last semester)* Student and mentor will jointly complete a narrative document that discusses the mentor/mentee interactions and takeaways from the mentoring experience. **NOTE:** The mentor is only required to contribute to the post-experience section, but is welcome to provide feedback at any time.

**Seminar Learning**

The Engineering Leadership Program will be sponsoring a number of leadership seminars each academic year, as well as sharing information about opportunities to attend other seminars on campus or in the Boulder/Denver area. An ELP student must attend at least four seminars sponsored by the College of Engineering and Applied Science.
Engineering Leadership Program Portfolio

Content for the portfolio:

- *(After each seminar)* Students should write a short memo summarizing each seminar, giving feedback as to its quality and explaining how each seminar adds to their leadership curriculum. Did any of the seminars contradict each other? Were there any points made by speaker(s) with which you disagreed?

Capstone Synthesis

This is the key, personal content of the portfolio for the student to bring together all the elements of the program and to describe how his/her leadership skills evolved and developed through the ELP.

Content for the portfolio:

- *(Last semester)* This report should include:
  - What key things did you learn about leadership through your ELP experiences (mentorship, course work, seminars, leadership experience)?
  - How have your leadership skills evolved and developed?
  - How do you plan to utilize the things you have learned as you undertake your post-graduation plans?
  - What constructive feedback do you have for the ELP?
Engineering Leadership Program Portfolio

Appendix A

Leadership Elective Petition Form
for Independent Study or a Course at Another Institution

Student Name: ______________________  Student #: ________________

For CU Boulder Independent Study Course: Title of Independent Study:
_____________________________________________________________________

Course Number: ________________  Semester & Year To Be Taken: ___________________

If the course will not be taken at the University of Colorado Boulder, provide the name of
institution where the course will be taken. (It is the student’s responsibility to ensure the course
is recorded for credit on his/her CU transcript.)

University/College:
_____________________________________________________________________

Course Title:
_____________________________________________________________________

Course Number: ________________  Semester & Year To Be Taken: ___________________

Please provide a brief description of the course:

How will this course enhance your understanding of leadership or your leadership skills? Please
provide a brief rationale for this petition. How does this course build leadership skills, enhance your
knowledge of leadership challenges and practices within a specific discipline, and/or develop your
understanding of leadership as a discipline?

Will the instructional/evaluative methods include any elements of service learning or experiential
learning? Describe any seminars, volunteer work, community projects, oral presentations, team teaching,
etc. included in the course.

I hereby certify that this information is accurate.

Student Signature and Date: ________________________________

Approved by and Date: ________________________________
Appendix B

Leadership Experience--Supervisor Suggested Feedback Topics

1. How did this student positively contribute to the organization?

2. Was this student accountable for all projects assigned to him/her? Did he/she meet the project goals, including quality, budget, and time?

3. Did the student have setbacks, and, if so, how did the student show resiliency and creativity in solving issues?

4. How well did the student respond to constructive feedback?

5. How did the student demonstrate leadership in his/her position?

6. Would you characterize this student’s experience as a significant leadership experience? If no, why not?
Engineering Leadership Program Portfolio

Appendix C
Engineering Leadership Portfolio Checklist by Semester

In the semester you take the Engineering Leadership Gateway Course OR, if you are a PLC student in ELP, the semester you take PLRC 1820:

- Start your ELP Portfolio by copying your ELP application into your portfolio.
- Write your electives plan (courses and planned year/semester). (Note: you will update your elective plan in the future, if you decide to take different electives.)
- Write how you will find and select your leadership experience.
- Send your portfolio to the ELP Director by December 1 or May 1 of that semester. You will receive feedback on your electives and leadership plan by the end of the semester.

After completing the Engineering Gateway course (or PLRC courses):

Every semester:

- Update your portfolio to include the mentor interactions you had during the current semester.
- If you attended any leadership seminars, update your portfolio to include reflections on these seminars.
- If you took a leadership elective during the semester, update your portfolio to include your reflections on your leadership learning from the course.
- Update your leadership electives plan, if needed.
- Update your leadership experience plan and execution. Add details (what, when, where) as they develop. (Per the portfolio requirements, you should be journaling your leadership experience on at least a monthly basis.)
- If you completed all of your electives, finish that section of your portfolio by adding the summary of the learning themes across the courses.

December 1 every year while you are in ELP (exception: if this is your last semester before completing your BS degree):

- Send your portfolio to the ELP Director. You will receive feedback on your ELP progress by the start of the spring semester to ensure that you are successfully executing all the ELP components and to help you improve your portfolio. (NOTE: You should be updating your portfolio every semester, but it is reviewed only once each year.)

In your last semester (or the semester you are completing your BS requirements if you are pursuing a concurrent BS/MS degree):

- By February 1 for May or August graduate (or October 1 for December graduate):
  - Complete the section on your mentor relationship and have your mentor add his/her feedback in the mentoring section of your portfolio. (Recommend asking your mentor at least one month in advance for his/her input.)
  - Complete the electives and seminar learning sections of your portfolio, if not yet completed.
  - Complete your leadership experience section and include your results, failures, leadership handoff, linkages to leadership course work, and any other significant learning.
  - Write the capstone synthesis section of your portfolio.
  - Review entire portfolio for grammar, punctuation, etc.
  - Send an electronic version in Word format to ELP Director. You will receive feedback on any required additions and improvements.
- By April 15 (or November 15):
  - Update your portfolio in response to the feedback received from ELP Director and ELP faculty.
  - Send the final electronic version in Word format to ELP Director.

Final decision on your ELP Certificate will be made by May 1 (or December 1).