

Proposal for CONE 4900 Independent Study*

Please work with the faculty member supervising your independent study to prepare the proposal below. Provide sufficient detail so that the CONE Curriculum Committee can evaluate the relevance as an engineering topics elective and determine if the planned effort justifies the number of proposed credits. This proposal must be submitted to the CCEE Advising Center before you enroll in CONE 4900.

Priority Review Deadlines: For Fall Semester – April 1; For Spring Semester – November 1

Student Information:

Name: _____ ID Number: _____
Classification: FR SO JR SR Email: _____
Adviser: _____

Preliminary Information:

Faculty supervisor: _____

Semester of the independent study: _____

Requested number of credits: _____

One (1) credit corresponds to about 48 hours of work (or 3-4 hours per week) in a semester.

Total credits requested here should match total hours of work in Question 4.

Will you work in a laboratory? **(mark one)** Y N

Have you completed the necessary safety training? **(mark one)** Y N NA

Description of Activities:

1. **Justification:** Briefly state the topic of the independent study and explain your motivation for proposing it.

Example: In my future career I will be working with a contractor that helps develop Transportation Management Plans (TMPs). Although there are courses in transportation engineering, there is not a class that provides insights about contractors' and consultants' roles in developing TMPs. By completing this independent study, I will gain knowledge about TMPs and the roles of the various parties in their development.

2. **Prior experience:** Explain any prior study or experience that has prepared you for the independent study you are proposing.

Example: I have learned about project management principles through my CONE classes and have taken CE 3550 on principles of transportation engineering. I also have had an internship with a contractor within their transportation group. These experiences can be utilized by this independent study opportunity to provide valuable experience for my professional career.

3. **Learning outcomes:** List the learning outcomes for the proposed independent study. In other words, explain what you will be able to do after the study is complete. Use words such as explain, compute, derive, design, and evaluate. Avoid terms that are difficult to quantify, such as understand, learn and know. Try to include terms from higher levels of [Bloom's revised taxonomy](#).

Example: 1) Develop survey/interview questions in regards to TMPs, 2) Interview contractors and summarize findings, 3) Capture common, or unique practices among contractors, 4) Analyze and determine best practices for TMPs, 5) Incorporate findings into a draft conference paper to be presented at the Transportation Research Board.

4. **Approach:** List the specific activities planned for the semester, including the steps, skills, and research required for the study. Include an estimate of the time required for each activity and be sure that the total number of hours corresponds to the number of credits requested. **In the task/hours breakdown, no one task should have more than 16-20 hours.**

<i>Activity/Task</i>	<i>Hours</i>

5. **Reporting progress and demonstrating achievement:** Describe how you will interact with your faculty supervisor during the term (weekly meetings, e-mail summaries, etc.) and identify the project’s deliverables—a written report, presentation, draft of a journal article, etc.--to be produced by the end of the semester. The deliverable must document your achievement of the outcomes listed under #3. *An electronic copy of the final report/deliverable should also be sent to Jenna Levendusky (jlev@iastate.edu) for the CONE Curriculum Committee.*
Example: I will meet with my faculty supervisor weekly throughout the semester. Before each meeting, I will provide a progress report via email that will outline what I have accomplished during the previous week and what my goals are for the next week. The deliverable for this study is a draft conference paper that highlights my findings, and will be submitted to the Transportation Research Board annual conference.

6. **Grading.** Students will earn a letter grade (A-F) upon completion of the Independent Study. Discussion with faculty supervisor regarding grading should be held as a part of the contract development.

Approval Signatures:

Student _____

Faculty supervisor SIGN _____

Faculty supervisor PRINT _____

Adviser _____

Adviser will not sign unless all tasks have less than 20 hours and the total is sufficient for the number of credits.

CONE Curriculum Committee Chair _____

*One-credit 4900s for the Learning Community requirement are exempt from using this form.