**Proposal for ConE 490 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 490. Priority review deadlines: Spring semester – November 10; Fall semester April 1.

**Student Information:**

 Name: Click or tap here to enter text. ID Number: enter text.

 Classification: enter text. Email: Click or tap here to enter text.

 Adviser: Click or tap here to enter text.

**Preliminary Information:**

Faculty supervisor: Click or tap here to enter text.

Semester of the independent study: Click or tap here to enter text.

Requested number of credits: Click or tap here to enter text.

 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 text N text

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

**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.*

1. **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 355 on principles of transportation engineering. I also have had an internship with a contractor within their transportation group. These experinces can be utilized by this independent study opportunity to provide valuable experience for my professional career.*

1. **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.](http://www.celt.iastate.edu/teaching/effective-teaching-practices/revised-blooms-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.*

1. **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.**

*Example:*

|  |  |
| --- | --- |
| ***Activity*** | ***Hours*** |
| *Literature review* | *18* |
| *Develop/practice interview questions* | *20* |
| *Setup interviews* | *4* |
| *Carry out interviews* | *10* |
| *Document interviews* | *16* |
| *Analyze and organize interview themes* | *10* |
| *Preliminary draft* | *16* |
| *Second draft* | *10* |
| *Revisions* | *8* |
| *Meetings/progress reporting* | *16* |
|  |  |
| *Total hours* | *144* |

1. **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.

*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.*

1. **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 490s for the Learning Community requirement are exempt from using this form.

Contract Revised 2/18