

E E/Cpr E/Cyb E 494

Instructors: Tony Moore & Bob Thompson

Why Portfolios?

A resume expresses your work in words. A portfolio expresses your work visually, with only necessary words.

We will refer to "portfolio" as any designed text and visuals (and other related media) that shows your design and engineering work to potential employers, academic programs, and other interested people.

- Reflect on experience and learn from process – assessment.
- Communicate past experiences more clearly and show how you can creatively communicate.
- Respond to unexpected opportunities of displaying work – no replacement for being ready now.
- Visual representation of your work.
- Job seeking & preparation, graduate school.
- Collect and save coursework in one place – organized documentation.
- Share examples of your work with advisors, faculty, mentors or potential employers.
- Demonstrate the knowledge, skills and attributes gained within and beyond the classroom.
- Master valuable technology skills.
- Create a valuable bridging tool for your next job.
- They do it in Engineering at MIT, Stanford, Dartmouth, etc!

EE/CprE/CybE 494 Course Information Sheet

Section	Day & Time	Location	Instructors	E-Mail	Phone
1	W 1:10 - 2:00	Coover 1011	Bob Thompson	rpthom@iastate.edu	294-3168
2	W 2:10 - 3:00	Coover 1012	Bob Thompson	rpthom@iastate.edu	294-3168
3	R 2:10 - 3:00	Coover 1016	Tony Moore	awmoore@iastate.edu	294-3485

***This class is supported by Canvas. Please login and look at modules, syllabus, etc.**

Learner Outcomes

By course completion, learners will:

1. create a professional portfolio as a tool to enhance career opportunities and assess the ECpE program;
2. reflect and articulate relationships between problem solving (engineering) and acquired knowledge in general education electives related to contemporary issues (ABET Criterion 3.j);
3. identify the use of resources that promote lifelong learning (ABET Criterion 3.i);
4. evaluate learning experience and how well it prepared them to meet the ECpE Undergraduate Program Objectives and Student Outcomes (ABET, Criterion 3 <http://www-archive.ece.iastate.edu/assessment.html>)
5. demonstrate the ability to communicate effectively (ABET Criterion 3.g) through written reflection;
6. show an understanding of professional and ethical responsibility (ABET Criterion 3.f).

Grading Policy

CprE/EE 494 is graded on an S/F basis and is a required course for graduation

1. **Required Attendance** - There are four required class sessions. This includes a presentation date that you will sign up for in class. Attendance of all four sessions is required for a satisfactory (“S”) grade.
2. **Syllabus Quiz** – Quiz, details, and deadline on Canvas
3. **Completed Portfolio** - All required artifacts requested in this packet must be included in the final portfolio product.

Academic Dishonesty - The Official Academic Misconduct Policy can be found at <http://www.dso.iastate.edu/ja/academic/misconduct.html>.

Accessibility Statement - Iowa State University is committed to assuring that all educational activities are free from discrimination and harassment based on disability status. Students requesting accommodations for a documented disability are required to work directly with staff in Student Accessibility Services (SAS) to establish eligibility and learn about related processes before accommodations will be identified. After eligibility is established, SAS staff will create and issue a Notification Letter for each course listing approved reasonable accommodations. This document will be made available to the student and instructor either electronically or in hard-copy every semester. Students and instructors are encouraged to review contents of the Notification Letters as early in the semester as possible to identify a specific, timely plan to deliver/receive the indicated accommodations. Reasonable accommodations are not retroactive in nature and are not intended to be an unfair advantage. Additional information or assistance is available online at www.sas.dso.iastate.edu, by contacting SAS staff by email at accessibility@iastate.edu, or by calling 515-294-7220. Student Accessibility Services is a unit in the Dean of Students Office located at 1076 Student Services Building.

Classroom Etiquette: Expectations for when class begins

1. Please give your fingers/eyes a break – NO electronics out (laptop, cell phones, MP3 players, etc.

2. Please engage yourself in the classroom topic – NO newspapers/textbooks/leisure reading.
3. Please be respectful of your instructor, guests and classmates – NO sleeping/snoring, etc.
4. Failure to follow classroom expectations could result in a failing grade for this class as you will be asked to leave.

EE/CprE/CybE 494 – Calendar

Jan. 22/23 Session 1. Introduction/Components/Examples

Jan. 29/30 Session 2. Rubrics/Writing your reflection

Final Version of your portfolio via e-mail is due **Friday, March 13, 2020.**

Mar. 25/26 Session 3 Reflect on the Portfolio

Apr. 1/2 Session 4 Presentation/Evaluation

Apr. 8/9

Apr. 15/16 (tentative)

Web Page Legal Stuff and Good Practices

Please review ISU's Copyright Policies, and use of Iowa State University's Marks:

<http://www.trademark.iastate.edu/policy>

http://www.techtransfer.iastate.edu/en/for_iowa_state/educational_resources/copyrights.cfm

Main Electronic Resources

<http://www.ece.iastate.edu/the-department/computing-support/>

Instructions on uploading content to ISU's Web servers

<http://www.it.iastate.edu/labsdb/>

Search for campus labs that have Web design software

Web Hosting Sites (suggested) Make sure only using what is free!!

- <https://www.wix.com/>
- <https://www.weebly.com/>
- <http://getbootstrap.com/>
- <https://www.krop.com/>
- <https://www.squarespace.com/>
- <https://seelio.com/>
- <https://wordpress.org/>
- <http://www.portfoliopen.com/>
- <https://carbonmade.com/>
- <https://portfolium.com/>

PORTFOLIO REQUIREMENTS CHECK LIST

- ☐ Name and Contact Information

- ☐ A welcoming/inviting front page
- ☐ Career Objective (not resume' style - your thoughts about your future goals)
- ☐ *Senior Design Project - Each project summary must include:
 - Description of project
 - Your role
 - Skills or knowledge gained
 - Link supporting documents
 - Big picture contribution

***A link to your 491/492 reports does not qualify as a project summary.**

- ☐ *Minimum of 3 more projects (in addition to Sr Design) - Each project summary must include:
 - Description of project
 - Your role
 - Skills or knowledge gained
 - Resources used

***A link to a lab report does not qualify as a project summary.**

- ☐ Internship/Co-op/Technical work experience (if applicable)
 - Duties and projects
 - Skills learned – technical and soft
 - Evaluations
 - Presentations
- ☐ Resume' – include research/published papers, awards, activities
- ☐ General Education Reflection (see rubric)
- ☐ Cumulative Reflection (see rubric)
- ☐ Ethics paper (from CPRE/EE 394)

***Reminder: You need to have a minimum of 3 projects **AND** your Senior Design project (4 total)**

Besides the above listed required items, we will be evaluating your professionalism on:
Creativity, Thoroughness, Visual Appeal, and Correct Grammar/Spelling

General Education Reflection

Please describe how your General Education Courses helped you to develop as a professional engineer. Write a reflection that incorporates your thoughts on each of the following questions.

- 1) What have you learned in your general education electives, which allow you to evaluate and formulate engineering solutions in problem solving and innovation beyond the technical aspects in problem solving? How do general education classes help you to think about an engineering problem?
- 2) Relate what you have learned in general education classes (**refer to at least two classes**) to seeing beyond the engineering solution in problem solving and innovation. What are some other dimensions to consider and what impact do they have in an economic, global or societal context?

***See general education reflection rubric on Canvas for guidance on meeting requirement.**

Cumulative Reflection

Reflect on your cumulative experience at Iowa State University. Remember to highlight learning experiences where you developed and/or improved your ability to communicate effectively, solve technical/engineering problems, use modern engineering tools, work effectively with peers on team-based projects/labs/tasks, and learn beyond classroom expectations. Here are some questions that can guide you as a part of your reflection:

- 1) How do you think ISU has prepared you to: Design systems or processes? Recognize, formulate, and solve contemporary engineering problems? Work in a team-based environment? Understand professional and ethical responsibilities?
- 2) In class projects & problem-solving tasks, did you draw upon information, research or experiences beyond what was provided in class to successfully complete your work? Please state which resources here and how they helped you to complete work (e.g. library resources, specific professional journals, experts in field, other students). How did learning activities outside of the classroom such as F.A.N., Student Orgs, Career or Study Abroad Fairs, Undergraduate Research Experience (REU), or other university programs help you to understand the importance of Lifelong Learning? Have you started to undertake any new learning to improve your ability to apply skills or knowledge to new problems and to develop confidence in taking risks? Please explain.

***See general cumulative reflection rubric on Canvas for guidance on meeting requirement.**

In the context of these questions, if you were to do your undergraduate work again, what things would you change?

