

ME 492 Overview

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Portland State University
ME 492 – January 2018

Outcomes of Capstone Project

Create a design that is desirable and transferable

- A desirable design satisfies client needs
- A transferable design is documented and verified so that it can be reproduced by others

Learn the Design process

- Phase gate model
- Using design process to guide engineering activities

Develop professional skills

- Teamwork
- Communication
- Decision-making

Learning Outcomes from ME 492

By the end of ME 492 you should be able to

- Develop a project contract to meet the requirements of the project sponsor and the requirements of ME 492-493.
- Use physical prototypes and/or computer simulations to explore design options and to demonstrate performance
- Communicate effectively in writing and orally.
- Make sustained and substantive contributions to your team.
- Act professionally in all interactions with team members, project sponsors, faculty and staff of the MME Department.
- Write a project progress report at the end of ME 492 to document the state your design.

Tangible Outcomes of ME 492

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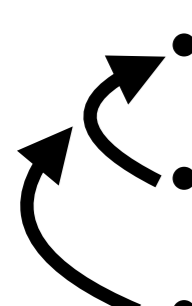
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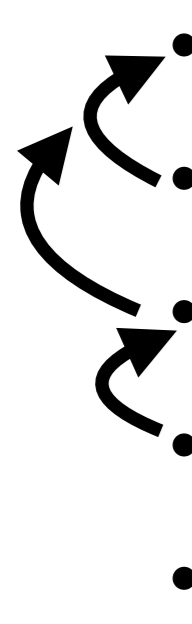
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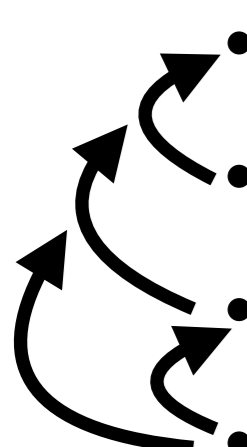
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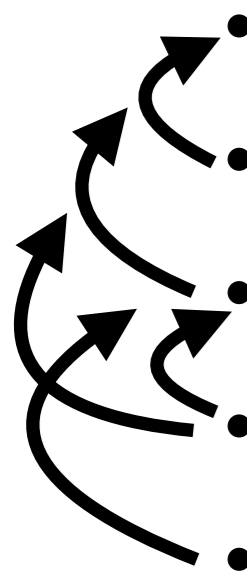
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By the end of the term

- Conceptual design report
- Design review – some time before start of Spring Term

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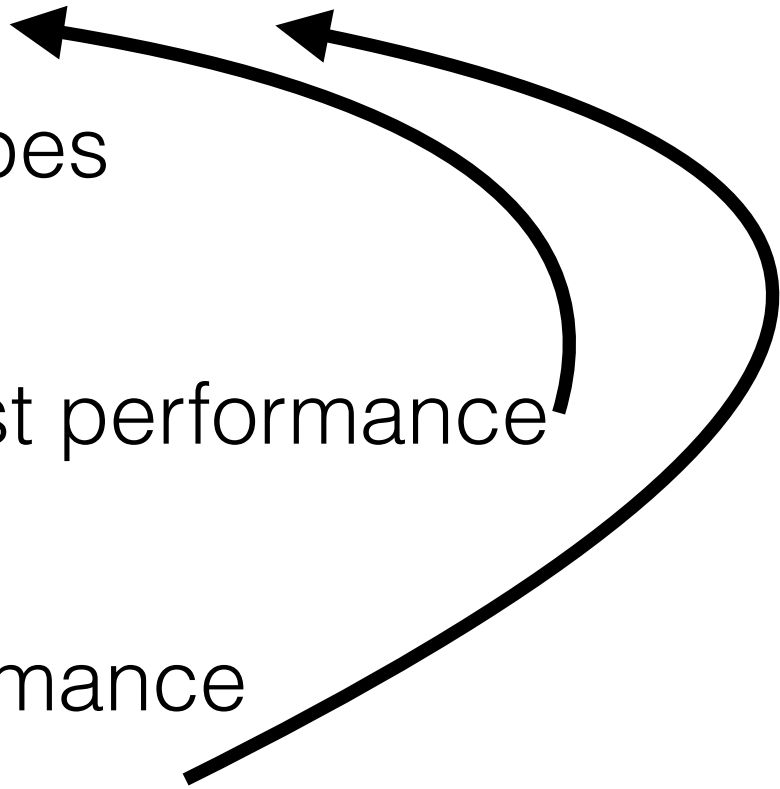
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- ▶ Poster for Capstone Showcase

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- ▶ Final presentation

Checklist for Week 1

1. Read notes for Lecture 1
2. Introduce yourself to your coach
 - Arrange a weekly meeting time
 - Introduce your project
3. Develop a team contract: due Jan 19
4. Contact your sponsor (if you haven't done so)
 - Arrange meeting to discuss customer requirements
 - Establish protocol for meetings
 - ▶ Desired frequency
 - ▶ Format: face-to-face, phone, live streaming