## B - Course Revision Form V. 7.2022 : Entry # 3682

**DEAN Decision**

Approved

**Today's Date**

09/16/2026

**EPC Decision**

Approved

**Today's Date**

10/14/2026

**SCHOOL EPC Comments**

Two committee members raised concerns about the feasibility of securing industry sponsors. One suggestion was to replace “industry sponsor” with the broader term “professional panel” to allow for flexibility if industry sponsorship does not materialize. The proposer provided additional details about a plan for how and when industry sponsors would be secured and outlined potential contingencies. However, the course remains firmly committed to industry sponsorship as a central component of its design and implementation.

We approve and request no changes.

**GEC Decision**

Approved

**Today's Date**

10/28/2026

**APIRC Decision**

Approved

**Today's Date**

10/30/2026

## Begin Form

**Today's Date**

09/06/2026

**Your Name**

Brian Bernard

**Your Email:**

bbernard@highpoint.edu

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**Are you a Department Chair?**

Yes

**By checking below, I certify that my department chair has seen and approved the course revisions that are in this proposal**

Yes

**Please select the appropriate school overseeing this proposal:**

Engineering

**When should this proposal take effect?**

Fall 2027

**Are you submitting multiple courses for revision from the same department?**

No, just one

**Please list all of the courses that you are submitting revisions for:**

| Course Prefix | Course Number | Course Title |
|---|---|---|
| MME | 4900 | Senior Design Project I |

**What would you like to revise?**

- Learning Outcomes

## Gen Ed & Academic Program Information

**Is this a revision to meet new Gen Ed requirements?**

Yes

**Which area(s) of Gen Ed does your proposal seek for approval?**

- Experiential Learning [EXP]

**Is this course part of an academic program?**

- This course does not currently fulfill academic program requirements

**Does this course, as revised, include any community engagement?**

Yes

**Is this course part of GoGlobal?**

No

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**Does this course count towards a major or a minor?**

Yes

**Please list the course(s) and whether they are required or electives for the major/minor.**

| Course Prefix/Number | Name of Major and/or Minor? | Required or Elective? |
|---|---|---|
| MME4900 | Mechanical Engineering | Required |
| MME4900 | Mechatronics Engineering | Elective |
| MME4900 | General Engineering | Elective |

**Is this course cross listed?**

No

**Choose the department designator for your course from the list below.**

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## Curriculum Review Information

**Please list all revised student learning outcomes, including Gen Ed outcomes, for this course in the box below.**

• Define a real engineering problem by working as a team with an industry sponsor to translate stated needs into engineering requirements and specifications.
• Research and apply relevant codes, standards, and prior art to constrain and inform a design.
• Generate and evaluate design concepts against realistic constraints (economic, safety, ethical, societal, and manufacturability) and select a justified design direction.
• Communicate project plans and design decisions through individual technical writing and team oral presentation to technical and sponsor audiences.
• Experiential Learning. Demonstrate knowledge gained through applied experiences or projects.

**Please list any revisions to units or content areas that will be required for all sections of this course in the box below.**

n/a

**If you have Gen Ed learning outcomes, please address the kinds of assessments you may use for each area that you are proposing the course be designated (i.e., Arts, Humanities, Diversity, etc.)**

See syllabus for full mapping of all student learning outcomes to their assessments. Below is only the Gen Ed mapping.

Experiential Learning (Gen Ed): Design Review, Final Proposal + oral defense

-The design review is a group oral presentation by student groups to the faculty instructor and the industry sponsors.
-Final Proposal is a written document that must be approved by the industry sponsor prior to submission to the faculty instructor.
-Oral Defense is an individual oral exam with the instructor, covering the material in their proposal, to ensure no students are able to coast to a good grade from their teammates' hard work.

**Please list any revisions to course policies that will be required for all sections of this course.**

n/a

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**If you would like to specify any revisions to requirements for how contact hours must be met for all sections of this course, please indicate below (e.g., if any experiential learning activities will replace seat time)**

n/a. Student meetings with their industry sponsors will normally occur during their out-of-class time.

**If this course proposal affects any other departments, please describe the consultation and approval that you've received and from whom in the box below.**

n/a

**Is there any additional information that you would like to provide for this proposal?**

- When should this proposal take effect? FALL 2027

- This online form is 3 pages long. Page 1 and Page 3 had questions I was able to answer. Page 2 was completely blank. If when reviewing this application, if it seems like I missed or skipped any information you need, this may have resulted from a bug in the form. Please let me know what is missing as soon as possible and I will send that to you separately.

Explanation - How is this course experiential?
MME 4900 Senior Design Project I is an experiential course in which students learn by doing authentic engineering work for a real external client. Every project in this course is sponsored by an industry partner, and student teams work directly with a practicing engineer from that company throughout the semester in an applied experience closely resembling an internship or undergraduate research project. Rather than solving textbook problems with known answers, students engage a genuine, open-ended need: they meet with their sponsor to understand the problem (Weeks 3–4), translate real-world needs into engineering requirements, research applicable codes, standards, and prior art, and generate and evaluate design concepts against the practical constraints their sponsor and their field impose, including economic, safety, ethical, and societal factors. Students demonstrate the knowledge gained through this experience at a formal Design Review presented to faculty and their industry sponsor (Week 12) and in a final design proposal defended at the end of the term (Week 15). Through this sustained, hands-on engagement with a real project and a real client, students demonstrate knowledge gained through applied experiences or projects (Experiential Learning).

**Sample Syllabus**

- Syllabus-F27-MME4900-SrDesignProject1.pdf