ENT4950 Registration Permission Form
Verification of Senior Design Objectives through Enterprise Experience

Major: MECHANICAL ENGINEERING

Date: _________________

Part A: To be completed by student.

Identify semester/year/CRN for appropriate section of ENT4950:

Student: _________________________________
ID#: M___________________________________
Primary major: ______ 2nd major/deg: ______
e-mail: ______________________@mtu.edu

Course: Semester/Year: CRN: e-mail: ______________________@mtu.edu
ENT4950 ____________ ____________
ENT 4960 ____________ ____________

Check if applicable:
[X] ENT concentration (EMEE Declared
☐) Enterprise Minor

Part B. To be completed by student and enterprise advisor. Form must be approved by your academic department prior to enrolling in ENT4950.

Director of School of MEEM: ____________
Enterprise Advisor: ______________________

Project Title: ______________________

Abstract: Outline the project scope and deliverables assigned to this student (attach additional pages as needed).

Preliminary Project Abstract
Final Project Abstract

SEE ATTACHED (ME PROJECT BRIEF TEMPLATE)

ABET Criteria Enterprise Advisor should check whether student will:

[X] 3 (a) Apply knowledge of mathematics, science and engineering.
[X] 3 (b) Design and conduct experiments, as well as to analyze and interpret data.
[☐] 3 (c) Design a system, component, or process to meet desired needs.
[X] 3 (d) Function on multi-disciplinary team(s) as demonstrated by the execution of a team project that is too large, complex, or diverse for a single person. Partition a project into tasks and lay out a project plan. Execute the project and produce the required deliverables.

[☐] 3 (e) Identify, formulate and solve engineering problems.
[☐] 3 (f) Demonstrate understanding of professional and ethical responsibility.
[☐] 3 (g) Communicate effectively.
[☐] 3 (h) Gain understanding of the impact of engineering solutions in a global, economic, environmental and societal context.

[☐] 3 (i) Recognize the need for, and an ability to engage in life-long learning.
[☐] 3 (j) Gain knowledge of contemporary issues.
[☐] 3 (k) Use the techniques, skills and modern engineering tools necessary for the practice of engineering.

Program specific criteria (please describe on back of this form)

Approved by:
Enterprise Faculty Advisor
Date

Approved by:
Academic Department
Date

Approved by:
2nd Major/Deg Academic Department
Date

Return completed from to Enterprise Program Office, IIS, 722 M&M.
Mechanical Engineering – Verification of Senior Design Objectives through Enterprise Experience
(ENT 4950 Registration Permission Form)

The Verification of Senior Design Objectives through Enterprise Experience form must be completed by each BSME-Enterprise concentration (EMEE) student prior to registering for ENT4950. The form is not complete until approved by the ME-EM department. The purpose is to ensure that the student’s participation in the Enterprise program represents a culminating design experience as required by ABET (equivalent to ME-EM Senior Capstone Design). The basic procedure to be followed by ME students is provided below.

Students should consult with their enterprise team advisor when defining the capstone-equivalent project they will be participating in. The completed form must be approved by the enterprise team advisor and the ME-EM Associate Chair for Undergraduate Studies. After the enterprise team advisor has signed the form, the student must submit the form to the ME Advising Center (2nd floor MEEM) for verification of pre-requisites by an academic advisor. The advisor will then submit the form to the ME-EM Associate Chair for Undergraduate Studies for review. The student will be enrolled in ENT 4950 when the form is returned with the Associate Chair’s approval. Dual degree students need departmental approval from both departments they belong to.

The following steps are required prior to enrollment in ENT4950.

1. Complete Verification of Senior Design Objectives through Enterprise Experience form.
2. The form must show the applicable ABET criteria addressed by the project (checked off by the enterprise advisor).
3. To be approved, the form must have an attached abstract/project brief that follows the required template for ME students. The project defined in this document should encompass both semesters of the project (ENT 4950 and 4960).
4. Form must be signed by the enterprise advisor prior to submission to an academic advisor.
5. The academic advisor will verify the following senior design readiness pre-requisite requirements are satisfied. The student should not check these off.
   • MEEM3900
   • MEEM3000 (concurrent pre-requisite)
   • MEEM3502 (concurrent pre-requisite)
   The above are the same pre-reqs required for MEEM 4901.
   • Additionally, at least two semesters of project credit are required for ENT 4950 readiness. These prior semesters must be on the same enterprise team as planned for ENT 4950/4960. Typically these are ENT 3950 and ENT 3960 (4 total semesters minimum on the same enterprise team including the capstone project semesters).
6. The academic advisor will forward the completed form to the Associate Chair for final approval.
7. When the department-approved form is received back, an academic advisor will enroll the student in ENT4950. Students will not be enrolled in ENT 4950 prior to the completion of this process.

The approved form will be retained on file in the ME Advising Center and will also be submitted (normally via emailed electronic copy) to the Enterprise program office. It is recommended that this form be completed during the semester prior to taking ENT4950 in order to facilitate the registration process. The latest the form should be submitted is the end of the first week of classes of the semester in which ENT4950 is to be completed.

All that is typically required for ENT 4960 registration for the second semester of the capstone-equivalent project is the usual signed Enterprise Enrollment (instructor) Approval form or equivalent. However if there any significant changes to the project definition – or if the original submission did not cover the second semester of the project – the above department approval process can be required for ENT 4960 as well.

Recognizing that it may not be possible to accurately and precisely predict the design project progress/outcome in this timeframe – i.e. the design project scope and/or deliverables may change over the course of the two project semesters – amended Verification of Senior Design Objectives through Enterprise Experience forms must be prepared and submitted through the above process again, if necessary. The final form on file at the conclusion of the Enterprise project course sequence must represent the project and deliverables as completed by the student.

Questions can be directed to Danise or Ryan in the ME Advising Center (204/205 MEEM, inside the ELC).

2.4.2013