

EM 675

Engineering Management Masters Project

Spring 2025

Class Time: Tuesdays, 6pm – 8pm

Location: TEX02117 or via Zoom

Instructor: Ken Gregory

Contact: kegrego4@ncsu.edu

Office Hours: By appointment via project status updates (see Syllabus details)

Version: Spring Semester 2025; EM 675 001, 601

Description:

Individual or team project work with faculty mentorship in engineering management resulting in written report and oral presentation. This is one of the approved courses to fulfill engineering management practicum requirements. Maximum of three (3) credits can be earned for MEM degree with the exception of Professional Practice concentration students who may earn six (6) credits. Practical experience in applying EM knowledge to real-world problems at an industrial site or at NC State.

Overview:

As Engineers, Managers, and Leaders (either current or aspiring), we are often asked to “improve” an element of the business. This can be focused on many scenarios, such revenue, process, cost, human resources, organizational capability or design, offering or product performance, quality, service, customer experience, data, Information Technology, etc.

You will be exposed to frameworks that you can apply across several scenarios as you progress in your career as well as to the project or operations that you currently manage.

In addition, you’ll be expected to understand where you and your organization fit within the larger enterprise and how they serve the customer. This will assist you as you consider various career objectives and opportunities in the future.

More specifically to your project, you’ll be expected to promote the creation of high-quality, executive-level deliverables. As a Project Manager you are expected to communicate status of your projects to all level of executives and senior managers, many of which may not have subject matter expertise in the area that you’re focused.

You’ll demonstrate this through deliverables such as an executive summary, periodic status updates of your project, a final report, and a final presentation, in which you’ll present the outcomes of your project to a panel of industry and academic leaders.

Course Delivery and Structure

Meeting times: We will plan to meet weekly on Tuesdays at 6pm when in person and via Zoom or other video conferencing vehicle for those working remote as well as the class periods in which in person is deemed unnecessary.

It's expected that you attend and actively participate in the sessions, as I aim to simulate a working environment as closely as possible.

Project Status Updates: I will provide options to schedule project status updates. It will be up to the student to determine the frequency (no more than weekly, and no less than monthly) of their project status updates.

The options will include a "calendly" link in which you can schedule time with me virtually as well as office hours in person on Tuesdays and potentially Thursdays. This will become more clear as we get started in the class.

Deliverables:

- Please monitor WolfWare to understand the assignments, deliverables, and due dates to submit.
- Deliverables will include:
 - o One page project executive written summary
 - o One page project summary (presentation)
 - o Homework assigned regarding where you fit within the organization
 - o Project status update(s)
 - o Final Project Report (written)
 - o Final Project Presentation (written)
 - o Final Project Presentation (presented to Panel)

Grading:

The grading structure for this course is Pass/Fail. You will see "S"(satisfactory), "U" (unsatisfactory), or "I" (incomplete) in your transcript. Please see details at <https://policies.ncsu.edu/regulation/reg-02-20-15/>.

Course Policy and Procedures:

Attendance

Attendance is required for class meeting, lecture, and discussion time. Any student that cannot attend must notify the instructor in advance as well as include a planned commitment on how they will catch up with the content and send an email confirmation that they have reviewed the content. Discussing an absence in advance with the instructor is encouraged such that the student derives the most value from the content.

In a scenario of special circumstances (family illness, prolonged travel, business travel, etc), you must inform the instructor in advance.

Late submissions

Assignments / deliverables will be due to be submitted in Moodle by midnight on the date the assignment is due. In a professional setting, late submissions are not encouraged, however in situations must be

dealt with and recovered from as a course of operations. Patterns of late submissions can become a subject of performance assessment and should be avoided. Therefore, late submissions will not be accepted without prior approval from myself. A pattern of exception requests will not be accepted.

Project status updates will be due by midnight on the date PRIOR to our 1/1 meeting to cover the status update. This is both good practice (preparation) as well as respectful as you progress in your career and start to provide updates to busy senior executives.

Use of Artificial Intelligence

The use of Artificial Intelligence tools (such as ChatGPT, Claude), are permissible to use as STARTING POINTS of thought generation. It is not acceptable to “cut and paste” the output as the deliverable. In addition, each submission will be screened for unacceptable application of artificial intelligence input.

When the use of artificial intelligence sources are used, they must be acknowledged as reference, just like any other research or information document, media, or source would be acknowledged in both an academic and professional setting. Copyright infringement is not acceptable.

Collaboration

In an industry setting, collaboration is necessary. I encourage you to leverage your colleagues, network, mentors, and co-workers to collaborate and partner on achieving high quality results. However, it is not acceptable to pass anybody’s input, work, analysis, or contribution on as your own. It is poor form, unprofessional, immoral, unethical, disrespectful, and could even be subject to legal action.

Use of External Sites/Tools

Use of editing tools, such as “Grammarly” for spelling/grammar/conciseness are permissible in assisting with production of content, however such use should be disclosed, as well as the purpose it was used for (such as spelling, grammar, clarity, similarity) and cited as being utilized in a footnote, our source acknowledgement.

Posting of Course Material to locations accessible to populations not in the class

Posting Course materials to the internet, sites such as CourseHero, Chegg, and the like, personal collaboration sites (such as BOX), and via social tools (email, social sites, professional networking sites) is forbidden without express written permission from myself. Failure to do so constitutes a violation of the Academic Integrity Policy and will be reported

Academic Integrity

It is expected that the student will conduct themselves in accordance with the Pack Pledge as well as according to the student code of conduct.

Violations of academic integrity will be handled in accordance with the Student Discipline Procedures ([NCSU REG 11.35.02](#)).

Students are responsible for reviewing the NC State University Policies, Rules, and Regulations (PRRs) which pertain to their course rights and responsibilities, including those referenced both below and above in this syllabus:

- Equal Opportunity and Non-Discrimination Policy Statement <https://policies.ncsu.edu/policy/pol-04-25-05> with additional references at <https://oied.ncsu.edu/divweb/policies/>
- Code of Student Conduct <https://policies.ncsu.edu/policy/pol-11-35-01>

Data Privacy

Students may be required to disclose personally identifiable information to other students in the course, via, digital tools, such as email or web-postings, where relevant to the course. Examples include online discussions of class topics, and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

Digital Delivery

Class content delivery will include video conference sessions using Zoom, and will be recorded for the benefit of the student. Students will be given the opportunity to opt out if there is concern regarding recording, however there is no intent to use recordings beyond the course nor current semester.

Students with Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Disability Resource Office at Holmes Hall, Suite 304, 2751 Cates Avenue, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (NCSU REG 02.20.01).

Course Continuity

To ensure course continuity, changes made to the method of instructional delivery, course structure, course schedule, number of assignments, grading or other aspects of the course after the start of the term should be communicated to all students in written form (e.g., dated syllabus revision or syllabus addendum) when course changes are implemented.