

MGT 411: Senior Design 1
Research, Business Consulting & Entrepreneurship Tracks
Stevens Institute of Technology, School of Business
Syllabus Fall 2023

Course Summary	Senior Design is a unique, two-course experience – mgt411 in the fall and mgt412 in the spring – that involves you working in teams on a real-world project related to one of three tracks (research, business consulting or entrepreneurship). Guided by an experienced advisor, your project will challenge you to apply the knowledge and competencies you have acquired during your time at Stevens. A university-wide Innovation Expo will be held at the end of the year to showcase and celebrate your work.
Faculty Advisors and Point of Contact for Course	<p>Once you select your track and determine your project, you will be assigned a faculty advisor who will be your primary point of contact for the course. Until your advisor is determined, you can feel free to reach out to any advisor with questions.</p> <p>Ann Murphy (course coordinator) – ann.murphy@stevens.edu Zvi Aronson - zvi.aronson@stevens.edu Erin Dempsey – erind92@gmail.com Theresa Howard – theresa@thePressRepublic.com Khalidoun Khashanah – khashanah@stevens.edu Siyuan Ma - sma13@stevens.edu Jay Woodruff - woodruff.jay@gmail.com</p>
Class Times & Course Schedule	This course is scheduled as a lecture with a recitation. For practical purposes, you should consider it as one time block on Mondays 10:00 a.m. – 12:30 p.m. Until advisors are assigned, we will use class time to meet as an entire class or in tracks. After advisors are assigned, most class time will be used for teams to meet with their faculty advisors. Course Schedules are provided on the Track Supplements to the syllabus.
Office Hours	Your advisor will inform you of office hours. In addition to the published office hours, they are available for meetings upon request.
Meeting	MGT411 will meet in person. Location will be the classroom designated to your particular advisor.
Contacting Advisors	Advisors will let you know how they prefer to be contacted. Email addresses above are fine, but in some cases advisors may ask you to contact them through Canvas.
Recitation Sections and Canvas	Each advisor has their own unique recitation section. Once your advisor is determined, you will be transferred into that advisor's recitation section if you are not already in it. This may take some time. Thus, until further notice, please rely on the MGT411A Canvas, not the Canvas shell for your recitation section.

Learning Objectives

Major Learning Objectives of the Senior Design courses are to provide:

- an integrative, ‘capstone’, experience that combines what students have learned in other courses;
- a “real- world” project challenge with more scope than what students have time for in a traditional course;
- a problem-solving opportunity, including developing a new business to address a market need (entrepreneurship), helping a client with a business need (consulting), or creating new knowledge through an empirical, data-driven study.
- an opportunity to further develop important skills, especially in the following areas:
 - Communication – Writing and Presentation
 - Team collaboration
 - Project management
 - Analytics
 - Research (note all tracks have some degree of ‘research’ involved)

Some Important Course Specifics

Finding a Team:

Students should form teams of 5 students. You can select your own team. Students who do not have other students with whom they want to form a team (or do not have a team of 5), advisors will work with you to create a team of 5 by combining partial teams. Think carefully about your team as you will be working with them for the entire year.

Selecting a Track:

Each team will work in one of three different tracks and will need to inform faculty advisors of their selection during the first couple of class periods. The tracks are as follows:

1. ***research track*** – conducting a real data-driven study to address an important research question in a discipline of your choosing.
2. ***entrepreneurship track*** - developing a real start-up business.
3. ***consulting track*** – helping a real organization (the client) with a pressing business challenge.

Students are allowed to pursue any of the tracks. The Program Director of the Quantitative Finance program (Professor Calhoun) recommends QF students take the research track.

Determining your project:

All projects should be determined by the end of September, earlier if possible. While the advisors will guide you, it is ultimately the responsibility of the student to determine your project. How you go about doing that depends on your track.

For the research track, it can happen one of two ways. First, the students will propose their research project idea to the faculty advisors. This may initially be a set of research questions students wish to examine. Students should also propose the data that they will use (if existing) or collect (if not existing), and their initial ideas for how they plan to analyze that data. Second, faculty may propose research project ideas, potentially including related datasets, that the students may consider.

For the entrepreneurship track, the students will propose their startup idea to the faculty advisors. Not all startup ideas will be approved. Where needed, advisors will work with students to modify the idea to make it a more viable project.

For the consulting track, a list of possible projects and project descriptions will be made available to the

students during the second week of the course. Students may also have connections with organizations and offer projects alternatives. Each team will rank order their preferences for projects and projects in the most equitable manner possible. Once projects are determined, each project will be assigned an advisor. All of this should be completed by the end of the September, and you can expect to start work on your projects and begin advisor meetings around the start of October.

Innovation Expo:

The major goal for the Senior Design experience is to exhibit your team work as part of the Innovation Expo to be held late April 26, 2024. On that day, students from across schools and departments at Stevens exhibit their projects to the Stevens community as well as to many visitors (past years attracted as many as 1500 visitors). While projects from each academic program and school will be a bit different, all of them will be team-based and focused on solving problems.

Ansari Pitch Competition:

All teams are eligible to participate in the Ansari pitch competition. This is a ‘shark tank’ style challenge where teams will be given 3 minutes to pitch their project to a panel of judges. The competition is geared more towards entrepreneurship projects, so teams in that track are expected to participate. However, in the past, projects in both the research and consulting tracks have modified their projects to fit more with the competition and have done quite well. In early April, there will be semi and quarter final rounds. On Innovation Expo day, the final ten teams will compete for cash prizes.

Other select deliverables:

Specific deliverables and assignments will be determined by the track and faculty advisor. All teams will be expected to present their work. It will vary but most teams across tracks present about three times during mgt 411 – e.g., a project proposal presentation during the beginning of the course, a midpoint presentation, and a final presentation at the end of fall semester. All students are also required to complete an evaluation of their fellow team members and a self-reflection paper. Finally, faculty advisors may require other deliverables (e.g., team and/or individual reports and papers) based on the nature of the project. For example, the startup and business consulting teams may conduct market research through interviews and/or surveys. The research teams may need to submit results of data analysis or a mid-way client report. More specific information about deliverables, along with how the course grades will be determined, can be found in the syllabus supplement for each track.

Pedagogy

Multiple methods will be used throughout the course including readings, short lectures, class discussions, guest speakers, short individual and group assignments, team presentations, and a final team report. We will use our regularly scheduled class meeting times nearly every week, but many weeks you will meet with professors as a team in lieu of meeting as a class. See course schedule for details.

Relationship of Course to Rest of Curriculum:

The course is a required course for all business students and should be taken during fall of your fourth year. Some students such as those in AMP or for other reasons may be approved to take the course in their third year. It is a capstone experience, designed to integrate and apply concepts learned in other courses to a real-world project.

Student Responsibilities

This is a non-traditional course that requires students to work more independently than typical courses. In particular, you should keep in mind the following expectations and responsibilities:

- Students are responsible for forming teams and generating their own project. While faculty will do their best to help identify possible projects, students are responsible. Identifying a good project is one of the critical parts of the senior design experience.

- While time will be provided during many weekly class meetings, students are required to meet in teams, outside of class, for at least 2 hours per week to work on their projects. The bulk of your learning and your efforts will be outside of the assigned class periods. Please plan this time into your schedule. It is not acceptable to expect that all team meetings will happen with the advisor, as this is usually a short 20-30 minute meeting where the team provides the advisor updates and next steps are discussed. The actual project work needs to occur outside of advisor meetings.
- Students are expected to conduct themselves honestly, respectfully and professionally when they engage with members of the client organization and their customers.
- Working with students from other programs outside the School of Business is possible and can be highly rewarding. To do this, there are certain requirements. Specifically: (1) there must at least four business students assigned to the project; (2) the business students must attend MGT411 including meeting with their MGT411 advisor regularly; (3) the students on the team from other departments will need to be registered for their equivalent senior design course and fulfill the requirements for that course. In unique situations, students may get approval to take MGT411 as a substitute for their equivalent senior design course and that approval needs to come from their department and school.

Professional Conduct

We are expected to conduct ourselves in a professional manner, inside and outside the classroom while working on MGT411/412 projects. Inside or outside the classroom, professional behavior does not include things like texting, looking at a screen that is not related to the immediate discussion, talking while others are making comments, mobile phone sounds, being late, leaving early, failing to return emails promptly, being unprepared, and being a passive observer instead of an active participant. Please remember that when you work on these projects outside of class, you are representing not only yourself as a professional but also the Stevens community. Each of us will act professionally and we expect our classmates to do likewise. It takes all of us to create a learning atmosphere where the best ideas can be created and understood.

Grading Components for MGT411

The specific grading components are determined by the faculty advisor and will represent a mix of individual and team level work. Note that participation and attendance is an important part of this experience. Think of it similar to an internship – it's hard to do well if you don't show up for work.

Due Dates and Submission Procedures

All assignments are to be submitted the day that they are due. See course schedule for specific due dates. Late penalties may be assigned to late work.

Grading Policy:

Based on your final percentage, grades will be allocated as follows:

Grade	Score	Grade	Score
A	93-100	C +	77-79
A-	90-92	C	73-76
B+	87-89	C-	70-72
B	83-86	D+	67-69
B-	80-82	D	60-66
		F	< 60

Relationship of this Course to the Rest of the Curriculum

In the process of planning and executing a real-world project, students will put into practice the management skills they have been learning throughout their undergraduate program. They will draw upon organization behavior, management, strategy, marketing and accounting/finance concepts as they execute their project and they will learn to translate their academic insights into practical action.

Academic Honesty Policy:

Enrollment into the undergraduate class of Stevens Institute of Technology signifies a student's commitment to the Honor System. It is the responsibility of each student to become acquainted with and to uphold the ideals set forth in the Honor System Constitution. Specific student responsibilities include:

- Maintaining honesty and fair play in all aspects of academic life at Stevens.
- Writing and signing the pledge, in full, on all submitted academic work.
- Reporting any suspected violations to an Honor Board member or to the Dean of Student Development.
- Cooperating with the Honor Board during investigations and hearings.

Pledge of the Honor System

The pledge signifies that the work submitted by a student is indeed his/her own. There is one designated pledge to be used for tests, homework assignments, lab reports, and computer projects. The pledge shall be written in full and signed by the student on all submitted academic work. Any references used (including texts, tutors, classmates, etc.) should be listed below the written pledge.

"I pledge my honor that I have abided by the Stevens Honor System."

Track Supplements to Syllabus:

There is a syllabus supplement for each of the three tracks. Please review them for information about the tracks. It will help you select the track you want to pursue and will give you a better sense of course expectations including grading and course schedule.

Changes to the Syllabus:

This course syllabus is a general plan for the course; deviations announced to the class by the professor may be necessary.

Inclusivity

Stevens Institute of Technology believes that diversity and inclusiveness are essential to excellence in academic discourse and innovation. In this class, the perspective of people of all races, ethnicities, gender expressions and gender identities, religions, sexual orientations, disabilities, socioeconomic backgrounds, and nationalities will be respected and viewed as a resource and benefit throughout the semester. Suggestions to further diversify class materials and assignments are encouraged. If any course meetings conflict with your religious events, please do not hesitate to reach out to your instructor to make alternative arrangements.

You are expected to treat your instructor and all other participants in the course with courtesy and respect. Disrespectful conduct and harassing statements will not be tolerated and may result in disciplinary actions.

Name and Pronoun Usage

As this course includes group work and class discussion, it is vitally important for us to create an educational environment of inclusion and mutual respect. This includes the ability for all

students to have their chosen gender pronoun(s) and chosen name affirmed. If the class roster does not align with your pronouns and/or name, please inform the instructor of the necessary changes.

Religious Holidays

Stevens is a diverse community that is committed to providing equitable educational opportunities and supporting students of all ethnicities and belief systems. Religious observance is an essential reflection of that rich diversity. Students will not be subject to any grade penalties for missing a class, examination, or any other course requirement due to religious observance. In addition, students will not be asked to choose between religious observance and academic work. Therefore, students should inform the instructor at the beginning of the semester if a requirement for this course conflicts with religious observance so that accommodations can be made for students to observe religious practices and complete the requirements for the course.

Mental Health Resources

Part of being successful in the classroom involves a focus on your whole self, including your mental health. While you are at Stevens, there are many resources to promote and support mental health. The Office of Counseling and Psychological Services (CAPS) offers free and confidential services to all enrolled students who are struggling to cope with personal issues (e.g., difficulty adjusting to college or trouble managing stress) or psychological difficulties (e.g., anxiety and depression). Appointments can be made by phone (201-216-5177), online at <https://stevensportal.pointnclick.com/confirm.aspx>, or in person on the 2nd Floor of the Student Wellness Center.

Emergency Information

In the event of an urgent or emergent concern about your own safety or the safety of someone else in the Stevens community, please immediately call the Stevens Campus Police at 201-216-5105 or on their emergency line at 201-216-3911. These phone lines are staffed 24/7, year-round. For students who do not reside near the campus and require emergency support, please contact your local emergency response providers at 911 or via your local police precinct. Other 24/7 national resources for students dealing with mental health crises include the National Suicide Prevention Lifeline (1-800-273-8255) and the Crisis Text Line (text “Home” to 741-741). If you are concerned about the wellbeing of another Stevens student, and the matter is not urgent or time sensitive, please email the CARE Team at care@stevens.edu. A member of the CARE Team will respond to your concern as soon as possible.