

BMED 4801 Syllabus

Medical Industry Engagement, Galway, Ireland 2026, Study Abroad Program, 1 Credit

Class Day(s), Time, Galway, Ireland

Instructor Information

Instructor	Email	Office Hours & Location
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General Information

Description

This study abroad course offers students the opportunity to explore the biomedical engineering profession through direct engagement with industry leaders and organizations in Ireland. Students will gain firsthand exposure to the “Medical Technology Landscape,” examining the complex history, relationships, and logistics that shape the field. Through site visits, discussions with professionals, and reflective assignments, students will broaden their understanding of the diverse roles and functions within biomedical engineering industries—insights that can inform future job and internship searches.

The course emphasizes professional growth by strengthening oral and written communication, teamwork, and intercultural collaboration. Students will develop strategies for building, monitoring, and sustaining relationships with industry partners while building confidence in their ability to contribute meaningfully in professional environments. By the end of the program, participants will not only understand the global impact of biomedical engineering but also leave with enhanced professional skills, expanded networks, and a clearer vision of their potential career pathways.

Pre- &/or Co-Requisites

PR: Acceptance to the Galway, Ireland BME study abroad program. Sophomore status.

Course Goals and Learning Outcomes

- To explore the connections among the complex, inter-relationships, history, and logistics which created the “Medical Technology Landscape” in Ireland
- To arouse students’ curiosity about numerous roles and functions within these organizations that may be of interest in their job and internship searches
- Strengthen students’ professional oral and written communication and teamwork skills
- Develop professional confidence
- Create a strategy for monitoring and managing relationships with industry partners

Course Requirements & Grading

Assignment	Weight (Percentage, points, etc.)
Professional Literature Review	10%
Professional Communication assignments	15%
Industry Presentation	25% (12.5% each presentation)
Industry Visit Results & Discussion Report	25% (12.5% each report)
Attendance/Active Participation in industry visits	25% (12.5% each visit, all or nothing)

Description of Graded Components

1) Professional Literature Review

You will read and synthesize the information from professional and scientific publications. In this literature review, you will explore one of the companies that you may have the opportunity to visit this summer. This review will include a discussion of:

- a. Company background: Mission, vision, goals, history, milestones, of company; controversies involving company, products, patents; company ratings
- b. Locations: why (and when) Ireland; what and why other locations
- c. Product line(s), patent(s)
- d. Potential roles and careers available
- e. Alumni employed at company

2) Professional Communication Assignment, Work Values Exploration, and Response to Request for a Proposal

One company representative recently likened a resume to a response to a request for proposals (RFP). You will first complete a work values inventory and the Clifton StrengthsFinder to explore what the types of work environments, tasks, and cultures you prefer. Then, you will select one position from a selection of sample job postings provided by employers. This position should be one for which you would be interested in applying after graduation. Finally, you will compose two items: 1) a resume/response to proposal, edited to respond directly to the job posting you selected; 2) a reflective activity that explores what you think about the work inventory results, the Clifton StrengthsFinder results (and readings), and how those results relate to the position you selected, the parts of your response to RFP you needed to adjust, and why and how you adjusted those parts.

Work Values Exploration Inventory Link:

https://www.onetonline.org/find/descriptor/browse/Work_Values/

For this assignment, you may create EITHER a video cover letter and a LinkedIn profile (only an option if you do NOT already have a LinkedIn profile). In the video cover letter, you will first review your chosen sample job posting (from the prior assignment) and the feedback on your

response to RFP/resume. Outline the content of your cover letter. Then, you will create a video cover letter that tells the story of your professional skill set and career path as relates to the sample job and resume. While recording your video cover letter, you should wear professional clothing as this video cover could be shared with an employer.

If you do not already have a LinkedIn profile and choose to create one, you will first review two short articles or videos on the features of an effective LinkedIn profile (to be provided to you). Then, you will review the feedback on your resume/response to RFP from the first assignment. Finally, you will create your LinkedIn profile and contact X professionals with whom you have already met in person to begin building your network.

3) **Industry Visits:**

a) **Participation**

This is a professional industry course. As such, punctuality, attendance, and active participation are required on industry site visits. To earn full credit for site visit attendance for each day, you must: arrive on time (defined as being in your seat, materials out, ready to go at the starting time), engage in class discussions (either via verbal conversation, nonverbal engagement, and/or active notetaking), and dress appropriately for the occasion.

b) **Presentation**

Students will work in teams to prepare a professional presentation for each industry site visit. The purpose of these presentations is to reflect on and analyze the company, its technologies, operations, and the role of biomedical engineering (or relevant engineering principles) within the organization. Presentations should go beyond simply describing the visit and should include research about the company, its products/services, underlying science and engineering concepts, manufacturing or operational processes, market needs, and key takeaways from the experience. Students are encouraged to connect observations from the visit to concepts discussed in class and to critically evaluate the impact of the organization within the industry. Each presentation should be clear, professional, visually organized, and supported with appropriate references, images, or data where relevant.

c) **Report**

In addition to the presentation, each team will submit a written report for each industry site visit. The report should provide a more detailed and in-depth analysis of the company, technologies, engineering principles, manufacturing or operational processes, and the broader impact of the organization within the industry. Students should incorporate information gathered during the visit along with additional independent research from credible sources. The report should include thoughtful discussion, technical details, analysis of observations, and connections to course concepts where applicable. Proper organization, professional writing, citations, figures/tables (if relevant), and references are expected.

The report should not simply be a written version of the presentation slides. While the presentation is intended to provide a concise, visual, and high-level summary of the visit, the report should expand significantly on those ideas with deeper explanations, technical detail, critical analysis, and supporting evidence. Students are expected to demonstrate additional insight and research in the written report beyond what is presented orally.

Grading Scale

Your final grade will be assigned as a letter grade according to the following scale:

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

Course Materials

Course Text

Rath, T. (2007). *StrengthsFinder 2.0*. Gallup Press: Washington, D. C.

Selected articles from <https://www.advamed.org/newsroom/industry-news> and other similar publications

Selected articles/videos on creating an effective LinkedIn profile

Additional Materials/Resources

Business casual and/or professional dress; and/or clean room dress for industry visits

Course Website and Other Classroom Management Tools

Assignments, along with asynchronous discussion boards, will be submitted through Canvas. Additional course readings, grading rubrics, and resources will also be posted there.

Course Expectations & Guidelines

As stated through this syllabus, the environment is to be professional. You will thus need to arrive on time (which is actually early) each day, and dress appropriately for the occasion. “Appropriately” means business casual, business professional, or clean room dress for site visits. Business casual dress is required for class sessions featuring a guest speaker.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic Honor Code, please visit <http://www.catalog.gatech.edu/policies/honor-code/> or <http://www.catalog.gatech.edu/rules/18/>.

Any student suspected of cheating or plagiarizing on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/>, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Attendance and/or Participation

Excused absences must be documented and presented to me upon return to class. Any unexcused absences will result in a loss of attendance and participation points for the day. Team presentations may not be made up, due to the nature of the assignment. As a professional courtesy to our industry partners, industry site visits may not be made up or rescheduled. Inform me in the first week of class if you will be observing

any religious occasions for which you may miss class. Finally, you will be required to attend classes on Memorial Day, as it is only a U.S. holiday.

Collaboration & Group Work

For the Company Presentation project, you will work in groups of 4-6 students. This assignment is the only assignment for which you will be encouraged to collaborate in this class. We encourage peer review of your other, individual assignments, however the Company Presentation assignment is the only one in which you may submit teamwork. Other assignments must be entirely your own individual work, with only review/editing suggestions coming from your classmates.

Extensions & Late Assignments

Late work and extensions are not permitted, unless you have documented emergency.

Student-Faculty Expectations Agreement

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See <http://www.catalog.gatech.edu/rules/22/> for an articulation of some basic expectation that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Student Use of Mobile Devices in the Classroom

Laptops are permitted in the classroom for note-taking purposes ONLY on days we will not have a guest speaker. If, however, laptops lead to nonparticipation in the course, this policy may be reversed. As with any professional setting, phones must be silenced and refrain from texting.

Additional Course Policies

Treat guest speaker days as site visits. Ask informed questions. Maintain a polite and courteous environment.

Campus Resources for Students

- *Information from UGI about wifi adherence, emergency resources from GIT Education Abroad will be added here.*

How to Succeed in this Course

Invest yourself fully in the process. To make the most your time at GIT, you will need to begin engaging with employers before your senior year. This course prepares you to make the most of the interactions. The more fully you give yourself over to the career exploration and planning process, the more you will get out of this course!

Course Schedule:

Industry visits	Group number	Visit date
CURAM	1	May 22 nd
Medtronic	2	May 22 nd
Medtronic	1	June 12 th
Boston Sci	2	June 12 th

The class will be divided in to two groups of 30-35 students. You will receive an email to know your group assignment. You can talk to your classmates and switch groups if both parties agree. You must report that to us before the start of the semester. Once we send the lists to the companies we will not be able to change the lists. The list of names and group number will be emailed to all class participants early April.