

Dear Potential Senior Design Sponsor:

Thank you for your interest in supporting and participating in a senior design project with a group of senior engineering design students from the Texas A&M University Biomedical Engineering Department (BMEN). The senior design experience is an extremely important part of our curriculum, and collaboration with external clients is a key element of the program.

This letter provides details of specific aspects of sponsoring a senior design team. The information below and in the attached documents (Attachments 1 through 5, incorporated as part of this letter agreement describes) may be helpful in understanding the course topics covered and expectations of students for meeting course requirements.

There also is a BMEN website, which contains an online project proposal submission portal and additional information: <http://engineering.tamu.edu/biomedical/academics/seniordesign>; (NB: @July 2018 - web site revisions ongoing, and this URL may change in the future).

BMEN TEAM ROLES:

- Starting with the preliminary project description provided by the sponsor (see Attachment #1), student teams will work with the sponsor to initiate and execute the project.
- Students work in small teams (3-6 students) for a two-course sequence (e.g. Fall/Spring, or Spring/gap/Fall). Students are expected to complete the two courses following one of these two sequences, to ensure maximum consistency in team members assigned to each project. Sequence deviations are strongly discouraged. (Some teams may have one member involved in a co-op assignment which will prevent that student from being on campus during the second semester of their course series.)
- Students are taught supporting design practices and concepts by a faculty member.
- Each team is expected to design a medical device or system based on the sponsor's requirements - to develop a Project Statement, including a statement of need, a clear set of User Requirements, and identification of key constraints for the design; to manage the project under the guidance of the sponsor's liaison, to conduct design reviews, to fabricate, and verify and test their design (when feasible and schedule permitting).
- Students are expected to have regular meetings with the designated representative of their sponsor; approximately occurring every 7 to 10 days (aka "weekly meetings").
- Teams are to give at least one comprehensive oral presentation about their work and progress to the sponsor's liaison during each of the two semesters.
- Each student team also will be mentored by the primary course faculty and will have access to the graduate student teaching assistants for these courses. Teams are expected to have regular period meetings with these faculties. Sometimes one or more of the BMEN's experienced engineering faculty, based on their specific expertise, may provide consultations.
- Teams are required to work a minimum of 6 hours per student per week, while the average time commitment expected typically is 10 hours per week per student (not including academic calendar breaks).

- Intellectual Property belongs to the participating student who created it and Texas A&M has no legal authority to assign ownership of or rights to that intellectual property, or to require a student to do so. Thus, if the sponsor has different expectations about intellectual property or confidentiality, the sponsor and the students are strongly encouraged to separately execute an agreement addressing those matters. A template Intellectual Property and Non-Disclosure Agreement to address the specific senior design project is provided in Attachment #3. Any deviation from the template agreement in Attachment #3 will require approval from Texas A&M. Although, Texas A&M will not be a party to those agreements they are subject to Texas A&M's review and approval.
- Since these are student projects, faculty members and teaching assistants are discouraged from providing design advice that could constitute the contribution of intellectual property to the project. However, faculty members potentially can be available to work with the sponsor under separate sponsored agreements, as may be deemed mutually beneficial to both the Senior Design Sponsor and the faculty member.

SENIOR DESIGN SPONSOR'S OBLIGATIONS:

- The Senior Design Sponsor in conjunction with Texas A&M faculty and participating students, must complete the Senior Design Project Brief describing the project and contact information (see Attachment #1, or online version).
- Senior Design Sponsors shall provide \$7,500.00 to fund the project and the design team's project work (see Attachment # 4 for invoicing and billing instructions).
- Senior Design Projects work best if they are not confidential, highly proprietary, or part of a tightly scheduled company strategy pipeline that requires meeting strict deadlines; additional to course's educational requirements.
- The sponsor must provide a liaison to the team. This individual will meet with the team on a "weekly" basis (approximately occurring every 7 to 10 days) to review and guide their team's progress. The diligence used in this liaison function is the key determinant in the success of the project.
- In general, it is preferred that the liaison:
 - have management support
 - have a vested interest in the success of the project
 - be comfortable working in a professional manner with 'senior' college students
- It is important to communicate to your project team early on, all technical and financial constraints that apply during the project's duration so these criteria may be considered in making good design decisions.
- Historically, each Senior Design sponsor provides the supplies necessary to fabricate the final device associated with its project (or provides the required funds to do so). Typically, the transactional method for this need is based on the Senior Design Sponsor's preference. However, students may not directly purchase the supplies and then be reimbursed by the sponsor.
- At their discretion, Senior Design Sponsors are encouraged to reimburse for travel expenses whenever the team is requested to come to the sponsor's site for design reviews, etc. Sponsors are welcome to come to Texas A&M University as desired for team events.



- Note that the current development cycle for each project is two semesters, with the following nominal timeline:
- Fall Semester: Project definition, background research, initial concept generation.
- Spring Semester: Prototyping, testing, and refinement, Project Showcase
- As part of the accreditation process for the Biomedical Engineering Department within the College of Engineering at Texas A&M University, Senior Design Sponsor liaisons must complete an evaluation of their project team and return it to the faculty course supervisor. These data will be requested at the end of each semester that the design team is active (December and May).

There are additional Capstone participation terms to which we both agree, which are communicated in Attachment #5 - Additional Terms and Provisions. Texas A&M University, Division of Research requires these terms to be included in our understandings and is the authorized entity to sign on behalf Texas A&M.

We sincerely appreciate your interest in our Capstone program. Please contact me at (979) 845-5540 or (mabrewer@tamu.edu) if you have any questions or further interest.

Sincerely,

Alan Brewer,
Professor of Engineering Practice, Department of Biomedical Engineering
Texas A&M University

By signing below, both parties accept the terms and conditions provided in this letter agreement and all of the attachments and have executed this Agreement on the dates indicated below. This agreement will be effective on the date of last signature ("Effective Date").

Executed on the dates indicated below:

Texas A&M University

By: _____
Name: _____
Title: _____
Date: _____

Sponsor/Company

By: _____
Name: _____
Title: _____
Date: _____

Project Brief, page 1 of 2

ATTACHMENT #1: SPONSORED SENIOR DESIGN PROJECTS**Project Brief**

Texas A&M University
Department of Biomedical Engineering

Date:	
Project Title:	
Entity: (e.g. sponsor company name)	

LIAISON INFORMATION: *The liaisons are the primary technical point of contact for the project team. These individuals are expected to be available to meet or talk by phone/computer on a regular basis (i.e. weekly, short meetings) and must use email effectively to rapidly respond to critical questions from the instructor and/or design team (within 1 working day).*

Primary Liaison**Back-up Liaison**

Name:	
Title:	
Address:	
Phone:	
Fax:	
E-Mail:	

Name:	
Title:	
Address:	
Phone:	
Fax:	
E-Mail:	

This document provides information required to understand the project scope and define the key technological expectations. The target audience for the first draft is an experienced engineering faculty member who will serve as a mentor to a team of undergraduate Biomedical Engineering students tasked with completing the project over a consecutive two-semester time frame (nominally September-May). These project descriptions are critical to determining the suitability of the projects for the course, prioritization, and to allow assignment of suitable student teams. Suitability and priority ranking will be determined by the instructor and a screening committee comprised of faculty members with design experience. Projects will also be grouped by the kinds of student expertise required. Once a common set of project expectations is established between the sponsor and the faculty member, this document may be revised as required to prepare it for the student team.

Project Brief, page 2 of 2

PROJECT BACKGROUND INFORMATION:

The students may be unfamiliar with your entity (company) and your products. It is possible that this project will be their first exposure to the entity), its technology and its markets. Therefore, it is important to provide some background information on your entity and a context for the project. How does this project relate to your business/endeavor? Why is it important? The addition of pamphlets or other material to this form to explain the entity mission and scope is acceptable.

MOST IMPORTANT OBJECTIVES OF PROJECT: *Provide a list of key objectives for the project—with or without priorities. Include expectations for economic analyses and business considerations where applicable.*

DESIGN EXPECTATIONS: *Provide a list of the key design deliverables, including such things as required CAD/CAM/CAE formats and tools, documentation standards, and software environments. Identify the engineering skills most relevant to the project. What kinds of expertise do you believe would facilitate project completion?*

Please return this form to:

Alan Brewer (mabrewer@tamu.edu)



Attachment #2: Sponsor-Team Disclosure Acknowledgement

This document confirms that the Sponsor and Design Team have discussed the relevant Intellectual Property issues regarding this project, and have executed IP agreements if applicable Texas A&M needs assurances that these items have been addressed AND class-related issues are suitably identified.

Intellectual property ownership

- Rights have been discussed and agreed upon

Disclosure

- Acceptable for general public disclosure
- Acceptable for in-class presentation only
- Unacceptable for disclosure outside of design team, instructor, faculty mentor, or other pre-approved individuals*

**NOTE: Due to the need for special accommodations, selection of this option may decrease likelihood for selection of a project for use within the class. Please provide brief rationale for selection:*

Signatures

<hr/>	<hr/>	<hr/>	<hr/>
Sponsor Representative	Date	Design Team Member	Date
<hr/>	<hr/>	<hr/>	<hr/>
Printed Name		Design Team Member	Date
<hr/>	<hr/>	<hr/>	<hr/>
Position		Design Team Member	Date
		<hr/>	<hr/>
		Design Team Member	Date
		<hr/>	<hr/>
		Design Team Member	Date
		<hr/>	<hr/>
		Design Team Member	Date

Attachment #3: Sponsor-Student Team Member IP and Disclosure Agreement (Template)

Intellectual Property and Nondisclosure Agreement

In consideration of the opportunity to participate in the Capstone Program in Texas A&M University's College of Engineering involving _____ ("Sponsor") for the _____ project (the "Project") in the Analysis and Design I and II courses, I agree as follows:

1. Intellectual Property

1.1 I hereby assign to Sponsor all intellectual property rights (including, but not limited to, copyright and patent rights) that I may acquire in copyrightable and/or patentable documents, inventions, or discoveries that I create, author, conceive, or first actually reduce to practice as a result of my participation in the Project (the Intellectual Property").

1.2 I shall inform Sponsor of any Intellectual Property that I may develop, and cooperate with Sponsor, at Sponsor's expense, to obtain a patent and/or register a copyright as the case may be regarding the Intellectual Property.

1.3 I understand that Sponsor will manage the Intellectual Property and be solely responsible for patenting and commercializing the Intellectual Property.

1.4 I understand that I will not receive any financial benefit, licensing, or patenting assistance, or other financial compensation from Texas A&M. Any financial benefit would have to be agreed to in a separate agreement with Sponsor.

1.5 I shall make myself available to patent attorneys, to sign all papers, take all rightful oaths, and perform all acts which may be necessary for fulfilling this assignment and for securing and maintaining patents to the Intellectual Property and for vesting title with Sponsor.

1.6 I understand that Sponsor will include me as an inventor in any resulting patent sought by Sponsor for the Intellectual Property. I understand that my responsibilities to cooperate in the patenting process under this agreement will continue after completion of the Project and possibly even after I leave Texas A&M.

2. Confidentiality

2.1 For purposes of this agreement, "Confidential Information" means any nonpublic information that:

- (a) Is disclosed by Sponsor during the Project and is clearly marked "Confidential;" or
- (b) I obtain from onsite visits to Sponsor's facilities if Sponsor identifies that information as confidential in writing to me within 30 days of the visit.

2.2 "Confidential Information" does not include material, knowledge, or information which I can establish by competent evidence that such information:

- (a) Was already known by me at the time of disclosure;
- (b) Was publicly available at the time of disclosure;
- (c) Was independently developed by me without use of Confidential Information;
- (d) Became available to the public after disclosure by means other than violation of this agreement by me; or
- (e) Was approved for disclosure by advance written permission of Sponsor.

2.3 I shall exercise reasonable care to prevent the disclosure of Confidential Information to any third party and shall only use Confidential Information for the educational purpose for which it is shared.

2.4 I may make use of the Confidential Information for the limited purposes of working on the Project. As part of the class requirements I may be required to give presentations about the Project to the other students in the class. Some presentations may be open to other faculty and students and, in some situations, even the public. All presentations are subject to advance review by Sponsor. Sponsor may designate a specific item of the Confidential Information that cannot be included in any presentation. Sponsor may also request in writing that the presentation be given to a very limited audience. I will not be required to edit the presentation beyond the point of it being understood.

2.5 I understand that I may mention the Project by name during job interviews or on résumés, but I cannot disclose Confidential Information.

2.6 The obligations of Article 2 of this agreement will be in place from the date that I sign this agreement until three years after the last day of class of the Texas A&M semester in which the Project concludes.

3. I consent to the disclosure of personally identifiable information of my education records (as defined under the Family Educational Rights and Privacy Act) related to the Project to Sponsor to the extent necessary for me to interact with Sponsor as anticipated in the course of the Project.

4. I understand that I have options to participate in alternative activities in which I would not be required to agree to the above.

Student

Signed: _____ Printed Name: _____ Date: _____

Sponsor / Company

By: _____ Name: _____ Title: _____ Date: _____



Attachment #4: PROJECT FUNDING

Instructions

1. Sponsor (Company) shall provide Texas A&M \$ _____ to fund the Project, to be paid (*payment timing*) _____
_____.

2. Texas A&M shall submit invoices to Sponsor at the following address:

3. Sponsor shall submit payments to Texas A&M at the following address: Sponsored Research Services

Texas A&M University Attn: Deposits
400 Harvey Mitchell Parkway South, Suite 300 3578 TAMU
College Station, TX 77845 Phone: 979.862.6777

Attachment #5 - Additional Terms and Provisions

1. Term

- 1.1 The period of performance for this Agreement commences on the Effective Date and terminates _____, unless extended by written agreement by the parties.
- 1.2 The parties shall use their best efforts to prevent or minimize any disruption to the educational experience of the students when the Project is underway. Either party may terminate this Agreement effective upon 90 days' written notice to the other.

2. Sponsor Information

- 2.1 Sponsor acknowledges that students participating in the Project may include foreign nationals. Sponsor may not disclose U.S. export-controlled information to Texas A&M or participating students as part of the Project.
- 2.2 Sponsor acknowledges that Texas A&M has no legal authority over its students and will not be responsible for the enforcement or any violations of the separate Intellectual Property and Nondisclosure Agreement between the Senior Design Sponsor and the participating students.

3. Results

- 3.1 Texas A&M shall provide Sponsor with a copy of the Project results, including as appropriate, any data, analysis, hardware and/or software (the "Results").
- 3.2 Texas A&M shall not claim ownership or any rights in the Results.
- 3.3 Sponsor acknowledges that:
 - (a) The Project is educational in nature and intended to facilitate student learning;
 - (b) Students may make mistakes as a natural, expected, and appropriate aspect of the educational process; and
 - (c) The Project is performed by students and is not subject to peer review or independent verification of results.
 - (d) The Results are provided "as is," without any representation or warranties, express or implied, including, but not limited to any warranty as to fitness for particular purposes, merchantability, or non-infringement.
- 3.4 Sponsor shall indemnify Texas A&M, The Texas A&M University System, and their regents, agents, employees, students, and volunteers for any harm, loss, liability, claims or damages which may arise from Sponsor's use of the Results.
- 3.5 Sponsor acknowledges that the Results are not the work of Texas A&M, and shall clearly identify the source of the Results in any references, either internally or to third parties, as an undergraduate student project performed at Texas A&M University without subsequent independent evaluation.

4. General Provisions

- 4.1 The substantive laws of the State of Texas (and not its conflicts of law principles) govern all matters arising out of or relating to this Agreement and all of the transactions it contemplates. Venue for any claim arising out of or relating to this Agreement and all of the transactions it contemplates is as provided under Texas law.
- 4.2 Both Parties acknowledge that this Agreement is subject to compliance with any and all applicable United States laws, regulations, or orders, including those that may relate to the export or transfer of controlled technology or technical data, and Parties agree to comply with all such laws, regulations and orders, including, if applicable, all requirements of the International Traffic in Arms Regulations and/or the Export Administration Act, as may be amended. Each Party further agrees that if the export laws are applicable, it will not disclose or re-export any controlled technology or technical data received under this Agreement to any countries, or their citizens or residents, for which the United States government requires an export license or other supporting documentation at the time of export or transfer, unless that Party has obtained prior written authorization from the U.S. Office of Export Control or other authority responsible for such matters.

4.3 Any notices required or permitted under this Agreement will be deemed given: (a) three business days after it is sent by certified or registered mail, return receipt requested, (b) the next business day after it is sent by overnight carrier, (c) on the date sent by facsimile or email transmission with confirmation of transmission and receipt, if sent during the recipient's normal business hours and if not, on the next business day, or (d) on the date of delivery if delivered personally, and in each case, addressed to the intended recipient at the address below or such other address as the intended recipient may specify in writing:

(a) Sponsor: _____

(b) Texas A&M: Division of Research
Texas A&M University
Attn: Autumn Biggers
301 Old Main Drive, ILSB Suite 3104
College Station, TX 77843-1260
Phone: 979.458.1140
Email: autumnbiggers@tamu.edu

- 4.4 The parties are independent contractors and not agents or employees of each other. Neither may make any statements, representations, or commitments or take any action which binds the other party, except as may be explicitly provided in this Agreement or authorized in writing.
- 4.5 This Agreement contains the entire understanding of the parties as to the matters contained in this Agreement, and supersedes all other written and oral agreements between the parties as to those matters. The parties may execute other contracts, but those will not change or alter this Agreement unless expressly stated in writing.
- 4.6 This Agreement is assignable only with the written consent of both parties.
- 4.7 Texas A&M is an agency of the State of Texas and nothing in this Agreement waives or relinquishes Texas A&M's right to claim any exemptions, privileges, and immunities as may be provided by law.
- 4.8 The failure of either party at any time to require performance by the other party of any provision of this Agreement will in no way affect the right to require such performance at any time thereafter nor will the waiver by either party of a breach of any provision be taken or held to be a waiver of any succeeding breach of such provision or as a waiver of the provision itself.
- 4.9 Each provision of this Agreement is severable. If any provision is rendered invalid or unenforceable by statute or regulations or declared null and void by any court of competent jurisdiction, the remaining provisions will remain in full force and effect if the essential terms of this Agreement remain valid, legal, and enforceable



DEPARTMENT OF BIOMEDICAL ENGINEERING

The parties have executed this Agreement on the dates indicated below.

Texas A&M University

Sponsor

By: _____
Name: _____
Title: _____
Date: _____

By: _____
Name: _____
Title: _____
Date: _____

NB: This (redundant) page most probably should not be used or included