

## Internship Experience in Biomedical Engineering

BME 3941

**Class Periods:** N/A

**Location:** N/A

### **Instructor:**

Dr. Sarah Furtney

[furtney@bme.ufl.edu](mailto:furtney@bme.ufl.edu)

(352) 273-9333

Office Hours: Email for appointment, J299 Biomedical Sciences Building

### **Course Description**

0-3 credits repeatable. Engineering work experience under the supervision of an engineer. (S-U)

### **Course Pre-Requisites / Co-Requisites**

None

### **Course Objectives**

Part-time or full-time engineering work experience to allow students the opportunity to receive technical elective credit toward their degree while being able to gain practical engineering skills.

### **Materials and Supply Fees**

None

### **Professional Component (ABET):**

N/A

### **Relation to Program Outcomes (ABET):**

Outcome	Coverage*
1. An ability to identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics.	
2. An ability to apply both analysis and synthesis in the engineering design process, resulting in designs that meet desired needs.	
3. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	
4. An ability to communicate effectively with a range of audiences	
5. An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.	

6. An ability to recognize the ongoing need for additional knowledge and locate, evaluate, integrate, and apply this knowledge appropriately.	
7. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty	

\*Coverage is given as high, medium, or low. An empty box indicates that this outcome is not covered or assessed in the course.

### **Required Textbooks and Software**

None

### **Recommended Materials**

None

### **Attendance Policy, Class Expectations, and Make-Up Policy**

Excused absences are consistent with university policies in the undergraduate catalog (<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>) and require appropriate documentation.

The student will maintain appropriate working hours as determined by her/his supervisor and maintain regular contact with the BME Department Undergraduate Coordinator or BME Department designee. To register for Internship Experience in Biomedical Engineering, the student must submit the Registration Request form to the BME Academic Office **at least one day prior to the drop/add period by 5:00 pm**. The Registration Request form is located at <https://www.bme.ufl.edu/resources/student-forms/>.

BME3941: Internship in Biomedical Engineering is a variable credit course that may be applied toward the technical electives requirement for the BME undergraduate degree. Students may register for BME3941 for a maximum of three credits. If a student requests to complete the internship for 0 credit, then the student is expected to fulfill all requirements as if they are registered for 1 credit. This course may only be taken S/U (Satisfactory/Unsatisfactory). Registration for the course is handled through BME Academic Office.

The number of credits assigned for this course is determined of the number of hours the student works per week during the internship and total number of hours completed over the course of the term.

- **Summer A or B term (at least 6 weeks in length):**
  - 1 credit = 20 hours per week (120 hours of work total)
  - 2 credits = 40 hours per week (240 hours of work total)
- **Summer C term (at least 12 weeks in length):**
  - 1 credit = 10 hours per week (120 hours of work total)
  - 2 credits = 20 hours per week (240 hours of work total)
  - 3 credits = 30 hours per week (360 hours of work total)
- **Fall/Spring terms (at least 15 weeks in length):**
  - 1 credit = 8 hours per week (120 hours of work total)
  - 2 credits = 16 hours per week (240 hours of work total)
  - 3 credits = 24 hours per week (360 hours of work total)

### **Evaluation of Grade**

The grade for this internship (S or U) will be determined by the BME Department Undergraduate Coordinator or BME Department designee. In order to receive a grade of Satisfactory (S), a 2-4 page Post-Internship Report written by the student and the Employer Evaluation completed by the student's supervisor must be submitted to

the BME Academic Office by email ([undergrad@bme.ufl.edu](mailto:undergrad@bme.ufl.edu)) **by no later 5:00 pm on the last day of class** during the term in which the internship is completed.

The Post-Internship Report is the student's self-assessment of knowledge and skills learned while participating in the internship and a summary of the roles and responsibilities assumed during this time. The Post-Internship Report should have margins of 1 inch, line spacing of 1.5 lines (single-spaced and double-spaced are not acceptable formats), and font size of 12 point. The document should be no less than 2 pages but no more than 4 pages total in length.

The Employer Evaluation includes a review of the student's work during the internship to evaluate whether or not the student has satisfactorily completed the internship and detailed contact information of the person or persons who have supervised and evaluated the student's performance. The student is responsible for providing the Employer Evaluation to their supervisor(s) for completion. The employer should be asked to email the form to [undergrad@bme.ufl.edu](mailto:undergrad@bme.ufl.edu) by 5:00 pm on the last day of class.

The grade will be based on: (1) the quality of the Post-Internship Report, (2) the scope of the internship project, and (3) the Employer Evaluation. The following grading system will be used:

#### Post-Internship Report

- 0 = Report DOES NOT clearly express knowledge/skills learned (e.g. lacks sufficient detail or poor presentation or excessive grammatical errors)
- 1 = Report DOES clearly express knowledge/skills learned (e.g. sufficient detail and effective presentation and minimal grammatical errors)

#### Scope of Internship Project

- 0 = Project deemed trivial and not representative of credit hours enrolled
- 1 = Project demonstrates a substantive level of work commensurate with credit hours enrolled

#### Employer Evaluation

- 0 = Student DID NOT perform at a satisfactory level (e.g. was not present and working the specified hours/week)
- 1 = Student DID perform at a satisfactory level (e.g. was present and working the specified hours/week)

A score of 1 for each of the three grading categories is required to receive a course grade of Satisfactory (S). If the Post-Internship Report and Employer Evaluation are not submitted by the deadline indicated above, the student will receive a grade of Unsatisfactory (U).

More information on UF grading policy may be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

#### ***Students Requiring Accommodations***

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

#### ***Course Evaluation***

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu/evals>. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

#### ***University Honesty Policy***

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

In adopting this Honor Code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. The quality of a University of Florida education and the value of your degree is dependent upon the community acceptance and enforcement of the Honor Code.

**Plagiarism** is a common infraction to the UF Honor Code. If you are confused as to what constitutes plagiarism, see here: <https://guides.uflib.ufl.edu/copyright/plagiarism>. Plagiarism on any of your assignments **will be reported to the Dean of Students as a UF Student Honor Code violation**. Also, note that **copying solutions for any assignment, regardless of the source (e.g. other students, pirated website solutions), will be treated as plagiarism**. If you have any questions or concerns, please consult with the instructor in this class. Note that failure to comply with this commitment will result in disciplinary action compliant with the UF Student Honor Code Procedures.

### ***Commitment to a Safe and Inclusive Learning Environment***

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Undergraduate Program Coordinator
- Robin Bielling, Director of Human Resources, 352-392-0903, [rbielling@eng.ufl.edu](mailto:rbielling@eng.ufl.edu)
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, [taylor@eng.ufl.edu](mailto:taylor@eng.ufl.edu)
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, [nishida@eng.ufl.edu](mailto:nishida@eng.ufl.edu)

### ***Software Use***

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

### ***Student Privacy***

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <https://registrar.ufl.edu/ferpa.html>.

### ***Campus Resources***

### ***Health and Wellness***

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**U Matter, We Care:**

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

**Counseling and Wellness Center:** <http://www.counseling.ufl.edu/cwc>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

**Sexual Discrimination, Harassment, Assault, or Violence**

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the **Office of Title IX Compliance**, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, [title-ix@ufl.edu](mailto:title-ix@ufl.edu)

**Sexual Assault Recovery Services (SARS)**

Student Health Care Center, 392-1161.

**University Police Department** at 392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>.

Academic Resources

**E-learning technical support**, 352-392-4357 (select option 2) or e-mail to [Learning-support@ufl.edu](mailto:Learning-support@ufl.edu).  
<https://lss.at.ufl.edu/help.shtml>.

**Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling. <https://www.crc.ufl.edu/>.

**Library Support**, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

**Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.  
<https://teachingcenter.ufl.edu/>.

**Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers.  
<https://writing.ufl.edu/writing-studio/>.

**Student Complaints Campus:** [https://www.dso.ufl.edu/documents/UF\\_Complaints\\_policy.pdf](https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf).

**On-Line Students Complaints:** <http://www.distance.ufl.edu/student-complaint-process>.