

Biomaterials Track Form

Fall 2019 Catalog: 15 Hours

SCOPE: The Biomaterials and Tissue Engineering Track is designed to equip BMEN students for the rapidly developing field at the multi-disciplinary interface of engineering, material science, biology, chemistry, and medicine. This track will provide students with a broad educational foundation with an emphasis on the principles and applications of biomaterials, particularly tissue engineering. Students will gain an understanding of biomaterial preparation and characterization, structure/property relationships, as well as cellular, blood, and tissue interactions with biomaterials. Selection and design of biomaterials for tissue engineering, artificial organs, drug delivery, and medical devices is presented.

Schedule an appointment with a track coordinator for course selection discussion and career advising. Track coordinators can be selected from Drs. Alge, Haridas, Gaharwar, Grunlan, Keller, Mabbott, D. Maitland, McShane and Raghavan.

Name: _____ UIN: _____ Phone #: _____

TAMU Email: _____ Graduation Term: _____

Required Track Courses (Select 6-15 hours)

- | | |
|---|---|
| <input type="checkbox"/> BMEN 480 Biomedical Engineering of Tissues (3) | <input type="checkbox"/> BMEN 486 Biomedical Nanotechnology (3) |
| <input type="checkbox"/> BMEN 482 Polymeric Biomaterials (3) | <input type="checkbox"/> BMEN 487 Drug Delivery (3) |
| <input type="checkbox"/> BMEN 483 Polymeric Biomaterial Synthesis (3) | |

Track Courses (Select 0-9 hours)

- | | |
|---|---|
| <input type="checkbox"/> BMEN 491 (1-3) | <input type="checkbox"/> MEEN 475 Materials in Design (3) † |
| <input type="checkbox"/> CHEM 466 Polymer Chemistry (3) | <input type="checkbox"/> MSEN 430 Nanomaterials Science (3) |
| <input type="checkbox"/> CHEN 451 Introduction to Polymer Engineering (3) | <input type="checkbox"/> MSEN 410 Materials Processing (3) |
| <input type="checkbox"/> MEEN 458 Processing & Characterization of Polymers (3) | <input type="checkbox"/> MSEN 420 Polymer Science (3) |
| <input type="checkbox"/> MEEN 451 Viscoelastic Materials (3) † | |
| <input type="checkbox"/> MEEN 467 Mechanical Behavior of Materials (3) † | |

† MEEN courses have prerequisites, but some BMEN courses may substitute. Discuss with BMEN advisor.

Other Courses (Select 0-3 hours)

- | | |
|---|--|
| <input type="checkbox"/> ACCT 640 Accounting Concepts & Procedures I (3) | <input type="checkbox"/> CHEM 228 Organic Chemistry II (3) |
| <input type="checkbox"/> BMEN 4XX BMEN Elective (subject to track coordinator approval) (3) _____ | <input type="checkbox"/> ENGR 385 Co-Op (one semester credit hour per term up to three credit hours) |
| <input type="checkbox"/> BMEN 404 FDA Good Laboratory and Clinical Practices (3) | <input type="checkbox"/> VTPP 401 History of Medicine in Europe (3) |
| <input type="checkbox"/> BMEN 469 Entrepreneurial Issues in Biomedical Engineering (3) | <input type="checkbox"/> VTPB 410 Cell Mechanisms of Disease (3) |

If requesting a course not listed above, list here:

Course Number	Course Name	# of Hours	Advisor Initials	Track Coordinator Initials	Dir. of Ugrad Programs Initials

The approval of a deviation is made by the Director of Undergrad Programs who will take into consideration the recommendation of the advisor and a track coordinator. If applicable, why are you requesting a deviation from the approved list of courses?

Career Advising

* I confirm that I have read the BMEN Career Advising Guide _____ (student signature)

What are your current plans after graduation? Industry Medical School Graduate School Military Other
Please elaborate (use additional pages if necessary):

Have you participated in any of the following? (Indicate completed or planned)

Undergraduate Research

Study Abroad

Volunteering

Internship

Co-op

Shadowing

Student Organizations (member or leader?)

Other _____

The following items will help you be successful in obtaining your goals upon graduation:

- Craft a profile on Texas A&M Career Center's website HireAggies.com
- Attend the SEC Career Fairs
- Attend BMES weekly meetings
- Create a resume and have it reviewed by the Career Center staff
- Draft a cover letter and have it reviewed by the Writing Center staff
- Build a LinkedIn account – <https://www.linkedin.com/in/> _____
- If continuing education, study for and take the appropriate entry exams
- If attending medical school, meet with an advisor in the Texas A&M Office of Professional School Advising

Any item not checked above should be completed prior to the start of your senior year.

Recommendations/comments from Track Coordinator (required):

Approved and discussed by:

Student signature and date

Director of Undergraduate Programs signature and date
(if deviating)

Track Coordinator printed name

Track Coordinator signature and date

Once this form is complete, schedule an appointment with your assigned Track Coordinator.

ADVISING OFFICE USE ONLY: Date received _____ Degree planner _____ Adjustments _____ Entered into Database _____ Signature and date _____
