Biomechanics Track Form
Fall 2019 Catalog: 15 Hours

**SCOPE:** The Biomechanics Track is designed to educate BMEN students in the field of biomechanics that spans from small-scale applications in molecular and cellular mechanics, tissue-scale applications such as cardiac and orthopedic implants, and whole body-scale applications for studying injury prevention and developing assistive devices. This track will provide students the opportunity to gain greater depth of knowledge in their particular interests related to biomechanics. Through these courses, students will gain experience applying mechanics principles to biomedical systems to aid in understanding the function of the human body and various medical conditions, and in the development of medical devices.

Schedule an appointment with a track coordinator for course selection discussion and career advising. Track coordinators can be selected from Professors Avaz, Biswas, Criscione, Jain, Machek, and Tian.

Name: __________________________________________   UIN: _________________ Phone #: ____________________

TAMU Email: ____________________________________________   Graduation Term: ___________________________

Track Courses (Select 12-15 hours)
- BMEN 491 (1-3)
- BMEN 432 Molecular and Cellular Biomechanics (3)
- BMEN 457 Orthopedic Biomechanics (3)
- BMEN 458 Motion Biomechanics (3)
- BMEN 461 Cardiac Mechanics (3)
- BMEN 468 Advanced Biomechanics (3)
- BMEN 471 Numerical Methods for Biomedical Engineers (3)
- MEEN 363 Dynamics and Vibrations† (3)
- MEEN 368 Solid Mechanics of Mechanical Design† (3)
- MEEN 4xx Comparative Biomechanics (3)
- MEEN 440 Bioinspired Engineering Design (3)
- MEEN 441 Design of Mechanical Components and Systems† (3)
- MEEN 442 Computer Aided Engineering† (3)
- MEEN 444 Finite Element Analysis in Mechanical Engineering† (3)

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

Other Courses (Select 0-3 hours)
- ACCT 640 Accounting Concepts & Procedures I (3)
- BMEN 4XX BMEN Elective (subject to track coordinator approval) (3) _____________
- BMEN 404 FDA Good Laboratory and Clinical Practices (3)
- BMEN 469 Entrepreneurial Issues in Biomedical Engineering (3)
- CHEM 228 Organic Chemistry II (3)
- ENGR 385 Co-Op (one semester credit hour per term up to three credit hours)
- VTPP 401 History of Medicine in Europe (3)
- VTPB 410 Cell Mechanisms of Disease (3)

If requesting a course not listed above, list here:

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Name</th>
<th># of Hours</th>
<th>Advisor Initials</th>
<th>Track Coordinator Initials</th>
<th>Dir. of Ugrad Programs Initials</th>
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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

What are your current plans after graduation?  Industry  Medical School  Graduate School  Military  Other

Please elaborate:

__________________________________________

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 ____________________________________________

Updated February 2020