DEN@Viterbi
Department of Biomedical Engineering
Orientation
Welcome to DEN@Viterbi and USC

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AGENDA

• Welcome to DEN@Viterbi & USC
• Program Overview
• Degree Requirements
• Advisement: BME Advisement Hold, DEN D-clearance
• DEN Contact Information
• Q & A
PROGRAM OVERVIEW

- Master of Science in
  - Biomedical Engineering (BME)
  - Medical Imaging and Imaging Informatics (MIII)
  - Medical Devices and Diagnostic Engineering (MDDE)
- Continuous enrollment (university requirement)
- Full-time enrollment: 8 units (not required)
- A maximum of 5 years to complete a program
- No final comprehensive exam to earn master’s degree
- No BME courses offered in the summer
- Registration calendar - [https://classes.usc.edu/term-20201/calendar/](https://classes.usc.edu/term-20201/calendar/)
MS in Biomedical Engineering (BME)

28-32 units

Required Courses All courses are required - 15 units total
BME 501 | Advanced Topics in Biomedical Systems (4 units, Fall & Spring) – Fall 2020
BME 502 | Advanced Studies of the Nervous System (4 units, Fall & Spring) – Fall 2020
BME 511 | Physiological Control Systems (3 units, Spring) – Spring 2020
BME 513 | Signal and Systems Analysis (3 units, Fall & Spring) – Spring 2020
BME 533 | Seminar in Bioengineering (1 unit, Fall only) – Fall 2020

Required Technical Elective courses – 13 units total
    Tracks: Biomechanics, Bio-Systems & Signals, Devices, Neuroengineering, Project Management, Regulatory Science, Custom Theme

See more at: https://bme.usc.edu/student-resources/graduate-student-resources/
MS in Imaging and Imaging Informatics (MIII)
29-33 units

Required Courses All courses are required – 23 units total
BME 501 | Advanced Topics in Biomedical Systems (4 units, Fall & Spring) – Fall 2020
BME 513 | Signal and Systems Analysis (3 units, Fall & Spring) – Spring 2020
BME 525 | Advanced Biomedical Imaging (3 units, Spring only) – Spring 2021
BME 527 | Integration of Medical Imaging Systems (3 units, Fall only) - Fall 2020
BME 528 | Medical Imaging Informatics (3 units, Spring only) – Spring 2020
BME 535 | Ultrasonic Imaging (3 units, Spring only) – Spring 2021
EE 569 | Introduction to Digital Image Processing (4 units, Spring only) – Spring 2021

Technical Electives –6 units total
See more at: https://bme.usc.edu/student-resources/graduate-student-resources/
MS in Medical Devices & Diagnostic Engineering (MDDE)
28-32 units

Required Courses - 19 units total
BME 501 | Advanced Topics in Biomedical Systems (4 units, Fall & Spring) – Fall 2020 OR
BME 502 | Advanced Studies of the Nervous System (4 units, Fall) – Fall 2020

BME 513 | Signal and Systems Analysis (3 units, Fall & Spring) – Spring 2020

BME 650 | Biomedical Measurement and Instrumentation (3 units, Spring only) – Spring 2020

*MPTX 511| Introduction to Medical Product Regulation (3 units, available Year-round) – Any semester

ISE 527 | Quality Management for Engineers (3 units, available Year-round) – Any semester OR
*MPTX 515| Quality Assurance (3 units, available Spring & Summer only) – Summer 2020

ISE 545 | Technology Development and Implementation (3 units, available Year-round) – Fall 2020

Technical Elective 1 course required - 3 units total.
Required Specialization Track - 6 units from one of the required specialization tracks.

See more at:
https://bme.usc.edu/student-resources/graduate-student-resources/

*see section on REGISTRATION regarding D-Clearance process for MPTX & RSCI courses

Regulatory Affairs Course list: http://regulatory.usc.edu/courses/
MDDE Program Continued...

Choose ONE track – 6 credits total

**Medical Technology and Device Science Track**
BME 525 | Advanced Biomedical Imaging (3 units, Spring only) – **Spring 2021**
BME 551 | Introduction to bio-MEMS and Nanotechnology (3 units, Spring only) – **Spring 2020**
BME 552 | Neural Implant Engineering (3 units, Spring only) – **Spring 2020**
BME 620 | Applied Electrophysiology (4 units, Fall only) – **Fall 2020**

*DEN@Viterbi students completing this specialization will substitute the 2nd BME elective (not available online) with a department approved alternative*

**Product Development Track**
ISE 515 | Engineering Project Management (3 units, Available Year-round) – **Spring or Summer 2021**
ISE 555 | Invention & Technology Development. *DEN@Viterbi students completing this specialization will substitute with a department approved alternative.*

**Regulatory Track (*Available online through Regulatory Affairs*)**
MPTX 513 | Regulation of Medical Devices and Diagnostics (3 units, Fall & Summer only) – **Summer 2020**
RSCI 527 | Medical Product Safety (3 units, Summer only) – **Summer 2020**
BME DEPARTMENT REGISTRATION RULES

• All BME courses require D-Clearance.
• All BME graduate students have a MANDATORY ADVISEMENT HOLD from the BME Department.

View class schedule at classes.usc.edu
Look for:
• Section#: 12345D, requires D-Clearance
• Section#: 12345R, D-Clearance not required
• Location: DEN@Viterbi

Every Semester
Step 1: Contact your Graduate Student Advisor for MANDATORY ADVISEMENT
Step 2: REQUEST D-CLEARANCE FROM DEN

Note 1: Schedule a meeting with the Graduate Student Advisor if you are unclear about your course plan. Provide your 10-digit USC ID and specify that you are a DEN student.
Note 2: Elective courses that are not on the BME list of approved technical electives for your program require a petition. Degree applicability of technical electives must always be approved by the Department Chair.

See more at https://bme.usc.edu/student-resources/graduate-student-resources/
HOW TO REQUEST D-CLEARANCE FOR MPTX or RSCI COURSES

D-Clearance requests are processed at the department level. You would need to send an email to Toni Rodriguez at tonirodr@usc.edu with the following information for MPTX courses.

PLEASE REVIEW THE SCHEDULE OF CLASSES BEFORE YOU REQUEST D-CLEARANCE SO THAT YOU WILL NOT HAVE TO MISS THE FIRST DAY OF CLASS DUE TO TRAVEL PLANS.

Name:
Student ID#: (no dashes)
Course(s):
Onsite/Distance (if 50 miles from campus or closer, please plan to be onsite):
If distance, your current mailing address to send your binder:
USC email:
Phone number:
Department in which you are enrolled: (ie: RegSci, BME, MDDE):
Degree you are pursuing: (Cert, MS, DRSc, PhD, limited status):

Consult the full MPTX/RSCI schedule at
http://regulatory.usc.edu/CourseSchedules.htm

See more at http://bme.usc.edu/students/graduate-students-current/advising-information.htm
HOW TO REQUEST D-CLEARANCE FROM DEN

All DEN courses require D-clearance.

1. Login to DEN Desire2Learn: http://courses.uscden.net
2. Go to DEN@Viterbi Tools on the navigation bar
3. Select “Request D-clearance” link, select the term, and select a course
4. Approval process takes 1-2 business days. To view the status of a request, click on “Check D-Clearance Status”
5. You can register once your request has been processed. D-clearances expire 7 days from when it is issued so register as soon as you obtain it to secure a seat in a course.

For questions on D-Clearance status, contact den@gapp.usc.edu
Contact Info

VITERBI ADMISSION & STUDENT ENGAGEMENT (VASE)

Location: Olin Hall of Engineering (OHE), Rm. 106
Hours: Mon. - Fri. 8:30 am - 5 pm (Pacific Time)
Phone: (213) 740-4488  |  Fax: (213) 821-0851
https://viterbigrad.usc.edu/

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<tr>
<th>DEN@Viterbi Support</th>
<th>Contact Information</th>
<th>Staff</th>
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<tbody>
<tr>
<td>Technical support,</td>
<td><a href="mailto:dentsc@usc.edu">dentsc@usc.edu</a></td>
<td>Rebecca Lee</td>
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<td>Desire2Learn training,</td>
<td>213-740-9356</td>
<td>Bianca Richter</td>
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<td>Homework</td>
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<td>DEN d-clearance inquiries</td>
<td><a href="mailto:den@vase.usc.edu">den@vase.usc.edu</a></td>
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<td>Exams</td>
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<td>Shirley Schutt</td>
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<td>213-740-9356</td>
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<tr>
<td>VASE Advisor</td>
<td><a href="mailto:ptrinida@usc.edu">ptrinida@usc.edu</a></td>
<td>Patty Rinehart</td>
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<tr>
<td>• General advisement</td>
<td>213-740-0116</td>
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<td>• Policies &amp; Procedures</td>
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