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

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AGENDA

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

- MS in Biomedical Engineering (MS BME/General BME)
- MS in Imaging and Imaging Informatics (MIII)
- MS in Medical Devices & Diagnostic Engineering (MDDE)
MS in Biomedical Engineering (MS BME/General BME) (28 units total)

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

Required Technical Elective courses – 13 units total
See more at:
https://viterbigradadmission.usc.edu/programs/masters/msprograms/biomedical-engineering/ms-biomedical-engineering/
MS in Imaging and Imaging Informatics (MIII) (29 units total)

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

Technical Electives –6 units total
See more at:
https://viterbigradadmission.usc.edu/programs/masters/msprograms/bio medical-engineering/ms-bme-medical-imaging-imaging-informatics/
MS in Medical Devices & Diagnostic Engineering (MDDE)
(28 units total)

Required Courses - 19 units total
BME 501 | Advanced Topics in Biomedical Systems (4 units, Fall & Spring) OR
BME 502 | Advanced Studies of the Nervous System (4 units, Fall & Spring)
BME 513 | Signal and Systems Analysis (3 units, Fall & Spring)
BME 650 | Biomedical Measurement and Instrumentation (3 units, Spring only)
BME 416 | Development and Regulation of Medical Products (3 units, Spring only) OR
*MPTX 511 | Introduction to Medical Product Regulation (3 units, available Year-round)
ISE 527 | Quality Management for Engineers (3 units, available Year-round) OR
*MPTX 515 | Quality Assurance (3 units, available Spring & Summer only)
ISE 545 | Technology Development and Implementation (3 units, available Year-round)

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

See more at:
https://viterbigradadmission.usc.edu/programs/masters/msprograms/biomedical-engineering/ms-in-medical-device-and-diagnostic-engineering/

*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)
BME 551 | Introduction to bio-MEMS and Nanotechnology (3 units, Spring only)
BME 552 | Neural Implant Engineering (3 units, Spring only)
BME 620 | Applied Electrophysiology (4 units, Fall only)

*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)
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)
RSCI 527 | Medical Product Safety (3 units, Summer only)
BME DEPARTMENT REGISTRATION RULES

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

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

Send an e-mail request to Toni Rodriguez (tonirodr@usc.edu) with the information below:

- Name, USC 10-digit ID, e-mail
- Course # (ie. MPTX 513)
- Graduate Program (eg. MS BME or MDDE)
- Distance Student

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.uscdden.net](http://courses.uscdden.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](mailto:den@gapp.usc.edu)
## CONTACT INFO

**OFFICE OF GRADUATE AND PROFESSIONAL PROGRAMS**

**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/](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>
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<td>Bianca Richter</td>
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<td>Homework</td>
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<td>DEN d-clearance inquiries</td>
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<td>GAPP Advisor</td>
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<td>Patty Rinehart</td>
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<td>• General advisement</td>
<td>213-740-0116</td>
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