Biomedical Engineering
Department of Biomedical Engineering
Program Requirement Checklist
Summer 2014 – Spring 2015

Doctor of Philosophy – Biomedical Engineering, Matriculating Directly into BME
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Doctor of Philosophy – Biomedical Engineering, Matriculating via PMCB .............4
Degree: Doctor of Philosophy – Biomedical Engineering  
Matriculating Directly into BME

Matriculation Term: Summer 2014  Fall 2014  Winter 2015  Spring 2015

Degree Requirements:

☐ Cumulative GPA at or above 3.0
☐ Qualifying exam: 1) approval of dissertation proposal by advisory committee; 2) oral, public presentation of the dissertation proposal; 3) oral exam on chosen specialty and core BME topics
   Date qualifying exam completed: __________________________
☐ Advancement to Ph.D. candidacy after required coursework and passing qualifying exam
   Date of advancement: __________________________
☐ ≥ 54 credits of BME 603 – Ph.D. Dissertation Research (begun after advancement to candidacy)
☐ Doctoral dissertation that documents a significant, original research contribution of publishable quality in both content and presentation – written dissertation and oral defense
☐ ≥ 135 credit hours of course and research credits

Curriculum:

☐ The following courses are required:

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<th>Course</th>
<th>Credits</th>
<th>Grade</th>
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<tr>
<td>BME 607 – Biomedical Engineering Seminar</td>
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<td>(minimum 3 terms; every term expected)</td>
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| CONJ 650 – Principles of Scientific Conduct and Practice | 1 | ___ | ___ |
| CONJ 620 – Intro to Biostatistics for the Basic Sciences | 3 | ___ | ___ |

☐ Four (4) elective courses (with prior approval of advisor):

MD/PhD students:

Two of the four elective courses are waived based upon completion of Gross Anatomy, Imaging and Embryology and Cell Structure and Function. The waiver can be requested when MD students enter their 3rd year of medical study. The waiver request must be submitted to the BME Program director.

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BME 2014-15
Additional courses are taken based on the student’s interests and upon recommendation of the student’s mentor, graduate program director and/or dissertation advisory committee. For instance, BME 650 (Teaching Practicum) offers students the opportunity to prepare and teach an undergraduate lecture.

BME 601 – Pre-qualifying Ph.D. Research

≥ 54 Credits of BME 603 Ph.D. Dissertation Research
**Degree:** Doctor of Philosophy – Biomedical Engineering  
Matriculating via PMCB

**Matriculation Term:** Summer 2014 Fall 2014 Winter 2015 Spring 2015

**Degree Requirements:**  
The first year of graduate studies in PMCB involves Research Rotation (CONJ 601), one point five credits in CONJ 607; 607E, one credit in CONJ 660 and completion of core courses (two of CONJ 661, CONJ 662, CONJ 663, CONJ 664; both CONJ 670, CONJ 671; and two of CONJ 665, CONJ 667, CONJ 668, CONJ 669).

- Cumulative GPA at or above 3.0
- Qualifying exam: 1) approval of dissertation proposal by advisory committee; 2) oral, public presentation of the dissertation proposal; 3) oral exam on chosen specialty and core BME topics  
  Date qualifying exam completed: __________________________
- Advancement to Ph.D. candidacy after required coursework and passing qualifying exam  
  Date of advancement: __________________________
- ≥ 54 credits of BME 603 – Ph.D. Dissertation Research (begun after advancement to candidacy)
- Doctoral dissertation that documents a significant, original research contribution of publishable quality in both content and presentation – written dissertation and oral defense
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- Four (4) elective courses (with prior approval of advisor):
  Completing the PMCB core courses, which must include CONJ 670 and CONJ 671, will fulfill the four elective BME course requirements.
Additional courses are taken based on the student’s interests and upon recommendation of the student’s mentor, graduate program director and/or dissertation advisory committee. These may include but are not limited to the following: BME 640 (Fluid Dynamics), BME 680 (Signals and Linear Systems), BME 682 (Nature & Analysis of Signals), BME 622 (Biomedical Optics I), BME 623 (Biomedical Optics II), BME 650 (Teaching Practicum).

BME 601 – Pre-qualifying Ph.D. Research

≥ 54 Credits of BME 603 Ph.D. Dissertation Research