



**Doctor of Philosophy in Bioengineering**  
**Track: Biomolecular Engineering**

Students entering SP20 to present

Track Director: Prajna Dhar, Ph.D. ([prajnadhar@ku.edu](mailto:prajnadhar@ku.edu))

<b>CORE</b>	<b>6 hours required</b>
C&PE 756	Intro to Bioengineering (3)
BIOE 800	Bioengineering Colloquium (.5) (2 total hours req)
BIOE 801	Responsible Conduct of Research in Engineering (1)
<b>DEPTH</b>	<b>15 hours required</b>
1. Advanced Engineering / Pharmaceuticals (2 courses min)	
C&PE 701	Numerical Methods (3)
C&PE 715	Drug Delivery (3)
C&PE 757	Polymer Science & Technology (3)
C&PE 731	Transport Phenomenon (3)
C&PE 732	Advanced Transport Phenomena (3)
C&PE 751	Basic Rheology (3)
ME 767	Molecular Biomimetics (3)
ME 790	Biomedical Microdevices (3)
PHCH 730/731	Biopharmaceuticals & Pharmacokinetics (3)
PHCH 862/863	Pharmaceutical Equilibrium (3)
PHCH 870	Advanced Pharmaceutical Biotechnology (4)
2. Advanced Biological Sciences (1 course min)	
PHCH 860	Principles & Practice of Chemical Biology (3)
CHEM 760	Intro to Chemistry in Biology (3)
<a href="#">MDCM 701</a>	<a href="#">Biomedical Chemistry (3)</a>
<a href="#">ANAT 845 / BIOL 560</a>	<a href="#">Histology (3)</a>
<a href="#">MICR 808 / BIOL 503</a>	<a href="#">Immunology (3)</a>
<a href="#">MICR 825 / BIOL 512</a>	<a href="#">Virology (3)</a>
BIOL 752	Cell Biology (3)
BIOL 807	Graduate Molecular Biosciences (6)
<b>BREADTH</b>	<b>15 hours minimum</b>
1. Math; Statistics; Numerical Methods (1 course min)	
2. Sciences (1 course min)	
3. Advanced Engineering (1 course min)	
<b>RESEARCH</b>	<b>18 hours minimum - 24 hours maximum</b>
BIOE 999	Independent Investigation (Dissertation)

*These hours are taken under your advisor/committee chair.*

**MINIMUM HOURS REQUIRED FOR DEGREE: 60**

No more than 3 classes may be taken at the 500-600 level and counted towards the graduate degree.