

RECOMMENDED SCHEDULE

ENTERING FALL 2018

Official course requirements based upon semester admitted into the program.

First Year

Fall			Spring			Summer		
3150:151	^Principles of Chemistry I	3	3150:153	^Principles of Chemistry II	3			
3150:152	Principles of Chem I Lab	1	3450:222	^Analytic Geometry-Calculus II	4			
3300:111	~^English Composition I	3	3650:291	^Elementary Classical Physics I	4			
3450:221	^Analytic Geometry-Calculus I	4	4800:111	Intro Biomedical Eng Design	3			
4800:101	Tools for Biomedical Engineering	3		^2nd Writing Course	3			
14			17					

Second Year

Fall			Spring			Summer		
3100:200	Human Anatomy & Physiology I	3	3100:202	Human Anatomy & Physiology II	3			
3100:201	Human Anatomy & Physiology I Lab	1	3100:203	Human Anatomy & Physiology II Lab	1			
3450:223	^Analytic Geometry-Calculus III	4	3450:335	Intro. To Ordinary Diff Equations	3	4100:300	Possible	
3650:292	^Elementary Classical Physics II	4	4300:202	Intro. to Mechanics of Solids	3		Cooperative Education Work Period	
4300:201	^Statics	3	4600:203	^Dynamics	3			
4800:201	Biomedical Eng.Sophomore Sem	1	4800:220	Biomedical Computing	3			
16			16					

Third Year

Fall			Spring			Summer		
3600:120	Intro to Ethics (Humanities)	3				3470:461	Applied Statistics	4
4600:300	Thermodynamics I	3					*General Ed or Honors Distribution	3
4600:321	Kinematics of Machines	2	4100:301	Cooperative Education Work Period			*General Ed or Honors Distribution	3
4800:362	Transport Fundamentals for BME	3						
4800:365	Mechanics of Biological Tissues	3						
	*General Ed or Honors Distribution	3						
17						10		

Fourth Year

Fall			Spring			Summer		
			4400:307	Basic Electrical Engineering	4			
4100:302	Cooperative Education Work Period		4800:310	Model & Simulation of Biomedical Sys	3	4100:403	Cooperative Education Work Period	
			4800:400	Biomaterials	3			
				Biomedical Engineering Elective	3			
			13					

Fifth Year

Fall			Spring			Summer		
4800:305	Intro to Biophysical Measurements	4	4600:420	Intro Finite Element Methods	3			
4800:491	Biomedical Design I	2	4800:460	Experimental Tech in Biomechanics	3			
	Biomedical Engineering Elective	3	4800:492	Biomedical Design II (CS)	2			
	*General Ed or Honors Distribution	3		Biomedical Engineering Elective	3			
	*General Ed or Honors Distribution	3		*General Ed or Honors Distribution	3			
15			14					

College of Engineering Notes

*Credit hours shown for General Education or Honors Distribution are general guidelines only. These courses should be chosen in accordance with the appropriate General Education Program (for non-honors students) or Honors Distribution (for honors students). Honors students must also ensure that their course selections meet additional requirements not shown on this curriculum guide.

[Gen Ed Program - https://www.uakron.edu/general-education/](https://www.uakron.edu/general-education/)

[Honors Distribution - https://www.uakron.edu/honors/curriculum/](https://www.uakron.edu/honors/curriculum/)

^Honors sections may be available; check the schedule of classes.

Biomedical Engineering Department Notes

The 9 credits of BME Electives must include:

- a minimum of 3 credits from a BME (4800) course
- 6 credits of BME Electives must be 300-400 level Engineering, Math, Physics, Biology or Chemistry courses

~The Biomedical Engineering Department recommends that English Composition I be used to satisfy writing course requirement but other choices are available. See the General Education Program for details.

^Check General Education Program or Honors Distribution to find courses that satisfy the 2nd writing course requirement.

In addition to meeting all other degree requirements, a minimum of 133 credits must be completed.