

Dual Degree Program

Biomedical Engineering Sample Curriculum

	WU Course	Fall	Spring
Home Institution (3-4 years)			
Calculus II, III	Math 132, 233	3	3
Differential Equations	Math 217	3	
General Physics I, II	Physics 117A, 118A	4	4
General Chemistry I, II	Chem 111A, 112A	3	3
General Chemistry Laboratory I, II	Chem 151, 152	2	2
Principles of Biology I (cellular, molecular and developmental biology)	Bio 2960		4
Principles of Biology II (genetics)	Bio 2970	4	
Computer science elective	CSE 131	3	
Engineering/Science electives		3	3
English Composition	ECMP 100		3
Humanities and social science electives		9	9
Additional home institution degree requirements		varies	varies
	Subtotal	60+ to transfer	
First Year of Dual Degree Curriculum at WU			
Introduction to Biomedical Engineering	BME 140	3	
Biomechanics	BME 240		3
Physiological Control Systems	Bio 3058		2
Introduction to Electrical and Electronic Circuits	ESE 230	4	
Technical Writing	ENGR 310		3
Bioengineering Thermodynamics	BME 320B	3	
Engineering Mathematics A	ESE 318	3	
Engineering Mathematics B	ESE 319		3
Engineering Ethics and Sustainability	ENGR 4501	1	
Engineering Leadership and Team Building	ENGR 4502	1	
Conflict Management and Problem Solving in Eng.	ENGR 4503		1
Engineering Tier I or II Course from approved list			3
	Subtotal	15	15
Second (Final) Year of Dual Degree Curriculum at WU			
Quantitative Physiology I & II	BME 301A, 301B	4	4
Biomedical Engineering Design	BME 401	3	
Transport Phenomena I/BioTransport	ChE 367/BME 366		3
Engineering Electromagnetics Principles	ESE 330		3
Probability and Statistics for Engineering	ESE 326	3	
BME Tier I Courses from approved list		3	3
Engineering Tier I or II Courses from approved list		3	3
	Subtotal	16	16
60 units or more must be taken at Washington Univ.	Total	60+ for WU degree	