

**Required Biomedical Engineering Courses (40 credits)**
<https://engineering.purdue.edu/BME/Academics/BMEUndergraduateProgram/AcademicDocuments/PlanofStudy>
**BME Courses (29 credits)\***

_____ (3) BME 20100 Biomolecules: Struct, Funct & Engr Apl	(3) BME 30400 Biomedical Transport Fundamentals
_____ (1) BME 20500 Biomolec & Cellular Sys Lab	(3) BME 30500 Bioinstrumentation, Circuit and Meas
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_____ (1) BME 29000 Frontiers in BME	(2) BME 30600 Biomedical Transport Lab
_____ (3) BME 20400 Biomechanics Hard/Soft Tissue	(2) BME 39000 Profes Devlp and Design in BME
_____ (1) BME 20600 Biomechanics and Biomaterial Lab	(1) BME 48800 Preliminary Project Design
_____ (3) BME 25600 Physiol Modeling Human Health	(2) BME 48900 Senior Design Project Lab
_____ (3) BME 30100 Bioelectricity	(1) BME 49000 Professional Elements of Design

**Core Engineering Courses (12 credits)\***

_____ (3) ME 27000 Basic Mechanics I	(3) MSE 23000 Structures and Properties Materials
_____ (3) ME 20000 Thermodynamics I	(3) ECE 30100 Signals and Systems

**Selectives - (21 credits)** (<https://engineering.purdue.edu/BME/Academics/BMEUndergraduateProgram/AcademicDocuments/PlanofStudy>)

_____ (15) Engineering Selectives ( Including Quantitative Breadth Requirement)
_____ (6) Life Sciences Core Selectives

**Other Program Course Requirements (50 credits)**

_____ (4) MA 16500/16100 Calculus I ( <i>Satisfies FYE requirement</i> )
_____ (4) MA 16600/16200/17300 Calculus II ( <i>Satisfies FYE requirement</i> )
_____ (4) MA 26100 Multivariate Calculus ( <i>Satisfies Math and Physics requirement</i> )
_____ (4) MA 26200 Linear Algebra & Ord Diff. Eq. ( <i>Satisfies Math and Physics requirement</i> )
_____ (3) STAT 51100 Statistical Methods ( <i>Satisfies Biomedical Engineering Required Course requirement</i> )*
_____ (4) CHM 11500 General Chemistry I ( <i>Satisfies FYE requirement; Science Selective for core</i> )
_____ (4) CHM 11600/13600 General Chemistry II ( <i>Satisfies FYE requirement; Science Selective for core</i> )
_____ (4) PHYS 17200 Modern Mechanics ( <i>Satisfies FYE requirement; Science Selective for core</i> )
_____ (3) PHYS 24100 Electricity and Optics ( <i>Satisfies Math and Physics requirement</i> )
_____ (3) BIOL 23000 Biology of the Living Cell ( <i>Satisfies Life Science Core requirement</i> )
_____ (2) ENGR 13100/14100 Transforming Ideas to Innovation I ( <i>Satisfies FYE requirement</i> )
_____ (2) ENGR 13200/14200 Transforming Ideas to Innovation II ( <i>Satisfies FYE requirement</i> )
_____ (3) CS 15900 Programming Apps for ENGRS ( <i>Satisfies FYE Science Requirement</i> )
_____ (3) ENGL 10100 English Composition ( <i>Satisfies FYE requirement; Written Communication/ Informational Literacy for core</i> )
_____ (3) Unrestricted Electives

**General Electives (18 credits)**

_____ (3) Ethics/Healthcare	(3) G.E.-IV	( )	( )
_____ Policy Selective			
_____ (3) G.E.-II	(3) G.E.-V	( )	( )
_____ (3) G.E.-III	(3) G.E.- VI	( )	( )

**University Core Requirements**

Human Cultures Humanities	<input type="checkbox"/>	Science, Technology & Society Selective	<input type="checkbox"/>
Human Cultures Behavioral/Social Science	<input type="checkbox"/>	Written Communication	<input type="checkbox"/>
Information Literacy	<input type="checkbox"/>	Oral Communication	<input type="checkbox"/>
Science Selective	<input type="checkbox"/>	Quantitative Reasoning	<input type="checkbox"/>
Science Selective	<input type="checkbox"/>		

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**The student is ultimately responsible for knowing and completing all degree requirements.**
**Degree Works is knowledge source for specific requirements and completion**

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## Biomedical Engineering

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### Suggested Arrangement of Courses:

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
4	MA 16500		4	MA 16600	MA 16500
4	CHM 11500		4	CHM 11600	CHM 11500
4	PHYS 17200		3	CS 15900	
2	ENGR 13100		2	ENGR 13200	ENGR 13100
3/4	ENGL 10100/10600/10800		3	General Elective	
<b>17/18</b>			<b>16</b>		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	BME 20100	CHM 11600, ENGR 13100,13200, MA 16600	3	BME 20400	BIOL 23000, ME 27000
3	BIOL 23000		3	MSE 23000	CHM 11500, MA 16500
1	BME 20500	CHM 11600 ,ENGR 13100,13200,MA 16600	1	BME 20600	ME 27000,BME 20500
1	BME 29000	BME majors only	3	BME 25600	PHYS 24100, BIOL 23000, CS 15900
4	MA 26100	MA 16600	3	MA 26200	MA 26100
3	ME 27000	PHYS 17200, ENGR 13200	3	ME 20000	CHM 11500, ENGR 13200
3	PHYS 24100	PHYS 17200, MA 16600			
<b>18</b>			<b>17</b>		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
3	BME 30100	PHYS 24100, MA 16600, CS 15900	2	BME 30600	BME 30400
3	BME 30500	PHYS 24100 or 27200, MA 26200 or 26600, BME 20600	2	BME 39000	BME 29000, Junior standing
3	BME 30400	ME 20000, MA 26200 or 26600	3	ECE 30100	BME 30500, MA 26200
3	BME Technical Elective		3	STAT 51100	MA 16600
3	General Education or Ethics Selective		3	BME Technical Selective	
			3	General Elective or Ethics Selective	
<b>15</b>			<b>16</b>		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
1	BME 48800	BME 30600	3	BME Technical Selective	
2	BME 48900		3	BME Technical Elective	
1	BME 49000	BME 39000, ECE 30100 and senior standing	3	Life Science Selective	
3	BME Technical Selective (Q.B)		3	General Elective	
3	General Elective		3	General Elective	
3	Life Science Elective				
3	Unrestricted Elective				
<b>16</b>			<b>15</b>		

**130 semester credits required for Bachelor of Science in Biomedical Engineering degree.**

**A minimum Graduation Index and BME Major GPA of at least 2.0 is required to qualify for graduation with a BSBME.**

**All required First Year Engineering (FYE) courses must be completed with a C- or above for entry into BME.**

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