



<https://www.bw.edu/academics/undergraduate/engineering/>

## Department of Engineering

B.S., Engineering Four Year Curriculum Plan

### Year 1

Fall Semester			Spring Semester		
Course Number	Course Name	Credits	Course Number	Course Name	Credits
EGR 101	Intro to Eng.	1	EGR 102	Intro to Eng. Design & Analysis	2
PHY 163	Physics Seminar	3	EGR 103	Eng Graphics	1
CHM 111	General Chem. 1	4	PHY 131	General Physics 1	4
MTH 141	Calculus 1	4	PHY 151	Physics Lab 1	1
ENG 111	College Comp.	3	MTH 142	Calculus 2	4
FYE 100	First Year Experience	1	ENG 131	Exposition & Argument	3
<b>Total</b>		<b>16</b>	ASW	Wellness Credit	1
			<b>Total</b>		<b>16</b>

### Year 2

Fall Semester			Spring Semester		
Course Number	Course Name	Credits	Course Number	Course Name	Credits
EGR 200	Statics & Dynamics	4	EGR 201	Mechanics of Materials	4
EGR 202	Creativity & Design Thinking	2	EGR 203	Thermo. & Fluid Mechanics 1	4
PHY 132	General Physics 2	4	CSC 212	Programming for Sci. & Egr.	3
PHY 152	Physics Lab 2	1	MTH 245	Diff. Equations	3
MTH 243	Calculus 3	4	HUM/SOC	Optional Elective	3
ASW	Wellness Credit	1	<b>Total</b>		<b>14 (17)</b>
<b>Total</b>		<b>16</b>			

### Year 3

Fall Semester			Spring Semester		
Course Number	Course Name	Credits	Course Number	Course Name	Credits
EGR 300	Electronics, Circuits & Devices	3	EGR 303	Sensors & Controls	3
EGR 301	Materials & Manuf.	4	EGR 305	Global Eng. Experience	3
EGR 304	Experimental Engineering	3	EGR 306	Product Design & Entrepr.	3
MTH 235	Prob. & Statistics	3	EGR XXX	Eng.Tech. Elect.	3
MGT 340	Biomimicry	3	HUM XXX	Humanities Elect.	3
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>15</b>

### Year 4

Fall Semester			Spring Semester		
Course Number	Course Name	Credits	Course Number	Course Name	Credits
EGR 463	Eng. Seminar	1	EGR 465	Eng. Capstone 2	3
EGR 464	Eng. Capstone 1	2	ECN 288X	Engineering Econ.	3
EGR XXX	Eng. Tech. Elect.	3	SOC XXX	Soc. Sci. Elective	3
SOC XXX	Soc. Sci. Elective	3	HUM XXX	Humanities Elect.	3
HUM XXX	Humanities Elect.	3	XXX	Free Elective	3
HUM XXX	Humanities Elect.	3	<b>Total</b>		<b>15</b>
<b>Total</b>		<b>15</b>			

#### **Engineering Technical Electives:**

EGR 310: Thermodynamics & Fluid Mechanics II  
EGR 363: Structural Engineering  
EGR 363: Aerodynamics  
EGR 420: Sustainable Power Generation

#### **Notes:**

1. Baldwin Wallace Core Curriculum requires a minimum of four (4) humanities courses, one from each of the four groups: Aesthetic Understanding, Historical Thinking, Philosophical & Religious Traditions, and Creative Expression & Communication.
2. Baldwin Wallace Core Curriculum requires a minimum of two (2) Social Science courses, from at least two separate departments.
3. Baldwin Wallace Core Curriculum requires a minimum of one (1) Diversity “D” designated course.
4. Baldwin Wallace Core Curriculum requires a minimum of two (2) International “I” designated courses. EGR 305 satisfies one of these two required courses.