

California Baptist University
Bachelor of Science in Mechanical Engineering (BSME)

Catalog: 2023-2024

Recommended 29 units of credit completion by AP

ENG113	English I	3	<i>AP Language - score ≥ 3</i>
EGR182	Intro Math for Engr Apps	4	<i>AP Calculus AB - score ≥ 4</i>
MAT245	Calculus 1	4	
MAT255	Calculus II	4	<i>AP Calculus BC - score ≥ 3 (also waives MAT245 and EGR182)</i>
CHE115	General Chemistry I	3	<i>AP Chemistry - score ≥ 3</i>
CHE115L	General Chemistry I Lab	1	
GE (3)	Gen. Ed	3	<i>AP U.S. History - score ≥ 3</i>
GE (3)	Gen. Ed	3	<i>AP U.S. Government - score ≥ 3</i>
PHY201	Physics 1	4	<i>AP Physics C ≥ 4</i>

104 Total Units at CBU

Recommended 3-year sequence sheet

Fall (Semester 1)			17
<u>Code</u>	<u>Title</u>		<u># Units</u>
___ EGR101	Christian Worldview	3	
___ EGR122	Visual Languages	3	
___ EGR182L	Intro Math for Engr Apps	1	
___ EGR241	Statics	3	
___ EGR121	C++	3	
___ GST100		1	
___ ICS105	Intro to Global Studies	3	

Spring (Semester 2)			17
<u>Code</u>	<u>Title</u>		<u># Units</u>
___ ENG123	English II	3	
___ EGR102	Intro to Design	4	
___ EGR242	Strength of Materials	3	
___ PHY203	Physics II	4	
___ GE (3)	Gen. Ed CST/ICS	3	

Fall (Semester 3)			18
<u>Code</u>	<u>Title</u>		<u># Units</u>
___ EGR231	Circuits I	4	
___ EGR306	Internship Prep	1	
___ EGR341	Thermodynamics	3	
___ EGR344	Materials & MFG Processes	4	
___ EGR305	Engineering Statistics	3	
___ EGR382	ODE/Linear Algebra	3	

Spring (Semester 4)			18
<u>Code</u>	<u>Title</u>		<u># Units</u>
___ EGR232	Circuits II	4	
___ EGR302	Engineering Design	3	
___ EGR304	Leadership Cohort	1	
___ EGR342	Fluid Mechanics	3	
___ EGR441	Heat Transfer	3	
___ MAT343	Multivariable Calculus	4	

Fall (Semester 5)			16
<u>Code</u>	<u>Title</u>		<u># Units</u>
___ EGR331	Signals and Systems	3	
___ EGR343	Dynamics	3	
___ EGR346	Machine Design	3	
___ EGR401	Capstone Design I	3	
___ EGR405	Internship Report	1	
___ TE (3)	Tech. Elective	3	

Spring (Semester 6)			18
<u>Code</u>	<u>Title</u>		<u># Units</u>
___ EGR402	Capstone Design II	3	
___ EGR431	Control Systems	3	
___ EGR442	CAD Design	3	
___ EGR443	Mechanical Vibration	3	
___ EGR444	Mechanical ENGR Lab	3	
___ GE (3)	Gen. Ed CST/ICS	3	

Additional Degree Requirements (0 Units)

- Successfully pass the practice FE Exam
 - Complete an approved cross-cultural experience.
 - Complete pre-approved 200 hours of supervised internship.
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