

# California Baptist University

## Bachelor of Science in Mechanical Engineering (BSME)

Catalog: 2022-2023

132 Total Units

*Recommended 4-year sequence sheet*

<b>Fall (Semester 1)</b>			<b>17</b>
<u>Code</u>	<u>Title</u>	<u># Units</u>	
___ ENG113	English I	3	
___ EGR101	Intro to Engineering	3	
___ EGR122	Visual Languages	3	
___ EGR182	Intro Math for Engr Apps	4	
___ GST100		1	
___ ICS105	Intro to Global Studies	3	

<b>Spring (Semester 2)</b>			<b>18</b>
<u>Code</u>	<u>Title</u>	<u># Units</u>	
___ ENG123	English II	3	
___ EGR102	Intro to Design	4	
___ EGR120	Python (or EGR121 C++)	3	
___ MAT245	Calculus 1	4	
___ PHY201	Physics 1	4	

<b>Fall (Semester 3)</b>			<b>15</b>
<u>Code</u>	<u>Title</u>	<u># Units</u>	
___ EGR231	Circuits I	4	
___ EGR241	Statics	3	
___ MAT255	Calculus II	4	
___ PHY203	Physics II	4	

<b>Spring (Semester 4)</b>			<b>17</b>
<u>Code</u>	<u>Title</u>	<u># Units</u>	
___ CHE115	General Chemistry I	3	
___ CHE115L	General Chemistry I Lab	1	
___ EGR232	Circuits II	4	
___ EGR242	Strength of Materials	3	
___ EGR382	ODE/Linear Algebra	3	
___ GE (3)	Gen. Ed CST/ICS	3	

<b>Fall (Semester 5)</b>			<b>18</b>
<u>Code</u>	<u>Title</u>	<u># Units</u>	
___ EGR306	Internship Prep	1	
___ EGR341	Thermodynamics	3	
___ EGR343	Dynamics	3	
___ EGR344	MTLs & MFG Processes	4	
___ MAT343	Multivariable Calculus	4	
___ GE (3)	Gen. Ed	3	

<b>Spring (Semester 6)</b>			<b>16</b>
<u>Code</u>	<u>Title</u>	<u># Units</u>	
___ EGR302	Engineering Design	3	
___ EGR304	Leadership Cohort	1	
___ EGR305	Engineering Statistics	3	
___ EGR342	Fluid Mechanics	3	
___ EGR441	Heat Transfer	3	
___ EGR442	CAD Design	3	

<b>Fall (Semester 7)</b>			<b>16</b>
<u>Code</u>	<u>Title</u>	<u># Units</u>	
___ EGR331	Signals and Systems	3	
___ EGR346	Machine Design	3	
___ EGR401	Capstone Design I	3	
___ EGR405	Internship Report	1	
___ TE (3)	Tech. Elective	3	
___ GE (3)	Gen. Ed	3	

<b>Spring (Semester 8)</b>			<b>15</b>
<u>Code</u>	<u>Title</u>	<u># Units</u>	
___ EGR402	Capstone Design II	3	
___ EGR431	Control Systems	3	
___ EGR443	Mechanical Vibrations	3	
___ EGR444	Mechanical ENGR Lab	3	
___ GE (3)	Gen. Ed CST/ICS	3	

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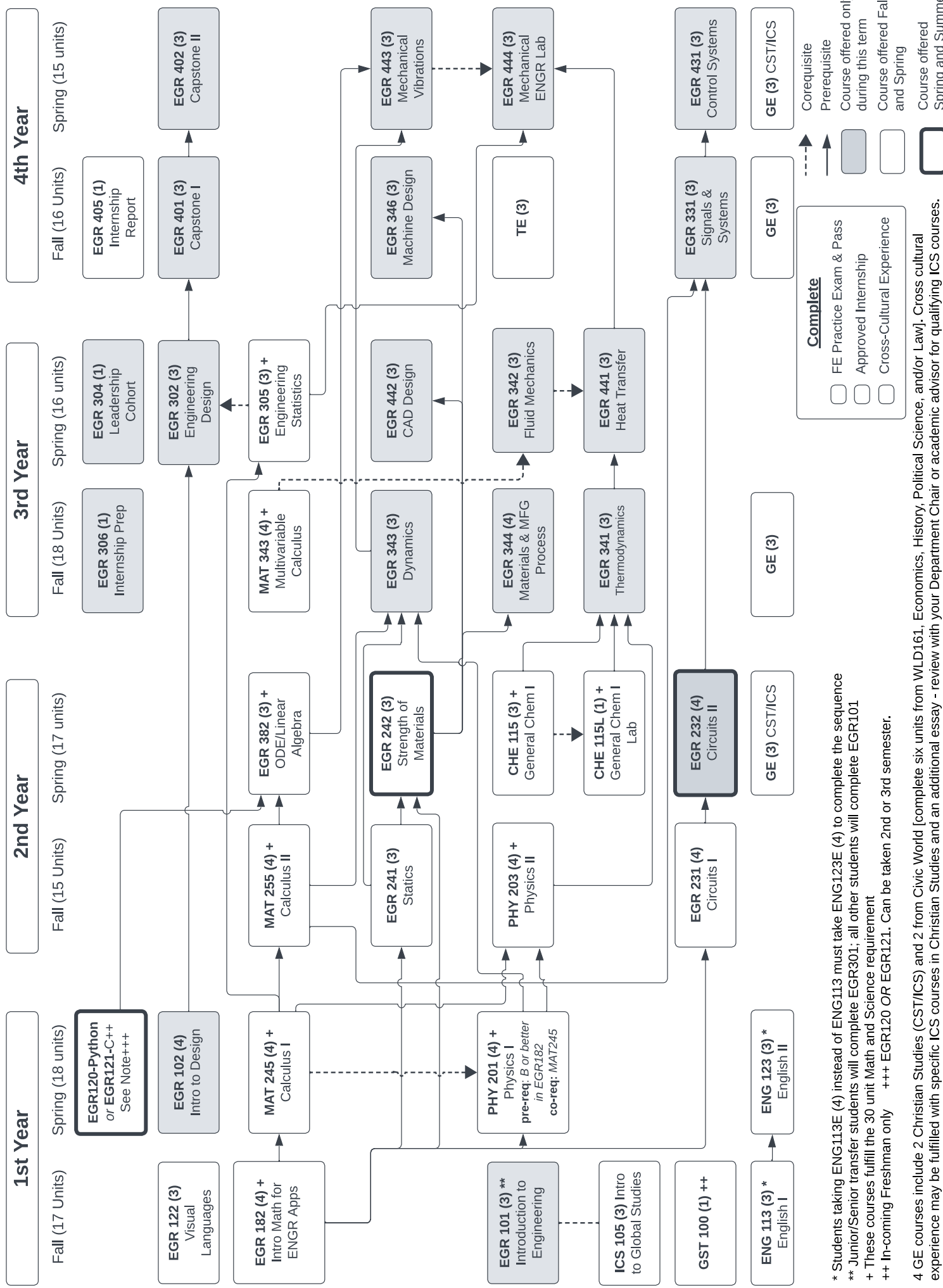
**Additional Degree Requirements (0 Units)**

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- Successfully pass the practice FE Exam
  - Complete an approved cross-cultural experience.
  - Complete pre-approved 200 hours of supervised internship.
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# Bachelor of Science in Mechanical Engineering (BSME) Course Flow Chart (132 Units)

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\* Students taking ENG113E (4) instead of ENG113 must take ENG123E (4) to complete the sequence  
 \*\* Junior/Senior transfer students will complete EGR301; all other students will complete EGR101  
 + These courses fulfill the 30 unit Math and Science requirement  
 ++ In-coming Freshman only   +++ EGR120 OR EGR121. Can be taken 2nd or 3rd semester.

4 GE courses include 2 Christian Studies (CST/ICS) and 2 from Civic World [complete six units from WLD161, Economics, History, Political Science, and/or Law]. Cross cultural experience may be fulfilled with specific ICS courses in Christian Studies and an additional essay - review with your Department Chair or academic advisor for qualifying ICS courses.