



CAL POLY

Q2S Transition

BMED Town Hall - Fall Quarter 2025

Major Points

Quarters	Semesters
3 x 10 weeks	2 x 15 weeks
191-6 units (180 standard)	131 units (120 standard)
4 units (typical class)	*3 units (typical class)
~4 classes per term	~5 classes per term



BIOMEDICAL ENGINEERING

THIS IS AN EXAMPLE

Individualized Course of Study

4-Year Semester

2026-2027 Semester Catalog

TOTAL SEMESTER UNITS REQUIRED : 131

YEAR ONE		YEAR TWO		YEAR THREE		YEAR FOUR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
Intro to Biomedical Engineering BMED 1101 (1)	Intro to Mechanical Design in Biomedical Engr. BMED 2212 (3)	Intro to Electrical Design in BMED BMED 2310 (2) <i>Corequisite: MATH 1262, PHYS 1143</i>	Principles and Applications of Biomaterials BMED 2420 (4) <i>ENGR 2211, BMED 212 or 2212, CHEM 124 or 1120</i>	Biomedical Engineering Professional Development BMED 3102 (1) <i>Corequisite: MATH 1262, PHYS 1143</i>	Medical Physiology for Engineers BMED 4460 (3) <i>BIO 2231 or 2232</i>	Senior Project Design I BMED 4465 (2) <i>Senior Standing; and BMED 3410</i>	Senior Project Design II BMED 4466 (2) <i>BMED 4465</i>
Calculus I MATH 1261 (4) <i>MATH 1005 or MATH 1007 with C- or better [GE 2]</i>	Calculus II MATH 1262 (4) <i>MATH 1261</i>	Intro to Electrical Design in BMED Lab BMED 2311 (1) <i>Corequisite: MATH 1262, PHYS 1143</i>	Life: Molecules and Cells BIO 1151 (4) <i>[GE 5B]</i>	Biomedical Modeling & Simulation BMED 3430 (2) <i>MATH 2341</i>	Bioelectronics & Instrumentation BMED 4440 (3) <i>BMED 2310 and BMED 2311</i>	Support Elective (3-4) *	Support Elective (3) *
Fundamentals of Chemical Structure and Properties CHEM 1120 (4) <i>[GE 5A & 5C]</i>	Fundamentals of Chemical Reactivity CHEM 1122 (4) *	Introduction to Mechanics ENGR 2211 (4) <i>MATH 1262 and PHYS 1141</i>	Introduction to Engineering Dynamics ENGR 2212 (2) <i>ENGR 2211</i>	Biomechanics BMED 3410 (3) <i>ENGR 2211 and ENGR 2212</i>	Biomedical Engineering Transport BMED 3425 (4) <i>ENGR 2212</i>	Support Elective (3) *	Technical Elective (3) *
GE 1A (3) *	General Physics I PHYS 1141 (4) <i>Corequisite MATH 1261</i>	Calculus III MATH 2263 (3) <i>MATH 1262</i>	Linear Analysis MATH 2341 (4) <i>MATH 1262</i>	Fluid Mechanics ME 3341 (3) <i>ENGR 2212, MATH 2263, and MATH 2341</i>	GE 4B (3) * <i>Area 4 courses must come from at least two different prefixes</i>	Technical Elective (3) *	Technical Elective (3-4) *
GE 1C (3) *	GE 1B (3) *	General Physics II PHYS 1143 (4) <i>PHYS 1141, Corequisite: MATH 1262</i>	GE 4A (3) * <i>Area 4 courses must come from at least two different prefixes</i>	Human Anatomy and Physiology BIO 2231 or 2232 (4) *	GE 3B (3) *	GE UD 3 (3) *	GE UD 4 (3) *
GE 3A (3) *				Engineering Statistics STAT 3210 (3) <i>[GE UD 5] MATH 1262, Completion of GE Area A w/ C- grades</i>		GE 6 (3) *	
15 UNITS	18 UNITS	17 UNITS	17 UNITS	16 UNITS	16 UNITS	17-18 UNITS	14-15 UNITS

Please Note: This flowchart is an example and not a template of your individualized plan. You will need to consult the Catalog and Degree Progress Report for detailed information about what you need to graduate. Engineering Student Services is available for assistance in this process.

*Refer to current catalog for course requirements

Course Color Key

MAJOR	GE
SUPPORT	CONCENTRATION
	FREE ELECTIVE

Additional Requirements

Click the links below to learn more about how to complete these requirements before graduation.

[U.S. CULTURAL PLURISM \(USCP\)](#)

[GRADUATION WRITING REQ. \(GWR\)](#)



Mechanical Design

- IME 1140 - Technical Graphics Communication for Design & Manufacturing (1 unit)
- IME 1143 - Introduction to Design & Manufacturing (2 units)
- ME 3328 - Design for Strength and Stiffness (4 units)
- BMED 3330 or ME 3329 Intermediate Biomedical Design or Mechanical Systems Design (3 units)
- Support Elective (3-4 units)
- Technical Electives (5-6 units)

18-19 units

Bioinstrumentation

- MATH 3351 - Differential Equations and Boundary Value Problems (3 units)
- BMED 3355 - Electrical Engineering Concepts for Biomedical Engineering (3 units)
- BMED 4445 - Biopotential Instrumentation (3 units)
- Technical Elective (9-10 units)

18-19 units

Cell Therapy

- BIO 3351 - Principles of Genetics (3 units)
- BIO 4456 - Immunology (4 units)
- BIO 4456 - Molecular Biology Lab (3 units)
- BMED 3360 - Cellular Immunotherapy (3 units)
- BMED 3362 - Regenerative Medicine Therapies (3 units)
- Technical Elective (3 units)

19 units



Individualized Concentration

- Support Electives (9-10 units)
- Technical Electives (9 units)

18-19 units

They're Approved!! ...sort of...

Nicole had asked for confirmation about all semester programs being approved at all levels and I double checked with Rachel, here is the confirmation!



Transitional Flow Charts

“4+0”, “3+1”, “2+2”, “1+3”

- Generally speaking, we encourage the following:
 - Fall 2022 cohort / current 4th year students - GRADUATE IN SPRING 2026
 - Fall 2023 cohort / current 3rd year students / “3+1” to adopt the 2026-2028 catalog
 - Examples to follow with both options for General Concentration
 - Fall 2024 cohort / current 2nd year students / “2+2” to adopt the 2026-2028 catalog
 - Example to follow with both options for General Concentration
 - Fall 2025 cohort / current 1st year students / “1+3” to adopt the 2026-2028 catalog
 - Example to follow with adopting 2026-2028 catalog
- *Important consideration - 4 quarter units = 2.67 semester units*

Transitional Flow Charts

“3+1”, “2+2”, “1+3”

- Critical Considerations:
 - 4 quarter units = 2.67 semester units
 - Degree Requirements: ~~131 semester units~~ 117.33 semester units
 - GE 2026
 - 43 semester units vs 48 semester units currently

Transitional Flow Charts

GE 2026

AREA 1: ENGLISH COMMUNICATION AND CRITICAL THINKING		SUBAREA IN GE 2020
1A	Written Communication (3 semester units)	A2: Written Communication (4 quarter units)
1B	Critical Thinking (3)	A3: Critical Thinking (4)
1C	Oral Communication (3)	A1: Oral Communication (4)
AREA 2: MATHEMATICS AND QUANTITATIVE REASONING		SUBAREA IN GE 2020
2	Mathematics and Quantitative Reasoning (3)	B4: Mathematics/Quantitative Reasoning (4)
AREA 3: ARTS AND HUMANITIES		SUBAREA IN GE 2020
3A	Arts (3)	C1: Arts - Arts, Cinema, Dance, Music, Theatre (4)
3B	Humanities: Literature, Philosophy, and Languages other than English (3)	C2: Humanities - Literature, Philosophy, and Languages other than English (4)

Transitional Flow Charts

GE 2026

AREA 4: SOCIAL AND BEHAVIORAL SCIENCES		SUBAREA IN GE 2020
	<i>Area 4 includes two lower-division courses (4A and 4B) and one upper-division course (see Upper-Division Area 4 below). These three courses must come from at least two different course prefixes.</i>	<i>Select courses in Area D from at least two different prefixes.</i>
4A	American Institutions (3) (Title 5 Section 40404 Requirement)	D1: American Institutions (4) (Title 5 40404 Requirement)
4B	Social and Behavioral Sciences (3)	Lower-Division D (4)
AREA 5: PHYSICAL AND LIFE SCIENCES		SUBAREA IN GE 2020
5A	Physical Sciences (3)	B1: Physical Sciences (4)
5B	Life Sciences (3)	B2: Life Sciences (4)
5C	Laboratory (1) <i>May be embedded in a 5A or 5B course or may be offered as a standalone laboratory, with a prerequisite or co-requisite of an associated lecture course</i>	B3: Laboratory (0) <i>Embedded in either B1 or B2</i>
AREA 6: ETHNIC STUDIES		SUBAREA IN GE 2020
6	Ethnic Studies (3)	Area F: Ethnic Studies (4)

Transitional Flow Charts

GE 2026

Proposed Upper-Division GE Requirements

UPPER-DIVISION GE REQUIREMENTS	SUBAREA IN GE 2020
Upper-Division Area 2 or Upper-Division Area 5 (3 semester units)	Upper-Division B (4 quarter units)
Upper-Division Area 3 (3)	Upper-Division C (4)
Upper-Division Area 4 (3) <i>Area 4 includes two lower-division courses (see 4A and 4B above) and one upper-division course (Upper-Division Area 4). These three courses must come from at least two different course prefixes.</i>	Upper-Division D (4)

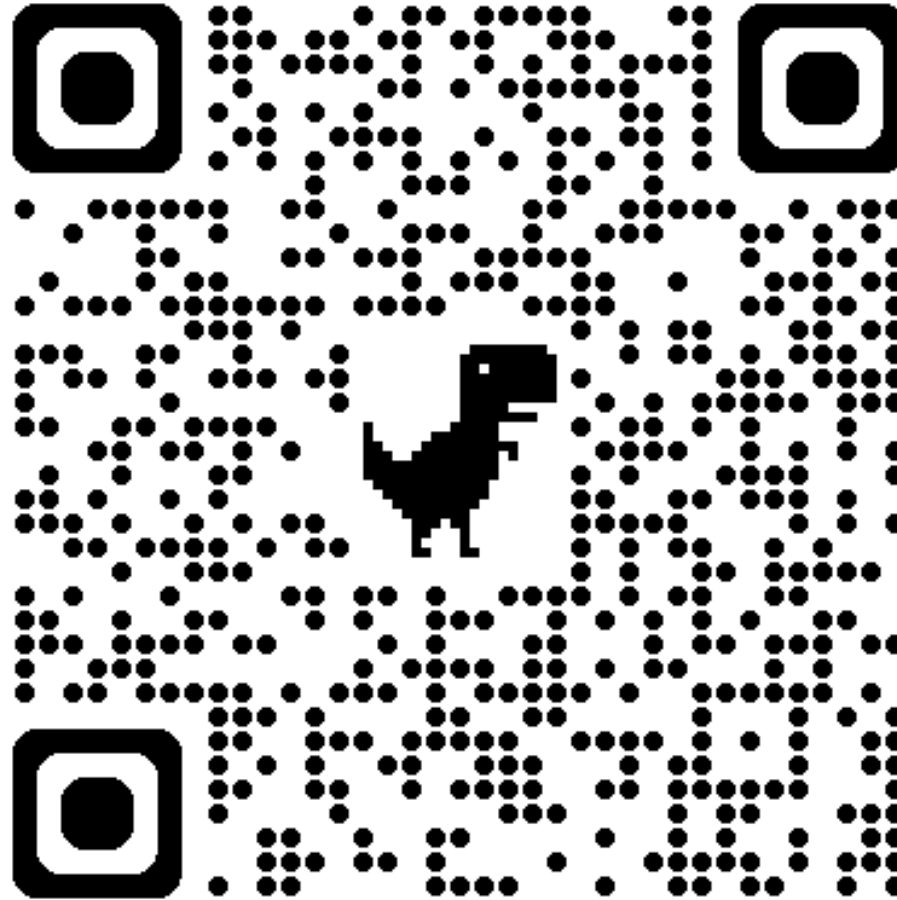
Transitional Flow Charts

GE 2026

- The current Area B: Scientific Inquiry and Quantitative Reasoning is being split into two new areas.
 - Area 2: Mathematics and Quantitative Reasoning
 - Area 5: Physical and Life Sciences
- Area 5C: Laboratory is now a 1-unit course. (It had been 0 units in the past as it was embedded in a Physical or Life Science course).
- There will no longer be an Area C lower-division elective (4 quarter units).
- There will no longer be a requirement for courses in lower-division C to come from three different prefixes.
- There will no longer be an Area E: Lifelong Learning and Self-Development (4 quarter units).
- There will no longer be a high-unit template. All Cal Poly students will have the same GE requirements.
- There will no longer be GE Area Electives (8 quarter units), which were available for students on the GE 2020 standard template.

Transitional Flow Charts

GE 2026



“3+1”



Transitional Flow Charts- Fall '23 Cohort

“3+1”

2022-2026 catalog
Requirements

Notes

- Based on high school AP & deviations to the flow chart, this may not apply to you

SENIOR		
Fall	Winter	Spring
Biomedical Engineering Transport BMED 425 (4) (ME 302; ME 341)	Biomedical Modeling and Simulation BMED 430 (2) (BMED 310)	General Curriculum Approved Technical Elective (300/400 level) (4)⁴
Biomedical Engineering Design I BMED 455 (4)⁵ (BMED 410)	Biomedical Engineering Design II: Senior Project BMED 456 (4)⁶ (BMED 455)	General Curriculum Approved Technical Elective (300/400 level) (4)⁴
Bioelectronics & Instrumentation BMED 440 (4) (BMED 310; EE 201)	Contemporary Issues in BMED BMED 450 (4) (Sr Standing)	
General Curriculum Approved Support Elective (4)³		
	GE (4) **	GE (4) **
		GE (4) **
16	14	16
		TOTAL: 191-192

Senior	
Fall	Spring
BMED 3425 (4)*	BMED 3430 - Modeling (2)
BMED 4465 - Design I (2)	BMED 4466 - Design II (2)
BMED 4440 - Bioelectronics (3)	BMED 4450 (3)
Support Elec (3)	Tech Elec (4)
Tech Elec (3)	GE (3)
GE (3)	GE (3)
18 units	17 units

Transitional Flow Charts- Fall '23 Cohort

“3+1”

2026-2028 Catalog Requirements

FRESHMAN				SOPHOMORE				JUNIOR				SENIOR			
Fall	Winter	Spring		Fall	Winter	Spring		Fall	Winter	Spring		Fall	Winter	Spring	
Introduction to the Biomedical Engineering Major BMED 101 (1)	Introduction to the Biomedical Engineering Major BMED 102 (1)			General Curriculum Engineering Design ME 338 (2)*	Introduction to Biomedical Engineering Design BMED 212 (3)	General Curriculum Approved Support Elective (4)*		Biomedical Engineering Measurement and Analysis BMED 310 (4)	Biomechanics BMED 410 (4)	Principles of Biomaterials Design BMED 420 (4)		Biomedical Engineering Transport BMED 425 (4)	Biomedical Modeling and Simulation BMED 430 (2)	General Curriculum Approved Technical Elective (300/400 level) (4)*	
Calculus I MATH 141 (4)	Calculus II MATH 142 (4)	Calculus III MATH 143 (4)		Calculus IV MATH 241 (4)	Linear Analysis I MATH 244 (4)	Electric Circuit Theory EE 201 (3)		General Curriculum Mechanics of Materials II CE 207 (2)*	Engineering Physiology BMED 400 (4)	Approved Support Elective (4)*		Biomedical Engineering Design I: Senior Project BMED 455 (4)*	Biomedical Engineering Design II: Senior Project BMED 460 (4)	General Curriculum Approved Technical Elective (300/400 level) (4)*	
General Physics I PHYS 141 (4)	General Physics II PHYS 142 (4)	General Physics III PHYS 143 (4)		General Physics IV PHYS 144 (4)	Engineering Statics ME 211 (3)	Engineering Dynamics ME 212 (3)		Materials Engineering MATE 210 (3)	Statistical Methods for Engineers STAT 312 (4)	General Curriculum Approved Technical Elective (300/400 level) (4)*		Biomechanics & Instrumentation BMED 440 (4)	Contemporary Issues in BME BMED 450 (4)		
General Chemistry for Physical Science and Engineering I CHEM 124 (4)	General Chemistry for Physical Science and Engineering II CHEM 125 (4)	General Chemistry for Physical Science and Engineering III CHEM 126 (4)		General Chemistry for Physical Science and Engineering IV CHEM 127 (4)	Introduction to Cell & Molecular Biology BIO 161 (4)	Programming for Engineering Students CSC 225 (2)		Choose one: Human Anatomy & Physiology I or II BIO 231 (5)	Pharmacodynamics I ME 302 (3)	Fluid Mechanics I ME 341 (3)		Approved Support Elective (4)*			
Oral Communication COMS 101 or 102 (4)**	Oral Communication COMS 103 or 104 (4)**	Oral Communication COMS 105 or 106 (4)**		Oral Communication COMS 107 or 108 (4)**	Oral Communication COMS 109 or 110 (4)**	Oral Communication COMS 111 or 112 (4)**		Oral Communication COMS 113 or 114 (4)**	Oral Communication COMS 115 or 116 (4)**	Oral Communication COMS 117 or 118 (4)**		Oral Communication COMS 119 or 120 (4)**	Oral Communication COMS 121 or 122 (4)**	Oral Communication COMS 123 or 124 (4)**	
Expository Writing ENGL 133 or 134 (4)**	Expository Writing ENGL 135 or 136 (4)**	Expository Writing ENGL 137 or 138 (4)**		Expository Writing ENGL 139 or 140 (4)**	Expository Writing ENGL 141 or 142 (4)**	Expository Writing ENGL 143 or 144 (4)**		Expository Writing ENGL 145 or 146 (4)**	Expository Writing ENGL 147 or 148 (4)**	Expository Writing ENGL 149 or 150 (4)**		Expository Writing ENGL 151 or 152 (4)**	Expository Writing ENGL 153 or 154 (4)**	Expository Writing ENGL 155 or 156 (4)**	
GE (4)	GE (4)	GE (4)		GE (4)	GE (4)	GE (4)		GE (4)	GE (4)	GE (4)		GE (4)	GE (4)	GE (4)	
17	17	16		16	16	17		16-19	16	16		16	14	16	
TOTAL: 191-192															



BIOMEDICAL ENGINEERING

2026-2027 Semester Catalog

THIS IS AN EXAMPLE
Individualized Course of Study
4-Year Semester

TOTAL SEMESTER UNITS REQUIRED : 131

YEAR ONE		YEAR TWO		YEAR THREE		YEAR FOUR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
Intro to Biomedical Engineering BMED 1101 (1)	Intro to Biomedical Engineering BMED 2212 (3)	Intro to Biomedical Design in BME BMED 2310 (2)	Principles and Applications of Biomaterials BMED 2420 (4)	Biomedical Engineering Fundamentals BMED 3102 (1)	Medical Planning for Engineers BMED 4460 (3)	Senior Project Design I BMED 4465 (2)	Senior Project Design II BMED 4466 (2)
Calculus I MATH 1261 (4)	Calculus II MATH 1262 (4)	Calculus III BMED 2311 (1)	Cell, Tissues and Cells BIO 1151 (4)	Biomedical Imaging & Simulation BMED 3430 (2)	Biomedical Engineering & Instrumentation BMED 4440 (3)	Support Elective (3-4)	Support Elective (3)
Fundamentals of Chemical Engineering CHEM 1120 (4)	Fundamentals of Chemical Engineering CHEM 1122 (4)	Introduction to Biotechnology ENGR 2211 (4)	Introduction to Engineering Dynamics ENGR 2212 (2)	Biomedical Engineering BMED 3410 (3)	Biomedical Engineering Transport BMED 3425 (4)	Support Elective (3)	Technical Elective (3)
GE 1A (3)	General Physics I PHYS 1141 (4)	Calculus IV MATH 2263 (3)	Linear Algebra MATH 2341 (4)	Fluid Mechanics ME 3341 (3)	GE 4B (3)	Technical Elective (3)	Technical Elective (3-4)
GE 1C (3)	General Physics II PHYS 1142 (4)	General Physics I PHYS 1143 (4)	General Physics II PHYS 1144 (4)	Human Anatomy and Physiology BIO 2231 or 2232 (4)	GE 4A (3)	GE UD 3 (3)	GE UD 4 (3)
		GE 3A (3)	GE 3B (3)	Engineering Statistics STAT 3210 (3)	GE 3B (3)	GE 6 (3)	
15 UNITS	18 UNITS	17 UNITS	17 UNITS	16 UNITS	16 UNITS	17-18 UNITS	14-15 UNITS

Please Note: This flowchart is an example and not a template of your individualized plan. You will need to consult the Catalog and Degree Progress Report for detailed information about what you need to graduate. Engineering Student Services is available for assistance in this process.

*Refer to current catalog for course requirements

Course Color Key		Additional Requirements	
MAJOR	GE	Click the links below to learn more about how to complete these requirements before graduation.	
SUPPORT	CONCENTRATION	U.S. CULTURAL PLURISM (USCP)	
	FREE ELECTIVE	GRADUATION WRITING REQ. (GWR)	

Transitional Flow Charts- Fall '23 Cohort

“3+1”

2026-202 Catalog

Requirements

New GE Path

LOWER-DIVISION (34 units)

Subject Area 1 English Communication

- 1A English Composition (3 units)
- 1B Critical Thinking (3 units)
- 1C Oral Communication (3 units)

Subject Area 2 Mathematical Concepts and Quantitative Reasoning

- One course (3 units)

Subject Area 3 Arts and Humanities

- 3A Arts (3 units)
- 3B Humanities (3 units)

Subject Area 4 Social and Behavioral Sciences ^

- Two courses (6 units)

Subject Area 5 Physical and Biological Sciences

- 5A Physical Science (3 units)
- 5B Biological Science (3 units)
- 5C Laboratory (1 unit)–May be embedded in 5A or 5B course, as long as 7 units met for lower-division Subject Area 5.

Subject Area 6 Ethnic Studies

- One course (3 units)

UPPER-DIVISION (9 units)

- Upper-division 5 Science or 2 Mathematical Concepts/Quantitative Reasoning (3 units)
- Upper-division 3 Arts or Humanities (3 units)
- Upper-division 4 Social and Behavioral Sciences ^ (3 units)

^ Two different disciplines across the 9 units in Area 4.

Transitional Flow Charts- Fall '23 Cohort

“3+1”

2026-2027 Catalog Requirements

‘Running Deficit’ - 5 units

Year 1					
Fall Semester	Quarter Map	Deficit	Spring Semester	Quarter Map	Deficit
BMED 1101 (1)	BMED 101 (1)	0.33	BMED 2212 (3)	BMED 212	1.00
MATH 1261 (4)	MATH 141-2 (6)	0	MATH 1262 (4)	MATH 142-3 (6)	0
CHEM 1120 (4)	CHEM 124 (4)	1.33	CHEM 1122 (4)	CHEM 125 (4)	1.33
GE 1A (3)	ENGL 133/4 (4)	0.33	PHYS 1141 (4)	PHYS 141-2 (6)	0
GE 1C (3)	COMS 101/2 (4)	0.33	GE 1B (3)	ENGL 147 (4)	0.33
	Total Deficit	2.33		Total Deficit	2.66

Transitional Flow Charts- Fall '23 Cohort

“3+1”

2026-2028 Catalog Requirements

Running ‘Deficit’ - 10.33 units

Year 2					
Fall Semester	Quarter Map	Deficit	Spring Semester	Quarter Map	Deficit
BMED 2310/11 (3)	BMED 310	0.33	BMED 2420 (4)	BMED 420 (4)	1.33
ENGR 2211 (4)	ME 211/CE 204 (6)	0	BIO 1151 (4)	BIO 161 (4)	1.33
MATH 2263 (3)	MATH 241 (4)	0.33	ENGR 2212 (2)	ME 212 (3)	0
PHYS 1143 (4)	PHYS 142-3 (6)	0	MATH 2341 (4)	MATH 244 (4)	1.33
GE 3A (3)	GE C1 (4)	0.33	GE 4A (3)	GE D1 (4)	0.33
	Total Deficit	1.00		Total Deficit	4.33

Transitional Flow Charts- Fall '23 Cohort

“3+1”

2026-2028 Catalog Requirements

Running ‘Deficit’ - 14 units

Year 3					
Fall Semester	Quarter Map	Deficit	Spring Semester	Quarter Map	Deficit
BMED 3102 (1)	BMED 102 (1)	0.33	BMED 4460 (3)	BMED 460 (4)	0.33
BMED 3430 (2)	Y4	0	BMED 4440 (3)	Y4	0
BMED 3410 (3)	BMED 410 (4)	0.33	BMED 3425 (4)	Y4	0
ME 3341 (3)	ME 341 (3)	1.00	GE 4B (3)	D elec lower (4)	0.33
BIO 2231 or 32 (4)	BIO 231 or 32 (5)	0.67	GE 3B (3)	C2 (4)	0.33
STAT 3210 (4)	STAT 312 (3)	0.33			
	Total Deficit	2.67		Total Deficit	1.00

Transitional Flow Charts- Fall '23 Cohort

“3+1”

2026-2028 Catalog Requirements

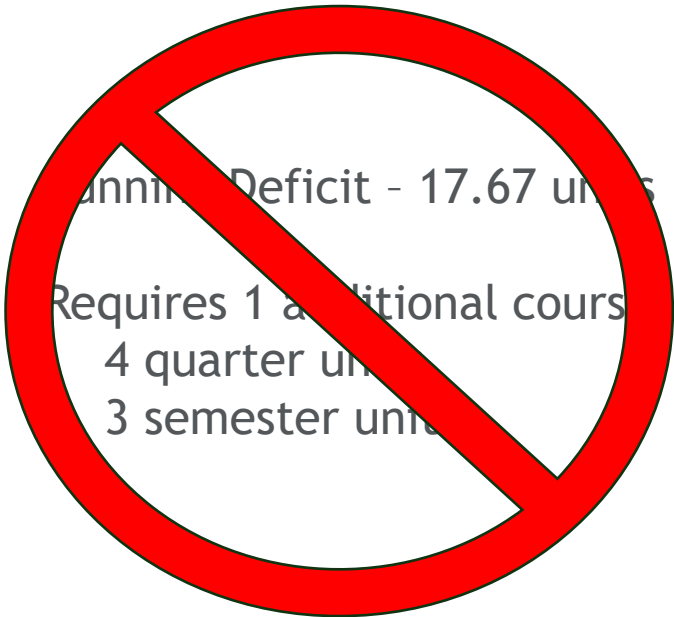
Running ‘Deficit’ - 17.67 units

Year 4					
Fall Semester	Quarter Map	Deficit	Spring Semester	Quarter Map	Deficit
BMED 4465 (2)	n/a	0	BMED 4466 (2)	n/a	
Support Elec (3)	Support Elec (4)	0.33	Support Elec (4)	Support Elec (4)	1.33
Support Elec (3)	n/a	0	Tech Elec (3)	Tech Elec (4)	0.33
Tech Elec (3)	Tech Elec (4)	0.33	Tech Elec (3)	Tech Elec (4)	0.33
GE UD 3 (3)	UD C (4)	0.33	GE UD 4 (3)	UD D (4)	0.33
GE 6 (3)	F (4)	0.33			
	Total	1.33		Total	2.33

Transitional Flow Charts- Fall '23 Cohort

“3+1”

2026-2028 Catalog Requirements



Balance	
Extra Classes	Surplus
ME 228	1.33
CSC 231	1.33
EE 201	2
CE 207	1.33
MATE 210	2
ME 302	2
GE E	2.67
GE C Elec	2.67
Total	15.33

Transitional Flow Charts- Fall '23 Cohort



OFFICE OF THE PROVOST AND
EXECUTIVE VICE PRESIDENT FOR ACADEMIC AFFAIRS

MEMORANDUM

To: Nathan Evans
Deputy Vice Chancellor for Academic
and Student Affairs

Date: June 9, 2025

From: Al Liddicoat *AL*
Interim Provost and Executive Vice
President for Academic Affairs

Copies: Cheryl May
Rachel Fernflores

Subject: Unit Waiver

Cal Poly San Luis Obispo is on track to transition to semesters in fall 2026. One outcome of Cal Poly's conversion to semesters is that due to the conversion factor of quarter units to semester units, it is possible that a student who began their academic program on quarters and completed it on semesters could meet all degree course requirements but still have fewer than the required 120 undergraduate semester units. The conversion factor is 1.5. A 3-unit semester course is 4.5 quarter units. A 4-unit quarter course converts to 2.67 semester units. After consulting with Pomona and San Bernardino about how they addressed unit shortfalls for students who completed all degree requirements, we intend to waive up to 2.67 semester units and/or 4 quarter units for any continuing student who has completed all other degree requirements but has fewer than 120 semester units and/or 180 quarter units.

The unit shortage could occur for a continuing student on the 2026-28 semester catalog and for a student on the 2022-26 quarter catalog, or indeed, a student on an earlier quarter catalog. The shortage could occur not only due to the conversion factor, but also because many of our converted courses have shifted in total number of units. There is a wide range of units per course across the semester curriculum. Many semester courses are not a one-to-one conversion of a quarter course to a semester course. For example, some semester courses award fewer units than their quarter counterparts.

Waiving units will apply only to students who began on a quarter calendar but will finish on a semester calendar and only upon the completion of all degree requirements. Please let us know if you have any concerns with this approach to addressing the anticipated shortfall in the total number of units for continuing quarter students on semesters.



Transitional Flow Charts- Fall '23 Cohort

“3+1”

2026-2027 Catalog

Semester Requirements

Can I just take 11.33 fewer units?

No- you still need to satisfy all of the degree requirements

Running Deficit - 4 units
(17.67-13.67 waived by CO)

~~Requires 1 additional course~~
~~— 4 quarter units~~
~~— 3 semester units~~

Balance	
Extra Classes	Surplus
ME 322	1.33
CSC 221	1.33
CE 207	1.33
MATE 210	2
ME 302	2
GE E	2.67
GE C Elec	2.67
Total	15.33

Transitional Flow Charts Fall '23 Cohort



BIOMEDICAL ENGINEERING

2026-2027 Semester Catalog

THIS IS AN EXAMPLE

Individualized Course of Study
4-Year Semester

TOTAL SEMESTER UNITS REQUIRED : 131

YEAR ONE		YEAR TWO		YEAR THREE		YEAR FOUR	
FALL	SPRING	FALL	SPRING	FALL	SPRING	FALL	SPRING
Intro to Biomedical Engineering BMED 1101 (1)	Intro to Mechanical Design in Biomedical Engr. BMED 2212 (3)	Intro to Electrical Design in BMED BMED 2310 (2) <i>Corequisite: MATH 1262, PHYS 1143</i>	Principles and Applications of Biomaterials BMED 2420 (4) <i>ENGR 2211, BMED 2312 or 2213, CHEM 124 or 1120</i>	Biomedical Engineering Professional Development BMED 3102 (1) <i>Corequisite: MATH 1262, PHYS 1143</i>	Medical Physiology for Engineers BMED 4460 (3) <i>BIO 2331 or 2252</i>	Senior Project Design I BMED 4465 (2) <i>Senior Standing; and BMED 3410</i>	Senior Project Design II BMED 4466 (2) <i>BMED 4465</i>
Calculus I MATH 1261 (4) <i>MATH 1005 or MATH 1007 with C- or better (GE 2)</i>	Calculus II MATH 1262 (4) <i>MATH 1261</i>	Intro to Electrical Design in BMED Lab BMED 2311 (1) <i>Corequisite: MATH 1262, PHYS 1143</i>	Life: Molecules and Cells BIO 1151 (4) <i>(GE 5B)</i>	Biomedical Modeling & Simulation BMED 3430 (2) <i>MATH 2345</i>	Bioelectronics & Instrumentation BMED 4440 (3) <i>BMED 2310 and BMED 2311</i>	Support Elective (3-4)	Support Elective (3)
Fundamentals of Chemical Structure and Properties CHEM 1120 (4) <i>(GE 5A & 5C)</i>	Fundamentals of Chemical Reactivity CHEM 1122 (4)	Introduction to Mechanics ENGR 2211 (4) <i>MATH 1262 and PHYS 1141</i>	Introduction to Engineering Dynamics ENGR 2212 (2) <i>ENGR 2211</i>	Biomechanics BMED 3410 (3) <i>ENGR 2211 and ENGR 2212</i>	Biomedical Engineering Transport BMED 3425 (4) <i>ENGR 2212</i>	Support Elective (3)	Technical Elective (3)
GE 1A (3)	General Physics I PHYS 1141 (4) <i>Corequisite: MATH 1262</i>	Calculus III MATH 2263 (3) <i>MATH 1262</i>	Linear Analysis MATH 2341 (4) <i>MATH 1262</i>	Fluid Mechanics ME 3341 (3) <i>ENGR 2212, MATH 2263, and MATH 2341</i>	GE 4B (3) <i>Area 4 courses must come from at least two different prefixes</i>	Technical Elective (3)	Technical Elective (3-4)
GE 1C (3)	GE 1B (3)	General Physics II PHYS 1143 (4) <i>PHYS 1141, Corequisite: MATH 1262</i>	GE 4A (3) <i>Area 4 courses must come from at least two different prefixes</i>	Human Anatomy and Physiology BIO 2231 or 2232 (4)	GE 3B (3)	GE UD 3 (3)	GE UD 4 (3)
15 UNITS	18 UNITS	17 UNITS	17 UNITS	16 UNITS	16 UNITS	17-18 UNITS	14-15 UNITS

Please Note: This flowchart is an example and not a template of your individualized plan. You will need to consult the Catalog and Degree Progress Report for detailed information about what you need to graduate. Engineering Student Services is available for assistance in this process.

*Refer to current catalog for course requirements

Course Color Key

MAJOR	GE
SUPPORT	CONCENTRATION
	FREE ELECTIVE

Additional Requirements

Click the links below to learn more about how to complete these requirements before graduation.

- [U.S. CULTURAL PLURISM \(USCP\)](#)
- [GRADUATION WRITING REQ. \(GWR\)](#)



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Transitional Flow Charts Fall '23 Cohort

Pinch Points - 4th year of current flow chart

- BMED 425 → BMED 3425 remains at 4 units and incorporates content from ME 302 - Thermodynamics
 - If you've taken ME 302, then take BMED 425 this year
 - If you haven't taken ME 302, hold off and take BMED 3425 next year
- BMED 455/456 for two quarters → BMED 4465/4466 for two semesters



Transitional Flow Charts Fall '24 Cohort

Pinch Points - 3rd year of current flow chart

- BMED 420 is moving from the 3rd year to the 2nd year (as BMED 2420)
 - Encouraging Fall 2024 cohort to take BMED 420 in Spring 2026
 - Requires completing MATE 210 and CE 204 in Winter 2026
 - Will offer extra sections for Fall 2024 cohort in Spring 2026
- BMED 310 is moving from the 3rd year to the 1st or 2nd year (as BMED 2310 and 2311)
 - Encourage Fall 2024 cohort to take BMED 310 if they can reasonably fit it in
 - If not, then take EE 201 and CSC 231 to satisfy



Transitional Flow Charts Fall '24 Cohort

Pinch Points - 2nd year of current flow chart

- ME 211 - Statics + CE 204 - Mechanics of Materials = ENGR 2211 - Introduction to Mechanics
 - Get through both courses this year!
- Some of MATH 344 → MATH 2341; Some of Math 344 → MATH 3351
 - If MATH 344 is required in your concentration, try to get through this year



Transitional Flow Charts Fall '25 Cohort

Pinch Points - 1st year of current flow chart

- MATH 143 + parts of MATH 142 = MATH 1262
 - Try to get through MATH 143!
 - Spring 2026
 - Summer 5-week course
 - If not- Cap course in Fall 2026
- PHYS 143 + part of PHYS 142 = PHYS 1143
 - Try to get through PHYS 143
 - Summer 5-week course?
 - PHYS 142 and PHYS 143 in Spring?
 - If not- Cap course in Fall 2026



Additional Resources



YEAR ONE	
FALL	SPRING
Intro to Biomedical Engineering BMED 1101 (1)	Intro to Mechanical Design in Biomedical Eng. BMED 2212 (3)
Calculus I MATH 1261 (4) (MATH 100B or MATH 100T with Co-requisite) (SEE A)	Calculus II MATH 1262 (4) (MATH 1261)
Fundamentals of Chemical Structure and Properties CHEM 1120 (4) (SEE AA & AC)	Fundamentals of Chemical Reactivity CHEM 1122 (4) (MATH 1262)
GE 1A (3)	General Physics I PHYS 1141 (4) (Co-requisite MATH 1262)
GE 1C (3)	GE 1B (3)
15 UNITS	18 UNITS

Please Note: This flowchart is an example and not a template. You will need to consult the Catalog and Degree Plan information about what you need to graduate. Engineers for assistance in this process.

*Refer to current catalog for course requirements



[UNIVERSITY SEMESTER CONVERSION WEBPAGE](#)
[CENG SEMESTER CONVERSION WEBPAGE & FAQS](#)
[UNIT CONVERTER TOOL](#)

QUARTER COURSE	SEMESTER
BMED 101	→ BMED 101
BMED 102	→ BMED 102
BMED 212	→ BMED 212
BMED 310	→ BMED 310
EE 201 -AND- CSC 231	→ BMED 310
BMED 410	→ BMED 410
BMED 420	→ BMED 420
BMED 425	→ BMED 425
BMED 430	→ BMED 430
BMED 440	→ BMED 440

BIOMEDICAL ENGINEERING

BIOMEDICAL ENGINEERING

Requirement Mappings: Quarter to Semester

QUARTER COURSE		SEMESTER REQUIREMENT	
ICS	ME 302	➡	ICS TECHNICAL ELECTIVE
SUPPORT	BIO 161	➡	BIO 1151
	BIO 231 -OR- BIO 232	➡	BIO 2231 -OR- BIO 2232
	ME 211 -AND- CE 204	➡	ENGR 2211
	CHEM 124	➡	CHEM 1120
	CHEM 125	➡	CHEM 1122
	MATH 141 - AND - MATH 142 - AND - MATH 143	➡	MATH 1261 - AND - MATH 1262
	MATH 141 - AND - MATH 142 - AND - CAP COURSE	➡	MATH 1261 - AND - MATH 1262
	MATH 141 - AND - BRIDGE COURSE - AND - MATH 1262 (SEMESTER)	➡	MATH 1261 - AND - MATH 1262
SUPPORT	MATH 241	➡	MATH 2263
	MATH 244	➡	MATH 2341
	ME 212	➡	ENGR 2212
	ME 341	➡	ME 3341
	PHYS 141 - AND - PHYS 142 - AND - PHYS 143	➡	PHYS 1141 - AND - PHYS 1143
	PHYS 141 (QUARTER) - AND - PHYS 142 (QUARTER) - AND - CAP COURSE	➡	PHYS 1141 - AND - PHYS 1143
	PHYS 141 (QUARTER) - AND - PHYS 143 (QUARTER) - AND - CAP/BRIDGE COURSE	➡	PHYS 1141 - AND - PHYS 1143
	PHYS 141 (QUARTER) - AND - BRIDGE COURSE - AND - PHYS 1143 (SEMESTER)	➡	PHYS 1141 - AND - PHYS 1143
STAT 312	➡	STAT 3210	

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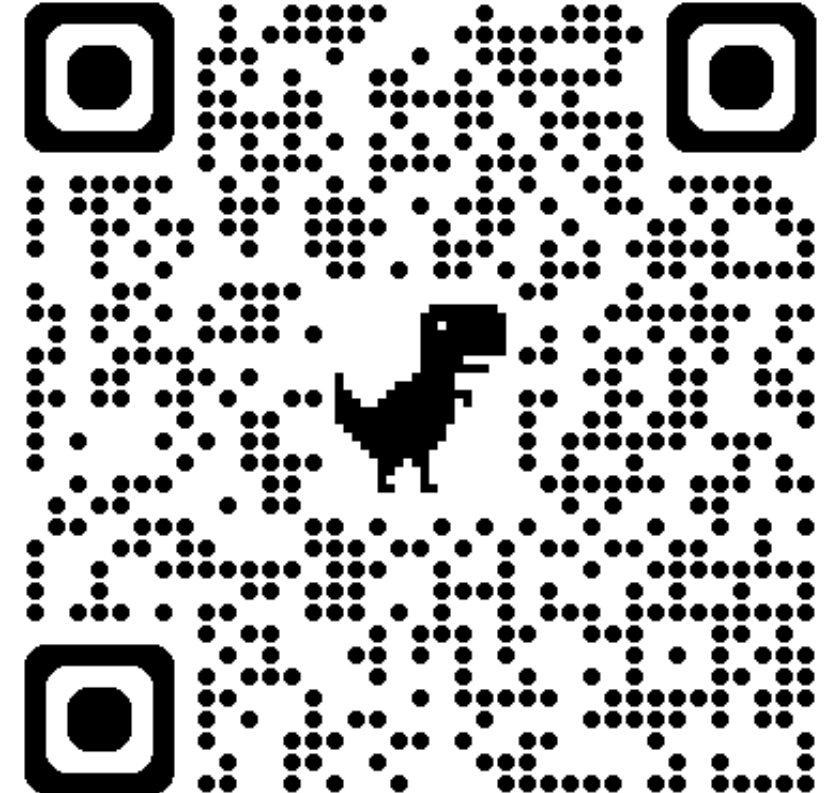
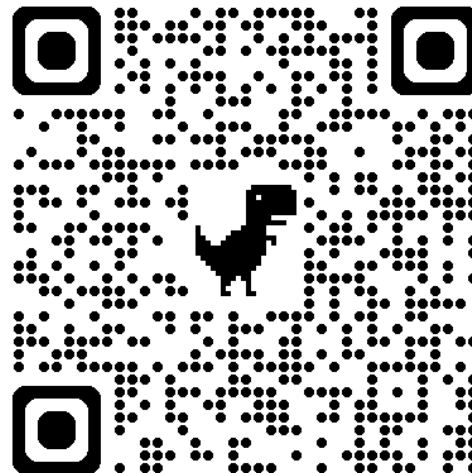


Additional Resources

Engineering Student Services

- <https://eadvise.calpoly.edu/semester-conversion-ceng>

- <https://ge.calpoly.edu/ge-2026>



Moving Forward

Planning, Communication, and Flexibility

- Email updates
 - Town Hall in Winter (~2 weeks before Spring Registration)
 - Dedicated OH (Mondays from 11:10am - 1:00pm in 192-326 for Fall)
 - Extra seats where possible
 - Extra sections where possible
 - Flexible substitutions
-
- You must also plan, communicate, and be flexible



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Questions?