

Biomedical Physics, B.S. (120 Units)

Valid for Catalog Years: 2018/2019 to 2019/2020

*Official planning guide approved by the College of Science & Math

For assistance or to schedule an advising appointment, please contact the
CSM Advising and Resources Center
at 559-278-4150, Science I 136
Department of Physics:
559-278-2371, McLane Hall 173

	Freshman		Sophomore		Junior		Senior	
	Freshman	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Units	15	17	15	15-17	15-20	14	17-18	13-14
Milestones	MATH 75 (4 units)	PHYS 4A (3 Units)	PHYS 4B (3 Units)	PHYS 4C (3 Units)	PHYS 136 (3 Units)			
General Education	A2 (3 Units) Written Communication *Must pass with a C or better; ENGL 10 recommended	A1 (3 Units) Oral Communication *Must pass with a C or better	B2 (4 Units) Life Sciences *BIOL 1A recommended	C1 (3-4 Units) Arts	C1/C2 (3-4 Units) Arts or Humanities	D2 (3 Units) American Government	E1 (3 Units) Lifelong Understanding & Self Development	ID (3-4 Units) Social, Political, & Economic Institutions
	A3 (3 Units) Critical Thinking *Must pass with a C or better			C2 (3-4 Units) Humanities		D3 (3 Units) Social Science	IB (3 Units) Physical Universe & Its Life Forms	
				D1 (3 Units) American History			IC (3-4 Units) Arts & Humanities	
Major	GE Area B1 CHEM 1A (3 Units) Physical Sciences [Pre-Req: High school chemistry. May be taken concurrently: GE B4; CHEM 1AL] *Not open to students with credit in CHEM 1B	CHEM 1B (3 Units) [Pre-Req: CHEM 1A & 1AL (both passed with a C or better); CHEM 1BL (may be taken concurrently)]	ECE 71 (3 Units) [Pre-Req: ELM or College Intermediate Algebra (C or better); trigonometry]	MATH 81 (3 Units) [Pre-Req: MATH 77]	BIOL 67A (4 Units) [Pre-Req: C or better in BIOL 20 or BIOL 1A & CHEM 1A (or CHEM 3A if allowed by major)] *Not open to students with credit in BIOL 33, 64, or 65	BIOL 144 (4 Units) [Pre-Req: BIOL 33, 64, or 65]	PHYS 135 (4 Units) [Pre-Req: PHYS 4A, 4AL, 4B, 4BL, 4C]	PHYS 157 (4 Units) [Pre-Req: PHYS 136]
	GE Area B3 CHEM 1AL (2 Units) Lab [Pre-Req: CHEM 1A (may be taken concurrently)]	CHEM 1BL (2 Units) [Pre-Req: CHEM 1B (may be taken concurrently)]	MATH 77 (4 Units) [Pre-Req: MATH 76]	PHYS 4C (3 Units) [Pre-Req: PHYS 4B; MATH 77]	PHYS 102 (3 Units) [Pre-Req: PHYS 4C; MATH 81 (may be taken concurrently)]	PHYS 137 (3 Units) [Pre-Req: PHYS 136]	PHYS 156 (4 Units) [Pre-Req: PHYS 136]	PHYS 158 (3 Units) [Pre-Req: PHYS 136]

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	Freshman	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Units	15	17	15	15-17	15-20	14	17-18	13-14
Major	GE Area B4 MATH 75 (4 Units) Quantitative Reasoning *See course catalog for prerequisite requirements	MATH 76 (4 Units) [Pre-Req: MATH 75 or MATH 75A & B]	PHYS 4B (3 Units) [Pre-Req: PHYS 4A; MATH 77 (may be taken concurrently)]		PHYS 136 (3 Units) [Co-Req: PHYS 102]	PHYS 155 (1 Unit)		
		PHYS 4A (3 Units) [Pre-Req: GE B4; MATH 76 (may be taken concurrently)]	PHYS 4BL (1 Unit) [Co-Req: PHYS 4B]		ECE 72 (2 Units) [Pre-Req: ECE 71 or CSCI 40]			
		PHYS 4AL (1 Unit) [Co-Req: PHYS 4A]						
		PHYS 155 (1 Unit)						
Additional Graduation Requirements					UDWS (0-4 Units) *Upper Division Writing Exam OR "W" Course (must pass with a C or better)			MI (3 Units) Multicultural/International

FOOTNOTES:

Prerequisites/Corequisites: Other restrictions may apply. Please see your course catalog for detailed prerequisite/corequisite requirements.

Grade Requirements: CR/NC grading is not permitted in the Biomedical Physics major. Additional requirements, however, may be taken for CR/NC.

Upper Division Writing Skills requirement (UDWS): All undergraduate students must demonstrate competency in writing skills by passing the Upper Division Writing Exam (UDWE) or by obtaining a C or better in an approved upper division writing course, identified by the letter "W."

Substitutions: If substitutions/exceptions/waivers are made for any major courses that also meet GE and/or the Multicultural/International graduation requirement, the student is responsible for completing additional courses to satisfy the respective areas (GE and/or MI). This also includes the upperdivision writing requirement.

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Milestones	MATH 75 (4 units)	PHYS 4A (3 Units)	PHYS 4B (3 Units)	PHYS 4C (3 Units)	PHYS 136 (3 Units)			
General Education	A2 (3 Units) Written Communication *Must pass with a C or better; ENGL 10 recommended	A1 (3 Units) Oral Communication *Must pass with a C or better	B2 (4 Units) Life Sciences *BIOL 1A recommended	C1 (3-4 Units) Arts	C1/C2 (3-4 Units) Arts or Humanities	D2 (3 Units) American Government	E1 (3 Units) Lifelong Understanding & Self Development	ID (3-4 Units) Social, Political, & Economic Institutions
	A3 (3 Units) Critical Thinking *Must pass with a C or better			C2 (3-4 Units) Humanities		D3 (3 Units) Social Science	IB (3 Units) Physical Universe & Its Life Forms	MI (3 Units) Multicultural/International
				D1 (3 Units) American History			IC (3-4 Units) Arts & Humanities	
Major	GE Area B1 CHEM 1A (3 Units) Physical Sciences [Pre-Req: High school chemistry. May be taken concurrently: GE B4; CHEM 1AL] *Not open to students with credit in CHEM 1B	CHEM 1B (3 Units) [Pre-Req: CHEM 1A & 1AL (both passed with a C or better); CHEM 1BL (may be taken concurrently)]	ECE 71 (3 Units) [Pre-Req: ELM or College Intermediate Algebra (C or better); trigonometry]	MATH 81 (3 Units) [Pre-Req: MATH 77]	BIOL 67A (4 Units) [Pre-Req: C or better in BIOL 20 or BIOL 1A & CHEM 1A (or CHEM 3A if allowed by major)] *Not open to students with credit in BIOL 33, 64, or 65	BIOL 144 (4 Units) [Pre-Req: BIOL 33, 64, or 65]	PHYS 135 (4 Units) [Pre-Req: PHYS 4A, 4AL, 4B, 4BL, 4C]	PHYS 157 (4 Units) [Pre-Req: PHYS 136]
	GE Area B3 CHEM 1AL (2 Units) Lab [Pre-Req: CHEM 1A (may be taken concurrently)]	CHEM 1BL (2 Units) [Pre-Req: CHEM 1B (may be taken concurrently)]	MATH 77 (4 Units) [Pre-Req: MATH 76]	PHYS 4C (3 Units) [Pre-Req: PHYS 4B; MATH 77]	PHYS 102 (3 Units) [Pre-Req: PHYS 4C; MATH 81 (may be taken concurrently)]	PHYS 137 (3 Units) [Pre-Req: PHYS 136]	PHYS 156 (4 Units) [Pre-Req: PHYS 136]	PHYS 158 (3 Units) [Pre-Req: PHYS 136]

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		PHYS 4A (3 Units) [Pre-Req: GE B4; MATH 76 (may be taken concurrently)]	PHYS 4BL (1 Unit) [Co-Req: PHYS 4B]		ECE 72 (2 Units) [Pre-Req: ECE 71 or CSCI 40]			
		PHYS 4AL (1 Unit) [Co-Req: PHYS 4A]						
		PHYS 155 (1 Unit)						
Electives					UDWS (0-4 Units) *Upper Division Writing Exam OR "W" Course (must pass with a C or better)			

FOOTNOTES:

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