## **BS PHYSICS**

NAME	
STUDENT ID	
CONCENTRATION	
MINOR	
Major GPA at least 2.00	[ ] YES [ ] No

Major GPA at least 2.00	[ ] YES [ ] NO
US Cultural Pluralism Met++	[ ] YES [ ] NO
60 Units Upper Division Met Taken/Remaining	[ ] YES [ ] NO
GWR Met	[ ] YES [ ] NO
Upper Div GE Met Taken/Remaining	[ ] YES [ ] NO
Free Electives Met	[ ] YES [ ] NO

2005-2007 updated 10/05 Un	its Required 180
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DEGREE DATE	Earned Hours	Quality Hours	Quality Points	GPA
Transfer				
Cal Poly				
Transcript Totals				
		<= Units that are NOT Degree Applicable		
		<= Degree Applicable Units		

Note: "Lab only" courses may NOT betaken CR/NC.

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MAJOR COURSES (112)	Units	Grade	GrdPts
PHYS 131 or PHYS 141 (B3 & B4)*	4		
PHYS 132 General Physics	4		
PHYS 133 General Physics	4		
PHYS 202 Physics on the Computer	4		
PHYS 206 Instru in Exper Physics	3		
PHYS 211 Modern Physics I	4		
PHYS 212 Modern Physics II	4		
PHYS 256 Elec Measurements Lab	1		
PHYS 301 Thermal Physics I	3		
PHYS 302 Analytical Mechanics I	3		
PHYS 323 Optics	5		
PHYS 340 Quantum Physics Lab I	2		
PHYS 341 Quantum Physics Lab II	1		
PHYS 342 Quantum Physics Lab III	2		
PHYS 405 Quantum Mechanics I	4		
PHYS 408 Electro Fields & Waves I	4		
PHYS 461 <i>or</i> PHYS 463	2		
PHYS 462 <i>or</i> PHYS 464	2		
CHEM 127 General Chemistry	4		
CHEM 128 General Chemistry	4		
MATH 141 Calculus I (B1)*	4		
MATH 142 Calculus II (B1)*	4		
MATH 143 Calculus III	4		
MATH 241 Calculus IV	4		
MATH 244 Linear Analysis I	4		
MATH 304 Vector Analysis	4		
MATH 344 Linear Analysis II	4		
Advanced Physics electives or	19		
Concentration courses (see back)			
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GENERAL EDUCATION (GE)		60
72 units required  Minimum of 12 units required at the 300-400 level.		
Area A Communication		12
A1 ENGL 133/134	4	
A2 SCOM 101/102	4	
A3 Reason, Argument, & Writing	4	
Area B Science and Mathematics		4
B2 Life Science	4	
Area C Arts and Humanities		20
C1 Literature	4	
C2 Philosophy: PHIL 230/231	4	
C3 Fine/Performing Arts		
C4 Upper-division elective	4	
Area C elective (Choose one course from C1-C4)	4	
Area D/E Society and the Individual		20
D1 Amer Experience (40404)	4	
D2 Political Economy	4	
D3 Comp Social Institutions	. 4	
D4 Self Develop (CSU Area E)	4	
D5 Upper-division elective	4	
Area F Technology (upper div)		4
Additional GE Units Required		
O = Work in progress @ = possible credit by Department review () = not allowed for degree credit # = GE Certification		

ELECTIVES.....

8

# ADVANCED PHYSICS ELECTIVES OR CONCENTRATION

Select either the advanced physics electives or one of the concentrations

### **Advanced Physics Electives**

Select one of the following: PHYS 424 or MATH 418.

In addition, select courses at the 300 or 400 level with the prefixes PHYS, MATH, GEOL, STAT, or CSC (but not CSC 302 nor CSC 310). One of the following may also be chosen: CSC 101, 231, 234. At least 9 of these elective units must have the PHYS prefix. All courses must be taken for a letter grade.

For students anticipating an industrial career PHYS 357, 412, 413, 423, and 452 are suggested electives.

For students anticipating graduate work in physics PHYS 303, 401, 406, 409, 424, and MATH 408 are suggested electives. In addition, PHYS 357 is suggested for students who anticipate becoming experimental physicists.

19

#### **Electronics Concentration**

Students will not be allowed to enroll in EE 301 until they have a) completed PHYS 357 and MATH 344, and b) received the approval of advisors in both Physics and Electrical Engineering. Students will then be allowed to enroll in EE courses with physics courses substituting for EE prerequisites.

PHYS 357 Advanced Instru in Experi Physics	3
EE 228 Continuous-Time Signals & Systems	4
EE 302 Classic Control Systems	3
EE 328 Discrete Time Signals & Systems	3
EE 342 Classical Control Systems Lab	1
EE 368 Signals & Systems Lab	1
EE 336 or EE 306 & EE 346	4
	19

### **Electro-optics Concentration**

Students will not be allowed to enroll in EE 301 until they have a) completed PHYS 357 and MATH 344, and b) received approval of advisors in both Physics and Electrical Engineering. Students will then be allowed to enroll in EE courses with physics courses substituting for EE prerequisites.

PHYS 357 Advanced Instru in Experi Physics	3
PHYS 423 Advanced Optics	4
EE 228 Continuous-Time Signals & Systems	4
EE 403 Fiber Optics Communication	3
EE 418 Photonic Engineering	3
EE 443 Fiber Optics Lab	1
EE 458 Photonic Engineering Lab	1
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