

**ADVANCED PHYSICS ELECTIVES or
CONCENTRATION (select one)**

Advanced Physics Electives

This is the default curriculum required for students who do not declare a concentration.

Select *two courses* from the following:

PHYS 323 (4), 342 (1), 357 (3), 417 (4), 422 (1) 423 (4), 452 (1); ASTR 444 (4)	2-8
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Select *one course* from:

PHYS 424 or MATH 418	3/4
PHYS 300-400 level elective units (minimum)	9

Additional elective units (if needed):

300 or 400-level PHYS/ASTR/GEOL/MATH/STAT/ CSC prefix (excludes ASTR 324; CSC 302, 310); or CSC 101(4), 231(2), 234(3), 235(4)	0-7
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For students anticipating an industrial career, PHYS 323, 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.

Electronics Concentration

Students are not allowed to enroll in EE 228 until they have a) completed PHYS 357 and MATH 344, and b) received the approval of advisors in both Physics and Electrical Engineering. Students are then allowed to enroll in EE courses with physics courses substituting for EE prerequisites.

PHYS 357 Adv Instrumentation in Exp Phys	3
EE 228 Continuous-Time Signals & Systems	4
EE 302 Classic Control Systems	3
EE 328 Discrete Time Signals & Systems	3
EE 342 Control Systems Lab	1
EE 368 Signals & Systems Lab	1
EE 336 Microprocessor System Design <i>or</i> EE 306 and EE 346 Semiconductor Device/Lab	4
Elective chosen from Adv. Physics Elect. list	2

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Electro-optics Concentration

Students following this concentration should take PHYS 323 instead of PHYS 322 as a major requirement.

Students are not allowed to enroll in EE 228 until they have a) completed PHYS 357 and MATH 344, and b) received approval of advisors in both Physics and Electrical Engineering. Students are then allowed to enroll in EE courses with physics courses substituting for EE prerequisites.

PHYS 357 Adv Instrumentation in Exp 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
Elective chosen from Adv. Physics Elect. list	2

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