

Applied Physics Honors Major Courses (68 – 69 credits)

Required Major Courses (44 – 45 credits)

- _____ (4) PHYS 17200 - Modern Mechanics - (*also satisfies Science Selective for core and CoS teambuilding experience requirement*)^{cc}
- _____ (4) PHYS 27200 - Electric and Magnetic Interactions (*also satisfies Science Selective for core*)^{cc}
- _____ (4-5) Calculus III Option – Select from MA 26100, MA 27101 (*satisfies Quantitative Reasoning for core*)
- _____ (3) PHYS 30600 (fall) Math Methods I
- _____ (3) PHYS 30700 (spring) Math Methods II
- _____ (1) PHYS 34000 - Modern Physics Lab
- _____ (4) PHYS 34400 (fall) - Modern Physics
- _____ (3) PHYS 41000 (fall)- Physical Mechanics I Honors
- _____ (4) PHYS 41600 (fall) - Thermal & Statistical Physics Honors
- _____ (3) PHYS 42200 (spring) - Waves & Oscillations
- _____ (3) PHYS 43000 (spring) - Electricity & Magnetism I Honors
- _____ (2) PHYS 45000 - Intermediate Laboratory
- _____ (3) PHYS 46000 (fall)- Quantum Mechanics I Honors
- _____ (3) PHYS 59300 - Independent Research

Major Selective* - (24 credits - in chosen applied area(s) approved by the Physics and Astronomy Department)

_____ () _____ () _____ () _____ () _____ () _____ () _____ ()

Other Departmental /Program Course Requirements (37-66 credits)

- _____ (3-4) First Year Composition Option_ (*satisfies Written Communication and Information Literacy for core*)
- _____ (0-3) Technical Writing Option (*Select courses COULD satisfy Oral Communication for core*)
- _____ (0-3) Technical Presenting Option_ (*Select courses COULD satisfy Oral Communication for core*)
- _____ (0-4) Teambuilding and Collaboration Experience
- _____ (0-4) Language I Option
- _____ (0-4) Language II Option
- _____ (0-4) Language III/Culture/Diversity Option (*Select courses COULD satisfy Human Cultures Humanities for core*)
- _____ (3) Great Issues Option (*satisfies one of the Science/Engineering requirements for Physics Selective*)
- _____ (0-3) Multidisciplinary Experience (*Select courses could satisfy Science, Technology & Society Selective for core*)
- _____ (4) CHM 11500 - General Chemistry I - (*satisfies Science Selective for core*)
- _____ (4) CHM 11600 - General Chemistry II (*satisfies Science Selective for core*)
- _____ (4-5) Calculus I Option – Select from MA 16100, MA 16500 (*satisfies Quantitative Reasoning for core*)
- _____ (4-5) Calculus II Option – Select from MA 16200, MA 16600 (*satisfies Quantitative Reasoning for core*)
- _____ (3) Statistics Option
- _____ (3-4) Computing Option
- _____ (3) General Education I Option (*Select courses could satisfy Human Cultures Humanities for core*)
- _____ (3) General Education II Option (*Select courses could satisfy Human Cultures Humanities for core*)
- _____ (3) General Education III Option (*Select courses could satisfy Humanities Behavioral/Social Science for core*)

Free Electives (1- 15 credits)

_____ () _____ () _____ () _____ () _____ () _____ () _____ ()

University Core Requirements

Human Cultures Humanities	<input type="checkbox"/>	_____	Science, Technology & Society Selective	<input type="checkbox"/>	_____
Human Cultures Behavioral/Social Science	<input type="checkbox"/>	_____	Written Communication	<input type="checkbox"/>	_____
Information Literacy	<input type="checkbox"/>	_____	Oral Communication	<input type="checkbox"/>	_____
Science Selective	<input type="checkbox"/>	_____	Quantitative Reasoning	<input type="checkbox"/>	_____
Science Selective	<input type="checkbox"/>	_____			

The student is ultimately responsible for knowing and completing all degree requirements.

Degree Works is knowledge source for specific requirements and completion

Applied Physics Honors

Suggested Arrangement of Courses:

Credits	Fall 1st Year	Prerequisite	Credits	Spring 1st Year	Prerequisite
4	PHYS 17200 (Honors sections)* ^{cc}	ALEKS 85%	4	PHYS 27200 (Honors sections)* ^{cc}	PHYS 17200 + Coreq: Calculus II
4-5	Calculus I Option *	ALEKS 85%	4	CHM 11600*	CHM 11500
4	CHM 11500*	ALEKS 75%	4-5	Calculus II Option *	Calculus I C- or higher
3-4	First Year Composition Option		3-4	Language I Option	
0	Teambuilding and Collaboration Experience				
15-17			15-17		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
3	PHYS 30600	PHYS 272 +coreq Calculus III	3	PHYS 30700	PHYS 272 +coreq MA 261
1	PHYS 34000	coreq Phys 344	3	PHYS 42200	PHYS 272
4	PHYS 34400	PHYS 272 + coreq Calculus III	3 - 4	Language III/Culture/Diversity Option	Language 102/ usually no pre-req
4 - 5	Calculus III Option	Calculus II C- or higher	3	Statistics Option	Prerequisites may vary
3 - 4	Language II Option	Language 101	3	General Education I Option (Humanities)*	
			1	Free Elective (PHYS 23500)	
15-17			16-17		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
3	PHYS 41000	PHYS 272 + coreq Calculus III	3	PHYS 43000	PHYS 272 + coreq Calculus III and (PHYS 306 or MA 362) C- or better
3	PHYS 46000	PHYS 344 + coreq PHYS410	3	Major Selective	Prerequisites may vary
2	PHYS 45000	PHYS 42200	3	Major Selective	Prerequisites may vary
3-6	Technical Writing Option and Technical Presenting Option (COM 21700*)		3	Major Selective	Prerequisites may vary
3 - 4	Computing Option (CS 15800)	Calculus I coreq	3	General Education II Option(Humanities)*	
1	Free Elective	Prerequisites may vary			
15-19			15		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
4	PHYS 41600	Coreq (PHYS 410 and 430 and 460) C- or better	3	Major Selective	Prerequisites may vary
3	PHYS 59300		3	Major Selective	Prerequisites may vary
3	Major Selective	Prerequisites may vary	3	Major Selective	Prerequisites may vary
3	Major Selective	Prerequisites may vary	3	General Education III Option (Behav./Social Science)*	
3	Great Issues Option	Jr/Sr Standing; may require COM or ENGL	1-3	Multidisciplinary Experience (STS)*	
			2	Free Elective	Prerequisites may vary
16			15 -17		

^{cc} Identified as a critical course. Student should earn minimum of a B- see advisor for further details.

* Satisfies a University Core Requirement; Courses in () are recommended.

120 semester credits required for Bachelor of Science degree.

3.0 Graduation GPA required for Bachelor of Science degree.

3.0 average in PHYS/ASTR classes required to graduate.

No more than one C grade (i.e., C+, C, or C-) is allowed in all physics courses taken

No grade of D+ or worse is allowed in any course.

The student is ultimately responsible for knowing and completing all degree requirements.

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