PHYSICS/ASTRONOMY DOUBLE BS REQUIREMENTS CHECKLIST

IOWA Physics and Astronomy

Student Name		HawkID	

FIRST YEAR

Fall	s.h.	Spring	s.h.
☐ Physics I[a] (PHYS:1701)	4	☐ Physics II[a] (PHYS:1702)	4
☐ Calculus I[ab] (MATH:1850)	4	☐ Calculus II (MATH:1860)	4
☐ Fundamental Astronomy I[a] (ASTR:1771)	4	☐ Fundamental Astronomy II[a] (ASTR:1772)	

[a] This course satisfies a General Education requirement.

[b] Enrollment in math courses requires completion of a placement exam.

SECOND YEAR

Fall	s.h.	Spring	s.h.
☐ Physics III (PHYS:2703)	4	☐ Physics IV (PHYS:2704)	4
☐ Intro to Linear Algebra (MATH:2700)	4	☐ Calculus III (MATH:2850)	4
		☐ Intermediate Mechanics (PHYS:3710)	3

THIRD YEAR

Fall	s.h.	Spring	s.h.
☐ Intro to Quantum Mechanics I (PHYS:3741)	4	☐ Intro to Quantum Mechanics II (PHYS:3742)	3
☐ Electricity & Magnetism I (PHYS:3811)	3	☐ Electricity & Magnetism II (PHYS:3812)	3
☐ Intro to Astrophysics I[c] (ASTR:3771)	3	☐ Electronics[ab***] (PHYS:3850)	4
		☐ Intro to Astrophysics II[c] (ASTR:3772)	3

[a] Students who take Electronics as one of their upper-level electives are advised to take it before they take Intermediate Laboratory (PHYS:3756)

[b] Electronics (PHYS:3850) is offered in the spring semester only. Check MyUI for course availability since offerings are subject to change.

[c] These courses are offered every other year - ASTR:3771 [even-years only] and ASTR:3772 [odd-years only]. Check MyUI for course availability since offerings are subject to change.

[***] Students must take three upper-level elective courses as listed on the General Catalog or page two of this form.

FOURTH YEAR

Fall	s.h.	Spring	s.h.
☐ Statistical Physics (PHYS:3730)	3	☐ Advanced Laboratory (PHYS:4750) - 3 s.h.	
☐ Intermediate Laboratory[a] (PHYS:3756)	3		
☐ Advanced Laboratory (PHYS:4750) - 3 s.h.			
☐ Observational Techniques in Astronomy[b] (ASTR:4850)	3		

[a] Students who take Electronics as one of their upper-level electives are advised to take it before they take Intermediate Laboratory (PHYS:3756)

[b] This course is offered every other year (odd-years only). Check MyUI for course availability as offerings are subject to change.

[***] Students must take three upper-level elective courses as listed on the General Catalog or page two of this form.

GE Requirements Not Satisfied by Physics Major

Diversity and Inclusion	(3 s.h.)	Social Sciences	(3 s.h.)
Interpretation of Literature	(3 s.h.)	Historical Perspectives	(3 s.h.)
Rhetoric	(3 s.h.)	International and Global Issues	(3 s.h.)
World Languages	(0-20 s.h.)[a]	Literary, Visual and Performing Arts	(3 s.h.)
Sustainability	([b])	Values and Culture	(3 s.h.)

[a] Requirements may vary by language

[b] Students complete this requirement by choosing an approved GE course that integrates Sustainability (with no additional s.h.) with a course from Natural Sciences, Quantitative or Formal Reasoning, or one of the core area listed in the right-hand column above.

Upper-Level Elective Courses

One of these:	s.h.	Two of these:	s.h.
Electronics[a] (PHYS:3850)	4	Electronics[a] (PHYS:3850)	4
Advanced Laboratory[a] (PHYS:4750)	3	Introductory Optics (PHYS:4720)	3
Observational Techniques in Astronomy[a] (ASTR:4850)	3	Electro Optics (PHYS:4726)	3
		Introductory Solid State Physics (PHYS:4728)	3
		Plasma Physics (PHYS:4731)	3
		Elementary Particle & Nuclear Physics (PHYS:4740)	3
		Advanced Laboratory[a] (PHYS:4750)	3
		Mathematical Methods of Physics I (PHYS:4761)	3
		Mathematical Methods of Physics II (PHYS:4762)	3
		Optical Processing (PHYS:4820)	3
		Computational Physics (PHYS:4860)	3
		Special Topics in Physics (PHYS:4905 or PHYS:5905)	3
		Introduction to Astrophysics I (ASTR:3771)	3
		Introduction to Astrophysics II (ASTR:3772)	3
		Observational Techniques in Astronomy[a] (ASTR:4850)	3

[a] Students can only take these courses once: Electronics (PHYS:3850), Advanced Laboratory (PHYS:4750), and Observational Techniques in Astronomy (ASTR:4850).