

UW Students take many paths to their physics degree. In 2014-15, fewer than 10% of graduates took Physics 121 in their first quarter at UW and then graduated 4 years later. Below are several options to help you build a path to your degree depending on your preparation, desired degree option (or track) and post-graduation goals. Note these paths only include courses directly related to your physics degree – you still need to fit in your college distribution requirements.

Standard 4-year Path to a Comprehensive Option in Physics

Legend: **BOLD**= required; **red** = lab; **green** = specific electives, *italics* = choose one or more

Standard 4 Yr Path – Comprehensive, headed for Physics Grad School

NB: The official physics degree requirements are done at end of Junior year. The fourth year should be spent taking more advanced courses to prepare for graduate school or other career goals.

The Sophomore/Junior years allows a degree in 2 yrs after completing 121-2-3 and most distribution requirements at community college. The extra year should be included if you are headed for graduate school.

Some classes on this chart are optional (in plain black type), but are recommended for grad school.

Comprehensive Track – 4 Year Plan

Year		Autumn	Winter	Spring
Freshman		121 or 121H Math 124/134	122 or 122H Math 125/135	123 or 123H Math 126/136
Sophomore		224 227 231 (lab) 217 Math 307 a/o 308	225 228 294 334 (lab) <i>Math 324</i>	226 335 (lab) another math (opt)
Junior		321 324 331 or 434 cognate subj	322 325 research cognate subj	323 329 research
Senior	REU	328 422 433 485/494 special topics research	423 431 429 486/495 special topics research	421 432 487/496 special topics research

Modifications if start Phys 121 in Winter or Spring:

If start Phys 121 in Winter, can take 123 over the summer, and then continue from Sophomore year above. If start 121 in spring, take 122 over the summer, and then follow the "start 123 in autumn" path below.

Arrive from CC needing 123 in Autumn;**Heading to Grad School in 3 years – Comprehensive**

Option 1: No Summers

Year	Summer	Autumn	Winter	Spring
Year 1	(123)	123 224 Math 126	294 334 Math 307 or 308	227 335 Math 324
Year 2		321 331 or 434 cognate sci	225 228 322 research	226 323 329 research
Year 3	REU	324 328 433 cognate sci 485/494 special topics research	325 423 431 486/495 special topics research	421 432 487/496 special topics research

➤ Option 2: 225/228 in Summer (allows more advanced classes)

Year	Summer	Autumn	Winter	Spring
Sophomore	(123)	123 224 Math 126	294 334 Math 307 or 308	227 335 Math 324
Junior	225 228	321 324 cognate subj	322 325 cognate subj research	226 323 a/o 329 research
Senior	REU	328 422 433 485/494 special topics research	423 431 429 486/495 special topics research	421 432 487/496 special topics research

3 Year Path, Comprehensive. Not heading for grad school

Minimal major, No summers

Year		Autumn	Winter	Spring
Year 1		121 or 121H Math 124	122 or 122H Math 125	123 or 123H Math 126
Year 2		224 227 Math from menu	225 228 294 334 (lab) Math from menu	226 335 (lab) 329
Year 3		321 324 328 331 or 434	322 325 cognate subj. research/486	323 cognate subj research/487

3 Year Path, Not heading for grad school

Minimal major, Including Summer to spread things out

Year		Autumn	Winter	Spring
Year 1		121 Math 124	122 Math 125	123 Math 126
Year 2	334	224 227 Math from menu	225 228 294 Math from menu	321 335 (lab)
Year 3	322 324	328 226 331 or 434	325 431 research/486	323 or 329 cognate subj research/487

Arrive from Community College needing 122 or 123**Graduate in 2 years**

Not recommended if heading for graduate school in physics. *Not recommended* if still need multiple distribution requirements.

- Arrive in autumn, needing Phys 123

Comprehensive Degree Option. Start with 123

Year	Summer	Autumn	Winter	Spring
Year 1		123 224 Math 126	294 334 Math 307/8	227 335 Math 324 cognate sci
Year 2	225 228	321 324 331 or 434 cognate sci	322 325 a/o 423 431 research	226 323 329 research

- Arrive in autumn, needing Phys 122

Year	Summer	Autumn	Winter	Spring
Year 1		122 217 Math 126	123 294 Math 307/8	224 227 Math 324
Year 2	225 228 431	321 324 331 a/o 328 cognate sci	322 325 a/o 423 334 cognate sci research/486	226 323 a/o 329 432 or 335 research/487

Applied Physics Track**2 Year Degree after Community College. Start with 122 or 123**

Year		Autumn	Winter	Spring
Year 1		122/123 Math 126 or Menu	(123) 294 AMath 301 334 (lab)	224 227 335
Year 2	225 Math Menu	226 or 324 321 231 (lab) 331 or 434	322 Math Menu Elective 486/research	226 , 323 a/o 329 1 or 2 Electives 487/research

Applied Physics Track

4 Year Plan

Year		Autumn	Winter	Spring
Freshman		121 or 121H Math 124/134	122 or 122H Math 125/135	123 or 123H Math 126/136
Sophomore		224 227 231 (lab) Math Menu	225 294 334 (lab) 228 or Math Menu	<i>226 or 329</i> <i>Elective</i> 335 AMath 301
Junior		321 331 or 434 <i>Elective (226, 324)</i> Math Menu	322 <i>Elective</i> research cognate subj	<i>Elective (226, 323, 329)</i> research
Senior	REU	phys/cognate subj. 433 485/496 special topics research	phys/cognate subj. 431 486/497 special topics research	phys/cognate subj. 432 487/498 special topics research

Applied Physics Track

3 Year Plan, no summers

Year		Autumn	Winter	Spring
Year 1		121 or 121H Math 124/134	122 or 122H Math 125/135	123 or 123H Math 126/136
Year 2		224 227 231 (lab) Math Menu	225 294 334 (lab) 228 or Math Menu	<i>Elective (226, 329)</i> 335 AMath 301
Year 3		321 331 or 434 <i>Elective (226, 324)</i> Math Menu	322 <i>Elective</i> 431 486/497 research	<i>Elective (226, 323, 329)</i> 432 487/498 research

Biophysics Track

Standard 4 Yr Path – Biophysics Degree

Some classes on here are optional, but recommended for grad school

		Autumn	Winter	Spring
Freshman		121 or 121H Chem 14x Math 124/134	122 or 122H Chem 15x Math 125/135	123 or 123H Chem 16x Math 126/136
Sophomore		224 227 Math from Menu Bio 180	225 228 294 Bio 200	226 or 329 (321)* Bio 220 Add. math
Junior	(322)	(321) 324 (328) Chem 223/237	(322) 325 334 (429) Chem 224/238 research	226, 323 or 329 Add'l Bio/Chem research
Senior	REU	328 Add. Bio/Chem 434 485/496 special topics research	Add. Bio/Chem 423 a/o 431 (429) 486/497 research	Add. Bio/Chem 421 a/o 432 487/498 special topics research

*If you can take 322 in the summer, it might be easier to take 321/322 Sp/Su than taking 321, 324 and organic chemistry simultaneously in the fall. This also makes it easier to take 429 in junior year.

Minimum Biophysics Degree 3 year plan

		Autumn	Winter	Spring
Year 1		121 or 121H Chem 14x Math 124/134	122 or 122H Chem 15x Math 125/135	123 or 123H Chem 16x Math 126/136
Year 2		224 227 Math from Menu Bio 180	225 228 294 Bio 200	226 or 329 (321)* Add'l Bio/Chem
Year 3	(322)	(321) 324 328	(322) 334 429 research	226, 323 or 329 Add'l Bio/Chem research

Teaching Preparation Track

4-year Plan. Includes courses recommended for breadth, but not required for graduation

Year		Autumn	Winter	Spring
Freshman		121 or 121H Math 124/134	122 or 122H Math 125/135	123 or 123H Math 126/136
Sophomore		224 227 217 Math Menu	225 294 334 (lab) 228	226 329 335 Math Menu
Junior		321 324 331 or 434	322 325 Intro. Chem/Bio	323 Intro. Chem/Bio
Senior	REU	407 328 422 a/o 433 485/496 Other Sci a/o Education teaching	408 423 a/o 431 486/497 Other Sci a/o Education teaching/research	409 421 a/o 432 487/498 Other Sci a/o Education teaching/research

Teaching Preparation Track

3-year Plan. Includes some courses recommended for breadth, but not required for graduation

Year		Autumn	Winter	Spring
Year 1		121 or 121H Math 124/134	122 or 122H Math 125/135	123 or 123H Math 126/136
Year 2	(224)	224 227 217 Math Menu	225 294 334 (lab) 228	226 321 335 a/o Math Menu
Year 3	322 324	407 (226) 328 331 or 434 teaching	408 325 Intro. Chem/Bio teaching/research	409 323 Intro. Chem/Bio Teaching/research