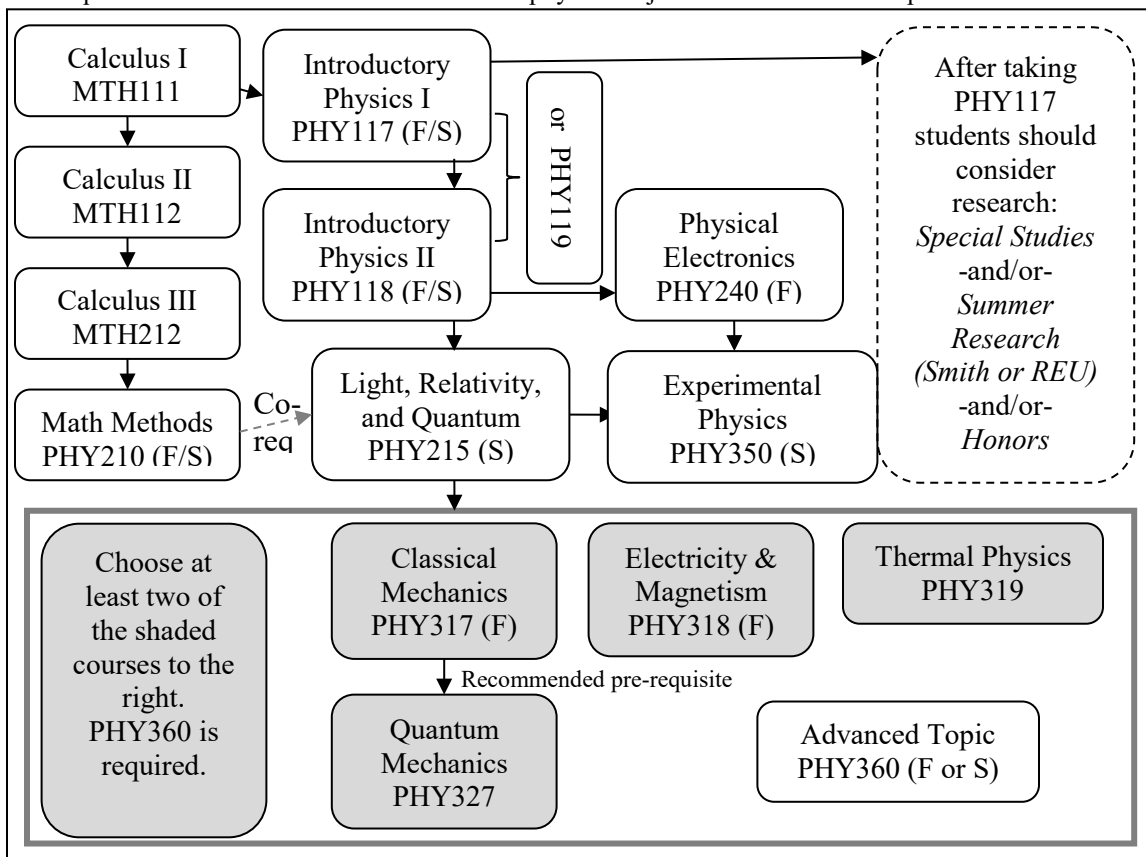


Your Guide to the Physics Major

(Last updated Fall 2020)

This represents the requirements put in place as of Fall 2019.

The requirements for the Education Track of the physics major are described on a separate sheet.



Requirements for the Physics Major

<p>117 – F/S – Introductory Physics I 118 – F/S – Introductory Physics II 119 – F – <i>Advanced Introductory Physics can replace 117 and 118</i> 210 – F/S – Math Methods 215 – S – Light, Relativity, and Quantum 240* – F – Physical Electronics <i>At least two of the following four:</i> 317 – F – Classical Mechanics 318 – S – Electricity & Magnetism 319 – Thermal Physics 327 – Quantum Mechanics } Not every year 350 – S – Experimental Physics 360* – F or S – Advanced Topic</p>	<p>A physics major can prepare you for work in many fields.</p> <p>For students interested in physics graduate study, we recommend taking all of the courses listed to the left (without substitutions and with all four of the pick-any-two courses). We also recommend programming (e.g. MTH/CSC205 or CSC111) and machine shop experience.</p>
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* For students interested in using a physics major as a route to other fields the courses marked with asterisks may be replaced by some courses in other departments. Talk to a member of the department for details.

Sample course sequences

These are intended to give a general idea, but you should consult with a member of the department to craft a specific plan of study.

Standard sequence	
Fall	Spring
MTH111	MTH112 PHY117
MTH212 PHY118	PHY210 PHY215
PHY240 PHY317	PHY319/327 PHY350
PHY360	PHY319/327 PHY318

Already had Calculus I	
Fall	Spring
MTH112 PHY117	MTH212 PHY118
PHY210 PHY240	PHY215 PHY350
PHY317	PHY319/327 PHY318
PHY360	PHY319/327

JYA (already had Calculus I)	
Fall	Spring
MTH112 PHY117	MTH212 PHY118
PHY210 PHY240	PHY215 PHY350
<i>JYA</i>	<i>JYA</i>
PHY317	PHY318,319 or 327 PHY360

Physics major for prehealth	
Fall	Spring
BIO151/152 CHM111 MTH111 <i>English course</i>	CHM222 MTH112 PHY117 <i>English course</i>
CHM223 MTH212 PHY118	CHM224 PHY210 PHY215
BIO202/203 PHY240 PHY317	BCM252/253 MTH245 PHY350
BIO200 CHM331 PHY360	CHM332 CHM336

Physics/Astronomy Double Major	
Fall	Spring
MTH111 AST 111	MTH112 PHY117 AST113
MTH212 PHY118 <i>200 level AST</i>	PHY210 PHY215 AST228
PHY240 PHY317 <i>Upper level AST</i>	<i>Upper level AST</i> PHY318 PHY350
<i>Upper level AST</i>	PHY319 PHY327

- Students interested in double majoring in physics and engineering should consult early with members of both departments to plan a course of study.
- Many students who didn't already have calculus go abroad for a semester, or sometimes a year if they take physics courses while abroad. Consult with a member of the department to make a plan.
- For students interested in the education track in the physics major we have a separate handout listing the requirements for that track.