

**BACHELOR OF SCIENCE IN PHYSICS  
APPLIED CONCENTRATION**

The following is a course of study that will lead to a BS in Physics, Applied Concentration. It assumes quality high school preparation in pre-calculus mathematics and physics but no entering credit. Please note that this is only a suggested schedule. Differing circumstances and interests will cause individual schedules to vary from this list.

<b>Fall – Year 1</b> (16 credits) PHYS 1600 MATH 1131 (Calc 1) CHEM 1127* ENGL 1010/1011 (Writing requirement)	<b>Spring – Year 1</b> (18 credits) PHYS 1601 MATH 1132 (Cal 2) CHEM 1128* Gen Ed Content Area I-A Gen Ed Content Area II
<b>Fall – Year 2</b> (17 credits) PHYS 1602 MATH 2110 (Multivariable) [Related Elective 1] PHYS 2501W (Laboratory in Mechanics) Gen Ed Content Area I-B Gen Ed Content Area II	<b>Spring – Year 2</b> (16 credits) PHYS 2300 (Development of Quantum Physics) PHYS 2400 (Math Methods) [Physics Elective 1] MATH 2410 (Elem Diff Eq) [Related Elective 2] BIO 1107/1108/1110 Gen Ed Content Area I-C
<b>Fall – Year 3</b> (15 credits) PHYS 3101 (Mechanics 1) PHYS 3201 (Electricity and Magnetism 1) PHYS 3401 (Quantum Mech 1) [Physics Elective 2] Gen Ed Content Area I-D Elective (perhaps second “W” Course)	<b>Spring – Year 3</b> (15-17 credits) PHYS <u>Restricted</u> Elective 1 (see below)§ Related Elective 3 PHYS 3501 or 3150 or 4150 (advanced lab)‡ PHYS 3300 (Statistical and Thermal Mechanics) Elective
<b>Fall – Year 4</b> (12-13 credits) PHYS <u>Restricted</u> Elective 2 (see below)§ Related Elective 4 Gen Ed Content Area IV (if needed) / Elective Elective	<b>Spring – Year 4</b> (12 credits) Related Elective 5 Related Elective 6 Gen Ed Content Area IV (if needed) / Elective Elective

**NOTES:**

- 120 total credits are required for a degree.
- \* Student might consider taking over the summer or a later semester to balance load.
- The CHEM, MATH, PHYS, and BIO 1XXX courses are CLAS BS requirements, Gen Ed Area III; alternate choices exist.
- MATH 2110-2410 are pre-reqs for physics courses, but also count towards 12 credits in a related field.
- We encourage the related field electives to be concentrated in a particular field.
- ‡ Particular advanced PHYS lab courses are not offered every year, and 4150 is typically a fall course. Student should check with their advisor for scheduling.
- PHYS 2400 and 3402 are listed as examples and suggestions for two of four required physics electives.
- § PHYS restricted electives to be selected from 3501, 3150, 4140, 4150, 4210, or 4350. Please note the same course cannot also count as advanced lab.
- An appropriate number of Gen Ed courses are listed, though the order they appear is arbitrary and specific choices are not made, with the exception of AREA III – Science and Technology.
- In addition to those listed, students must take one other W course and satisfy the foreign language requirement. For a synopsis of Gen Ed requirements for CLAS, students should see the catalog for the year in which their major is declared, or the webpage of the academic services center <http://clasadvising.uconn.edu/general-education-requirements/>
- For more details please see the university catalog, the physics plan of study, and contact your advisor.
- Beginning Fall 2019 one “E” course required (can simultaneously fulfill a Gen Ed Content Area requirement).