## BACHELOR OF SCIENCE IN MATH - PHYSICS <br> PHYSICS EMPHASIS

The following is a course of study that will lead to a BS in Mathematics-Physics, with an emphasis in Physics. 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.

| Fall - Year 1 (16 credits) | Spring - Year 1 (18 credits) |
| :---: | :---: |
| PHYS 1600 | PHYS 1601 |
| MATH 1131 (Calc 1) | MATH 1132 (Cal 2) |
| CHEM 1127* | CHEM 1128* |
| ENGL 1010/1011 (Writing requirement) | Gen Ed Content Area I-A |
|  | Gen Ed Content Area II |
| Fall - Year 2 (17 credits) | Spring - Year 2 (16 credits) |
| PHYS 1602 | MATH 2210 (Applied Linear Algebra) |
| MATH 2110 (Multivariable) | PHYS 2300 (Development of Quantum Physics) |
| PHYS 2501W (Laboratory in Mechanics) | BIO 1107/1108/1110 |
| Gen Ed Content Area I-B | PHYS Restricted Elective 1 (see below) $\ddagger$ |
| Gen Ed Content Area II | Gen Ed Content Area I-C |
| Fall - Year 3 (15 credits) | Spring - Year 3 (15 credits) |
| MATH 2410 (Elem Diff Equations) | MATH 3146 (Intro to Complex Variables) |
| PHYS 3101 (Mechanics 1) | PHYS 3202 (Electricity and Magnetism 2) |
| PHYS 3201 (Electricity and Magnetism 1) | PHYS 3300 (Statistical and Thermal Mechanics) |
| PHYS 3401 (Quantum Mech 1) | Elective |
| Gen Ed Content Area I-D | Elective |
| Fall - Year 4 (12 credits) | Spring - Year 4 (12 credits) |
| MATH 3410 (Diff Equations for Applications) | MATH 3510 |
| PHYS Restricted Elective 2 (see below) $\ddagger$ | PHYS Restricted Elective 3 (see below)* |
| Elective (perhaps second "W" Course) | Elective |
| Gen Ed Content Area IV (if needed) / Elective | Gen Ed Content Area IV (if needed) / 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.
$-\ddagger 9$ credits of PHYS restricted electives to be selected from $2200,2400,2502,3102,3103,3104,3150,3989$, 4093, 4095, 4096, 4098, 4099, 3402, 4100, 4130, 4140, 4150, 4210, 4300, 4350, 4900.
- 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-educationrequirements/
- 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).

