

# B.S. in Applied Physics

## Sample Program Outline/Advising Guide

| Fall                                      |           | Spring                                     |           |
|---|-----------|--|-----------|
| <b>FIRST YEAR</b>                         |           |  |           |
| PHYS 120: Physics First Year Experience   | 1         | PHYS 125: Analytical Physics II            | 3         |
| PHYS 123: Analytical Physics I (NLEC)     | 3         | PHYS 126: Analytical Physics II Laboratory | 1         |
| PHYS 124: Analytical Physics I Lab (NLAB) | 1         | MATH 222: Calculus II                      | 4         |
| MATH 221: Calculus I (REAS)               | 4         | World Language 102 (LANG)                  | 4         |
| WRTG 105: Writing Seminar: (subtitle)     | 4         | Global Society (CAI)                       | 3         |
| World Language 101 (LANG)                 | 4         |  |           |
| Total                                     | <b>17</b> | Total                                      | <b>15</b> |
| <b>SECOND YEAR</b>                        |           |  |           |
| PHYS 223: Analytical Physics III          | 3         | PHYS 224: Analytical Physics IV            | 3         |
| PHYS 226: Optics & Modern Phys Lab        | 1         | PHYS 228: Math Methods in Physics          | 2         |
| PHYS 261: Programming in Physics          | 3         | MATH 326: Differential Equations           | 3         |
| MATH 223: Calculus III                    | 4         | Global Society (DPP)                       | 3         |
| Global Society (CGC)                      | 3         | Global Society (WCV)                       | 4         |
| Total                                     | <b>14</b> | Total                                      | <b>15</b> |
| <b>THIRD YEAR</b>                         |           |  |           |
| PHYS 311: Classical Mechanics             | 3         | PHYS 230: Digital Electronics              | 3         |
| PHYS 362: Intermediate Laboratory         | 3         | PHYS 313 or 314 or 332                     | 3         |
| PHYS 300-level Elective                   | 3         | Lab Science II                             | 4         |
| N/Lab Science I                           | 4         | Course for minor                           | 3         |
| Global Society (SST)                      | 3         | Interative and Applied Learning            | 3         |
| Total                                     | <b>16</b> | Total                                      | <b>16</b> |
| <b>FOURTH YEAR</b>                        |           |  |           |
| PHYS 341: Seminar in Physics              | 1         | PHYS 463 or 472 or 484                     | 2         |
| PHYS 300-level Elective                   | 3         | PHYS 300-level Elective                    | 3         |
| Course for minor                          | 3         | Course for minor                           | 3         |
| Course for minor                          | 3         | Course for minor                           | 3         |
| Elective                                  | 3         | Elective                                   | 3         |
| Total                                     | <b>13</b> | Total                                      | <b>14</b> |

Total Credits = **120**

Gen Ed Subtotal = **36**

### Special instructions:

Credits for Minor in Chem/Bio/Gsci/Math **15**

(may vary depending on minor)

Directed Study cannot count for the elective credits in physics.

Students may count only one of the following towards the major: PHYS 463 or 472 or 484

### General Education Requirements

#### 1. Communicaiton and Scientific Literacy (CSL)

- INTD 105, Lang, Quant, and Nat Sci with Lab

#### 2. Participation in Global Society (PGS)

- DPP, WCIV, CGC, CAI, and SST

### Rules:

At least 4 unique courses for PGS

No more than one course used twice in PGS

Only one course from your major may be used for PGS

Courses used to satisfy CSL cannot double dip for PGS