**B.S. IN PHYSICS (Odd Year Cohort)**

**Recommended Course Sequence**

**1st Semester (Fall Odd Yr.) 2nd Semester (Spr. Even Yr.)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Prefix** | **No** | **Course** | **Cr** | **Prefix** | **No** | **Course** | **Cr** |
| MATH | 125 | Calculus I- For Phys. &Chem. | 3 | PHYS | 110 | Principles of Engineering | 3 |
| ENGL | 101 | Composition I- College Writing | 3 | MATH | 126 | Calculus II – For Phys. & Chem. | 3 |
| PHYS | 131 | Physics I Calc–Lecture | 3 | PHYS | 132 | Phys II Calc – Lecture | 3 |
| PHYS | 141 | Physics I Calc–Lab | 1 | PHYS | 142 | Phys II Calc – Lab | 1 |
| HPED | 143 | Health & Wellness\* | 3 | ARHI | 101 | Liberal Studies Fine Arts(1) | 3 |
| HIST | 196 | History & Modern Era# | 3 | COSC | 110 | Structured Programming | 3 |
|  |  |  | **16** |  |  |  | **16** |

**3rd Semester (Fall Even Yr.) 4th Semester (Spr. Odd Yr.)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Prefix** | **No** | **Course** | **Cr** | **Prefix** | **No** | **Course** | **Cr** |
| MATH | 241 | Differential Equations | 3 | COSC | 250 | Numerical Methods | 3 |
| MATH | 225 | Calc III – For Phys. & Chem. | 3 | MATH | 342 | Adv. Math with Applications | 4 |
| PHYS | 260 | Nanotechnology | 3 | PHYS | 2xx | Computer interfacing\*\* | 3 |
| PHYS | 3xx | Computational Physics\*\* | 3 | PHYS | 331 | Modern Physics (W) | 3 |
| ENGL | 202 | Composition II- Res. Writing | 3 | XXX | --- | Liberal Studies SS #1+ | 3 |
|  |  | LS Humanities (Phil /Rel St.) ## |  |  |  |  |  |
|  |  |  | **15** |  |  |  | **16** |

**5th Semester (Fall Odd Yr.) 6th Semester (Spr. Even Yr.)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Prefix** | **No** | **Course** | **Cr** | **Prefix** | **No** | **Course** | **Cr** |
| MATH | 171 | Elective (Lin. Algebra) | 3 | PHYS | 3xx | **Free elective** (Exp. Phys. II) | 3 |
| PHYS | 231 | Electronics | 4 | PHYS | 342 | Thermal & Statistical Physics\*\* | 3 |
| PHYS | 350 | Intermediate Exp. Phys. I | 3 | PHYS | 451 | Electricity and Magnetism | 3 |
| PHYS | 441 | Classical Mechanics | 3 | XXX | --- | Liberal Studies : Electives | 3 |
| XXX | --- | Liberal Studies SS #2 | 3 | XXX | --- | Liberal Studies SS #3 | 3 |
|  |  |  | **16** |  |  |  | **15** |

**7th Semester (Fall Even Yr.) 8th Semester (Spr. Odd Yr.)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Prefix** | **No** | **Course** | **Cr** | **Prefix** | **No** | **Course** | | **Cr** |
| PHYS | 401 | Theoretical Physics | 3 | PHYS | 345 | Optics\*\* | | 3 |
| PHYS | 4xx | **Free Elective** | 3 | PHYS | 4xx | **Free Elective** | 3 | |
| PHYS | 437 | Quantum Mechanics | 3 | PHYS | 472 | Nuclear Physics **or** | |  |
|  |  | **Free Elective** | **3** | ===== | 490 | Solid state **or** | |
|  |  |  |  | ===== | 475 | Semiconductor Devices | |
|  |  |  |  | ENGL | 121 | Humanities Literature | | 3 |
|  |  |  |  |  |  | **Free Elective** | | **3** |
|  |  |  | **12** |  |  |  | | **12** |

**§** Placed in MATH 125 and PHYS 131 based on placement test.

#/## May take in winter/summer session

(1) One course from: Art, Theater, or Dance.

# May substitute with another course

\* Or ROTC (Fall 2 Cr + Spr 2 Cr.)

\*\* These courses are offered every other year.

+ One course from: Global & Multicultural Awareness Category