**Applied Physics 2021-2022: 3+2 Mechanical Engineering**

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| **Freshman Year** | | | | | | | |
| **Fall** | | | | **Spring** | | | |
|  | Course Number | Course Title | Credits |  | Course Number | Course Title | Credits |
|  | UNV 1000 | Freshman Seminar | 1 |  | ENG 1060 | Composition II | 3 |
|  | ENG 1050 | Composition I | 3 |  | CHM 1310 | General Chemistry II | 3 |
|  | MAT 2210 | Calculus I | 4 |  | CHM 1110 | General Chemistry Laboratory II | 1 |
|  | CHM 1300 | General Chemistry I | 3 |  | MAT 2220 | Calculus II | 4 |
|  | CHM 1100 | General Chemistry Laboratory I | 1 |  | PHY 2010 | University Physics II | 3 |
|  | PHY 2000 | University Physics I | 3 |  | PHY 2070 | University Physics II Lab | 1 |
|  | PHY 2060 | University Physics Laboratory I | 1 |  | General Education | Physical Education | 1 |
| **Total Credits** | | | 16 |  | **Total Credits** | | 16 |

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| **Sophomore Year** | | | | | | | |
| **Fall** | | | | **Spring** | | | |
|  | Course Number | Course Title | Credits |  | Course Number | Course Title | Credits |
|  | MAT 3310 | Calculus III | 4 |  | MAT 3320 | Differential Equations | 3 |
|  | PHY 2560 | Modern Physics | 4 |  | General Education | Social Science | 3 |
|  | PHY 3000 | Classical Mechanics | 3 |  | PHY 3560 | Modern Electronics | 3 |
|  | CSC 2050 | Introduction to Programming | 3 |  | PHY 2180 | Optics | 3 |
|  | PED 1010 | Wellness & Fitness | 1 |  | PHY 2210 | Hardware/Software Con | 3 |
|  | General Education | Social Science | 3 |  | PHY 3360 | Mathematical Physics | 3 |
| **Total Credits** | | | 18 |  | **Total Credit** | | 18 |

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| **Junior Year** | | | | | | | |
| **Fall** | | | | **Spring** | | | |
|  | Course Number | Course Title | Credits |  | Course Number | Course Title | Credits |
|  | PHY 3880 | Advanced Comp Physics | 3 |  | MAT 3150 | Linear Algebra I | 3 |
|  | PHY 3200 | Electricity and Magnetism I | 3 |  | PHY 4990 | Independent Study | 3 |
|  | PHY 3260 | Heat and Temperature | 3 |  | PHY 4000 | Quantum Mechanics | 3 |
|  | PHY 4200 | Advanced Laboratory I | 3 |  | PHY 3210 | Electricity and Magnetism II | 3 |
|  | General Education | Fine Arts | 3 |  | PHY 4210 | Advanced Laboratory II | 3 |
|  | General Education | Philosophy or Religion | 3 |  | General Education | History | 3 |
| **Total Credits** | | | 18 | **Total Credits** | | | 18 |

**Students who are interested in the Dual Degree at UNCP and NCSU must maintain a 2.5 Cumulative GPA and a 3.0 GPA in Mathematics and Science Courses.**

**During the Junior Year the student must submit to the program coordinator an application for admission to NCSU engineering school.**