

Full name: _____ Hamline ID: _____ Phone #: _____

Anticipated graduation date (such as: May, 2023) _____

| DEPT | COURSE | TITLE | GRADE | CREDITS | TERM/ YEAR | SUBSTITUTE COURSE* | BREADTH OF STUDY** |
|---|--------|--|-------|---------|---------------|--------------------|-----------------------|
| Core Physics Courses: | | | | | | | |
| PHYS | 1230 | General Physics I | | 4 | | | no |
| PHYS | 1240 | General Physics II | | 4 | | | no |
| PHYS | 3540 | Modern Physics | | 4 | | | no |
| PHYS | 3600 | Mathematical & Computational Methods | | 4 | | | no |
| PHYS | 3750 | Thermodynamics & Statistical Mechanics | | 4 | | | no |
| PHYS | 5900 | Junior Seminar | | 0.5 | | | no |
| PHYS | 5900 | Junior Seminar | | 0.5 | | | no |
| PHYS | 5910 | Senior Seminar | | 0.5 | | | no |
| PHYS | 5910 | Senior Seminar | | 0.5 | | | no |
| PHYS | 5920 | Research Project-Based Adv Lab | | 2 | | | no |
| PHYS | 5920 | Research Project-Based Adv Lab | | 2 | | | no |
| Core Mathematics Courses: | | | | | | | |
| MATH | 1170 | Calculus I | | 4 | | | yes |
| MATH | 1180 | Calculus II | | 4 | | | yes |
| MATH | 3320 | Multivariable & Vector Calculus | | 4 | | | yes |
| MATH | 3720 | Differential Equations | | 4 | | | yes |
| Core Chemistry Courses: | | | | | | | |
| CHEM | 1130 | General Chemistry I | | 4 | | | yes |
| CHEM | 1140 | General Chemistry II | | 4 | | | yes |
| or | | | | | | | |
| CHEM | 1500 | Advanced General Chemistry | | 4 | | | yes |
| Engineering Emphasis: | | | | | | | |
| PHYS | 1610 | Engineering Mechanics: Statics | | 4 | | | no |
| PHYS | 1620 | Engineering Mechanics: Dynamics | | 4 | | | no |
| Two of the following: | | | | | | | |
| PHYS | 3520 | Physical Optics | | 4 | | | no |
| PHYS | 3700 | Condensed Matter Physics | | 4 | | | no |
| PHYS | 3800 | Electronics & Instrumentation | | 4 | | | no |
| Two of the following: | | | | | | | |
| PHYS | 5930 | Theoretical Mechanics | | 4 | | | no |
| PHYS | 5940 | Adv Electromagnetic Field Theory | | 4 | | | no |
| PHYS | 5950 | Adv Quantum Mechanics | | 4 | | | no |
| PHYS | 5955 | Advanced Topics in Physics | | 4 | | | no |
| One of the following: | | | | | | | |
| CDS | 1010 | Introduction to Programming | | 4 | | | yes |
| INTD | 3900 | Innovation | | 4 | | | yes |
| MATH | 3330 | Linear Algebra | | 4 | | | yes |
| MATH | 3410 | Mathematical Modeling | | 4 | | | yes |
| MATH | 3810 | Probability & Mathematical Statistics | | 4 | | | yes |
| Writing intensive course in the major: | | | | | | | |
| | | | | | | | |

*Department approval is required for transfer courses or other substitutions. Courses used as substitutions must be initialed by Department Chair.

**In order to graduate, you must have at least 48 Breadth of Study credits (credits outside your major department). See above for courses in your major that also count toward Breadth of Study.

 Student signature: _____ Date: _____
 (required)

 Physics advisor signature: _____ Date: _____
 (required)

 Department chair/director signature: _____ Date: _____
 (required for course substitutions and waivers)