UNIVERSITY OF CALIFORNIA | SCHOOL OF
MERCED | NATURAL SCIENCES
UNDERGRADUATE ADVISING

Sample Plan and Course Flow Chart Template – Physics-No Track

Legend

- **Major Requirement Only** (rectangle)
- **General Education Requirement Only** (hexagon)
- **Major Requirement and General Education Requirement** (dashed rectangle)
- **Free Elective units** (circle)
- ● **Meets Badge**

Year 1

Semester 1 (16 Units)

| PHYS 08/08H & 08L Introductory Physics I & Lab (4 units) ● | MATH 021 Calculus I for Physical Sciences & Engineering (4 units) | SPARK Seminar (4 units) | CHEM 02/02H General Chemistry I (4 units) ● |

Semester 2 (16 Units)

| PHYS 09/09H & 09L Introductory Physics II & Lab (4 units) ● | MATH 022 Calculus II for Physical Sciences & Engineering (4 units) | WRI 10 College Reading & Comprehension (4 units) | Computer Science Requirement (4 units) ● |

Year 2

Semester 3 (16 Units)

| PHYS 10 Introductory Physics III (4 units) ● | PHYS 108 Thermal Physics Core (4 units) | MATH 24 Linear Algebra & Differential Equations (4 units) ● | GE Approaches to Knowledge Area B (4 units) |

Semester 4 (14 Units)

| PHYS 105 Analytics Mechanics Core (4 units) | PHYS 126 Special Relativity Minicourse (2 units) | MATH 023 Vector Calculus (4 units) ● | GE Approaches to Knowledge Area B (4 units) |

Year 3

Semester 5 (16 Units)

| PHYS 110 Electrodynamics Core (4 units) | PHYS 137 Quantum Mechanics Core (4 units) | MATH 032 Probability and Statistics (4 units) ● | GE Approaches to Knowledge Area B (4 units) |

Semester 6 (14 Units)

| PHYS 115 Electrodynamics Core Waves II Waves (4 units) ● | PHYS 138 Quantum Mechanics II Core (2 units) ● | PHYS 160 Modern Physics Lab (4 units) *Writing in Discipline* ● | Free Elective (4 units) |

Year 4

Semester 7 (14 Units)

| PHYS 195 or ENGR 193 (2 units) ● | UD PHYS Emphasis Elective (4 units) | LD Science or Engineering Elective (4 units) | Crossroads Course (4 units) |

Semester 8 (14 Units)

| PHYS 196 or ENGR 194 (2 units) | UD PHYS Emphasis Elective (4 units) | Free Elective (4 units) | Free Elective (4 units) |
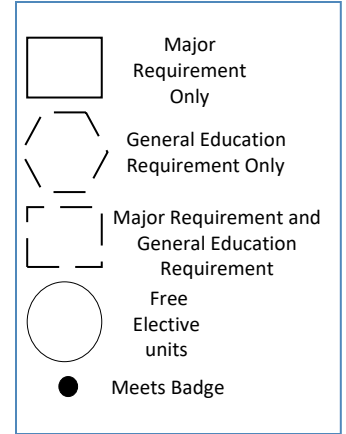
- This sample plan demonstrates the recommended sequencing and timing of the required and elective components within the major.

- In many cases, a student's academic background will require variations in the timing of the coursework listed in the plan.

- All students are expected to work with their academic advisor to find their best pathway through the degree requirements of their chosen program.