

# PHYSICS MINOR

## Program Requirements

| Code                                                    | Title                                    | Credits      |
|---------------------------------------------------------|------------------------------------------|--------------|
| <b>Required Courses</b>                                 |                                          |              |
| PHYS 191                                                | University Physics I                     | 4            |
| PHYS 192                                                | University Physics II                    | 4            |
| PHYS 230                                                | Intermediate Physics Laboratory          | 4            |
| PHYS 210                                                | Intermediate Mechanics                   | 3            |
| or PHYS 220                                             | Oscillations, Waves, and Optics          |              |
| PHYS 320                                                | Statistical and Thermal Physics          | 3            |
| or PHYS 340                                             | Electricity and Magnetism                |              |
| or PHYS 360                                             | Modern Physics                           |              |
| <b>Elective</b>                                         |                                          |              |
| Select one course from the following (not taken above): |                                          | 3-4          |
| PHYS 180                                                | Astronomy for Everyone                   |              |
| PHYS 210                                                | Intermediate Mechanics                   |              |
| PHYS 220                                                | Oscillations, Waves, and Optics          |              |
| PHYS 245                                                | Fundamentals of Electronics              |              |
| PHYS 280                                                | Astronomy for Physicists                 |              |
| PHYS 310                                                | Advanced Mechanics                       |              |
| PHYS 320                                                | Statistical and Thermal Physics          |              |
| PHYS 325                                                | Computational Physics                    |              |
| PHYS 330                                                | Advanced Physics Laboratory              |              |
| PHYS 340                                                | Electricity and Magnetism                |              |
| PHYS 341                                                | Electronics and Digital Circuits         |              |
| PHYS 350                                                | Modern Optics                            |              |
| PHYS 360                                                | Modern Physics                           |              |
| PHYS 368                                                | Fluid Mechanics                          |              |
| PHYS 377                                                | Mathematical Physics                     |              |
| PHYS 380                                                | Observational Astronomy                  |              |
| PHYS 399                                                | Special Topics in Physics                |              |
| PHYS 451                                                | Radiation and Medical Physics            |              |
| PHYS 461                                                | General Relativity                       |              |
| PHYS 462                                                | Nuclear Physics                          |              |
| PHYS 464                                                | Quantum Mechanics                        |              |
| PHYS 470                                                | Solid State Physics                      |              |
| PHYS 480                                                | Astrophysics                             |              |
| PHYS 495                                                | Research or Independent Study in Physics |              |
| <b>Total Credits</b>                                    |                                          | <b>21-22</b> |

### Collateral Courses

| Code                                                                                                                                                                                             | Title              | Credits |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------|
| These credit hours are not counted in the minor total. MATH 122/AMAT 120 and MATH 221/AMAT 220 are required prerequisites. MATH 222 is optional, but is a prerequisite for some physics courses. |                    |         |
| MATH 122                                                                                                                                                                                         | Calculus I         | 4       |
| or AMAT 120                                                                                                                                                                                      | Applied Calculus A |         |
| MATH 221                                                                                                                                                                                         | Calculus II        | 4       |
| or AMAT 220                                                                                                                                                                                      | Applied Calculus B |         |
| MATH 222                                                                                                                                                                                         | Calculus III       | 4       |