Degree & Certificate Requirements

Health Physics Bachelor of Applied Science (BAS)

2022-2023 Degree Requirements BAS degrees require a minimum of 60 credits of 300- and 400-level courses

Major Courses

| Course Number | Course Title | Credits | Qtr. Completed | Comments / Substitution |
|---------------|---|---------|----------------|-------------------------|
| ELT 124 | Direct Current Circuits | 5 | | |
| NT 111 | Basic Nuclear Math & Physics | 5 | | |
| NT 121 | Reactor Plant Operations | 4 | | |
| or | | | | |
| NT 122 | Basic Nuclear Facilities | 4 | | |
| NT 131 | Nuclear Facility Components | 4 | | |
| NT 141 | Basic Reactor Safety, Theory, & Operations | 5 | | |
| or | | | | |
| NT 142 | Basic Nuclear Safety & Environmental Compliance | 5 | | |
| NT 150 | Internship Seminar | 1 | | |
| NT 152 | Internship | 5 | | |
| or | | | | |
| NT 154 | Industry Project | 5 | | |
| NT 160 | Nuclear Chemistry | 3 | | |
| NT 170 | Mechanical & Fluid Power Transmission | 4 | | |
| RPT 111 | Radiation Fundamentals | 5 | | |
| RPT 121 | Radiation Monitoring | 5 | | |
| RPT 131 | Radiation Effects | 5 | | |
| RPT 141 | Radioactive Materials Handling | 5 | | |
| RPT 211 | Radiological Safety and Response | 5 | | |
| RPT 222 | Radiation Protection | 5 | | |
| HPHYS300 | Radiation Physics I | 5 | | |
| HPHYS305 | Radiation Physics II | 5 | | |
| HPHYS310 | Nuclear Forensics | 5 | | |
| HPHYS315 | Radiological and Nuclear Emergency Response | 5 | | |
| HPHYS320 | Environmental Radioactivity | 5 | | |
| HPHYS350 | Health Physics Seminar I | 1 | | |
| HPHYS400 | External Dosimetry | 5 | | |
| HPHYS405 | Internal Dosimetry | 5 | | |
| HPHYS410 | Radiation Biology | 5 | | |
| HPHYS415 | Radiation Detection and Measurement & Lab | 5 | | |
| HPHYS420 | Medical Health Physics | 5 | | |
| HPHYS425 | Nuclear and Radiological Regulatory Framework | 5 | | |
| HPHYS450 | Health Physics Seminar II | 1 | | |
| | | | | |

Subtotal 123

Degree & Certificate Requirements

General Education

| Course Number | Course Title | Credits | Qtr. Completed | Comments / Substitution | | |
|--|---|---------|----------------|-------------------------|--|--|
| English - select 5 credits from the following: | | | | | | |
| ENGL&101 | English Composition I [C] | 5 | | | | |
| ENGL 103 | Writing in the Workplace | 5 | | | | |
| Communication - select 5 credits from the following: | | | | | | |
| CMST&101 | Introduction to Communication Studies [C] | 5 | | | | |
| CMST&210 | Interpersonal Communication [C] | 5 | | | | |
| CMST&220 | Public Speaking [C] | 5 | | | | |
| CMST 260 | Multicultural Communication [C] | 5 | | | | |
| Quantitative/Symbolic Reasoning - 20 credits: | | | | | | |
| MATH&141 | Precalculus I [M/S] [Q/SR] | 5 | | | | |
| MATH&142 | Precalculus II [M/S] [Q/SR] | 5 | | | | |
| MATH&151 | Calculus I [M/S] [Q/SR] | 5 | | | | |
| MATH&152 | Calculus II [M/S] [Q/SR] | 5 | | | | |
| Humanities* -10 credits: | | | | | | |
| PHIL 305 | Professional Ethics [H] | 5 | | | | |
| Choose any course from this distribution | | 5 | | | | |
| Social & Behavioral Sciences* - select 10 credits from the following: | | | | | | |
| PSYC&100 | General Psychology [S/B] | 5 | | | | |
| SOC& 101 | Intro to Sociology [S/B] | 5 | | | | |
| Choose any course from this distribution | | 5 | | | | |
| Mathematical & Natural Science* - select 20-21 credits from the following: | | | | | | |
| BIOL&175 | Human Biology w/ Lab [M/S] | 5 | | | | |
| CHEM&140 | General Chemistry Prep w/ Lab [M/S] | 5 | | | | |
| or | | | | | | |
| CHEM&161 | General Chemistry I w/ Lab [M/S] | 6 | | | | |
| ENVS 310 | Environmental Issues [M/S] | 5 | | | | |
| PHYS&110 | Physics for Non-Science Majors w/ Lab [M/S] | 5 | | | | |
| or | | | | | | |
| Any PHYS& co | ourse higher than 110 | 5 | | | | |

Subtotal 70-71 Total Credits Required 193-194

Note:

*Course selections must meet the distribution requirements for the BAS degree.

- Students must earn a minimum 2.5 grade in all Health Physics (HPHYS) 300- and 400-level courses.
- Required minimum 193 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade 2.0 for MATH&141 and MATH&142.
- Minimum grade per distribution course 1.0.
- A student may not use equivalent cross-listed courses for the same graduation requirement. Refer to the Cross-Listed Courses section of the catalog for more information, and consult with your counselor, completion coach, or faculty advisor.