Degree & Certificate Requirements

Health Physics Bachelor of Applied Science (BAS)

2025-2026 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 [RE]	5		
NT 111	Basic Nuclear Math & Physics [RE]	5		
NT 121	Reactor Plant Operations [RE]	4		
or				
NT 122	Basic Nuclear Facilities [RE]	4		
NT 131	Nuclear Facility Components [RE]	4		
NT 141	Basic Reactor Safety, Theory, & Operations [RE]	5		
or				
NT 142	Basic Nuclear Safety & Environmental Compliance [RE]	5		
NT 150	Internship Seminar [RE]	1		
NT 152	Internship [RE]	5		
or				
NT 154	Industry Project [RE]	5		
NT 160	Nuclear Chemistry [RE]	3		
NT 170	Mechanical & Fluid Power Transmission [RE]	4		
RPT 111	Radiation Fundamentals [RE]	5		
RPT 121	Radiation Monitoring [RE]	5		
RPT 131	Radiation Effects [RE]	5		
RPT 141	Radioactive Materials Handling [RE]	5		
RPT 211	Radiological Safety and Response [RE]	5		
RPT 222	Radiation Protection [RE]	5		
HPHYS 300	Radiation Physics I	5		
HPHYS 305	Radiation Physics II	5		
HPHYS 350	Health Physics Seminar	2		
HPHYS 400	External Dosimetry	5		
HPHYS 405	Internal Dosimetry	5		
HPHYS 415	Radiation Detection and Measurement & Lab	5		
Select 30 credits from the following:				
HPHYS 310	Nuclear Forensics	5		
HPHYS 315	Radiological and Nuclear Emergency Response	5		
HPHYS 320	Environmental Radioactivity	5		
HPHYS 325	Reactor Health Physics	5		
HPHYS 410	Radiation Biology	5		
HPHYS 420	Medical Health Physics	5		
HPHYS 425	Nuclear and Radiological Regulatory Framework	5		
HPHYS 430	CHP Exam Preparation and Problem Solving	5		
	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 [RE]	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 to 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& course 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 completion coach or advisor.