

Degree & Certificate Requirements

Health Physics Bachelor of Applied Science (BAS)

2020-2021 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

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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& 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 180 credits.
- Required minimum cumulative GPA 2.0.
- Minimum grade 2.0 for MATH&141 and MATH&142.
- Minimum grade per distribution course 1.0.