

Radiation and Health Physics Degree Checklist

Effective Fall 2023

Program Requirements (58-60 credits)			
Required Courses (53-55 credits)	Credits	Grade	Semester/Year
RAS 140 (Radioecology)	3		
RAS 150 (Radiation Regulations)	3		
RAS 360 (Health Physics)	3		
RAS 410 (Radiation Detection Lab)	3		
RAS 460 (Applied Health Physics)	3		
RAS 498 (Internship in Health Physics)	3		
PHYS 211 (Gen. Phys. 1) or PHYS 208 (Intro. Physics 1)	4		
PHYS 212 (Gen. Phys. 2) or PHYS 209 (Intro. Physics 2)	4		
CHEM 121 (Gen Chem 1)	4		
CHEM 122 (Gen Chem 2)	4		
MATH 160 (Calculus 1) or MATH 140 (Pre-calculus)	3 or 4		
PHYS 315 or 316 or ENGT 141 (Electronics)	3 or 4		
BIOL 110 (Principles of Biology 1)	4		
BIOL 411 (Radiation Biology)	3		
STAT 141 Intro to Statistics or STAT 241 Probability and Statistics	3		
BIOL 208 or BIOL 209 (Genetics)	3		
Radiation and Health Physics Electives (5-7 credits required)			
PHYS 205 (Physics for Medical Imaging)	3		
Computer Science (Programming, eg CS 115)	3		
MATH 170 (Calculus 2)	4		
BIOL 180 (Anatomy Physiology 1)	4		
BIOL 181 (Anatomy Physiology 2)	4		
BIOL 210 (Genetics Lab)	1		
BIOL 443 (Molecular Biology)	3		
BIOL 211 (Cell Biology)	3-4		
BIOL 462 (Cancer Biology)	3		
MATH 170 (Calculus 2)	3		
PHYS 310 (Modern Physics)	3		
Advanced Physics Lab	3		

PHYS 491 (Independent Study/Research)	1-3		
PHYS 304 (Nanosciences)	3		
PHYS 404 (Advanced Nanosciences Lab)	3		
Radiochemistry	3		
Medical terminology	3		

General Education

Category	Credits	Course Taken (Required classes are listed)	Semester/Grade
First Year Seminar (U)	3		
Writing (W) (3 credits)	3		
Oral Communication (O)	3		
History (H)	3		
Quantitative (Q)	3 or 4	MATH 140 Pre-Calculus or MATH 160 Calculus I	
Diversity (D)	3		
Global Perspective (G)	3		
Diversity (D) Foreign Languages (F) or Global Perspective (G) Course	3		
Ethical Reasoning (E)	3		
Critical Reasoning (R)	3		
Natural World (N)	4	PHYS 211 Gen. Phys. 1 or PHYS 208 Intro. Physics 1	
Natural World (N)	4	PHYS 212 Gen. Phys. 2 or PHYS 209 Intro. Physics 2 or CHEM 121 Gen Chem 1	
Natural World (N)	4	CHEM 122 Gen Chem 2	
Literature (L)	3		
Arts (A) or Creative (C)	3		
Total General Education Credits	47 or 48		

Students need a minimum of 120 credits to graduate from Commonwealth University
