PURDUE UNIVERSITY

RADIOLOGICAL HEALTH SCIENCES /HEALTH PHYSICS EMPHASIS
College of Health and Human Sciences

HLSC-BS
RADH
120 credits

Student: _____ PUID: _____ Catalog Term: _____

Additional Majors: _____ Minors: _____

Requirements (106-108 credits)

____ (4) BIOL 11000 Fundamentals of Biology I
____ (4) BIOL 11100 Fundamentals of Biology II
____ (4) BIOL 20300 Human Anatomy & Physiology
____ (4) BIOL 20400 Human Anatomy & Physiology
____ (4) CHM 11500 General Chemistry
____ (4) CHM 11600 General Chemistry
____ (3) COM 11400 Fundamental of Speech Communication
____ (4) ENGL 10600 First Year Composition
____ (3) _____*English Selective – select from list*
____ (3) _____*General Science or Radiological Health Sciences Selective – select from list*
____ (3) _____*Health Physics Selective – select from list*
____ (3) _____*Health Physics Selective – select from list*
____ (3) _____*Math or Computer Science Selective – select from list*
____ (4) _____*Math or Computer Science or General Science Selective - select from list*
____ (2) HSCI 10100 Introduction to Health Sciences Professions
____ (3) HSCI 20200 Essentials of Environmental, Occupational, and Radiological Health Sciences
____ (3) HSCI 31200* Radiation Science Fundamentals
____ (2) HSCI 31300* Principles of Radiation Detection & Measurement
____ (2) HSCI 51400* Radiation Instrumentation Laboratory
____ (3) HSCI 52600* Principles of Health Physics & Dosimetry
____ (3) HSCI 53400* Applied Health Physics
____ (3) HSCI 54000* Radiation Biology
____ (2) HSCI 57400* Medical Health Physics
____ (4-5) MA 16100 Plane Analytic Geometry & Calculus I or MA 16500 Analytic Geometry & Calculus I
____ (4-5) MA 16200 Plane Analytic Geometry & Calculus II or MA 16600 Analytic Geometry & Calculus II
____ (4) MA 26100 Multivariate Calculus
____ (3) NUCL 20000 Introduction to Nuclear Engineering
____ (2) NUCL 20500 Nuclear Engineering Undergraduate Laboratory I
____ (2) NUCL 30500 Nuclear Engineering Undergraduate Laboratory II
____ (4) PHYS 17200 Modern Mechanics
____ (3) PHYS 24100 Electricity & Optics
____ (1) PHYS 34000 Modern Physics Laboratory
____ (3) PHYS 34200 Modern Physics
____ (3) STAT 30100 Elementary Statistical Methods

Humanities Selectives – select from list (9 credits)

____ (3) _____
____ (3) _____
____ ( ) _____

Electives (3-5 credits)

____ ( )_____ ____ ( ) _____ ____ ( ) _____ ____ ( ) _____

***A grade of "C" or higher must be earned in HSCI 31200, 31300, 51400, 52600, 53400, 54000, and 57400.**
All students must complete 32 credits of 300 level or higher courses at Purdue for graduation.
120 credits required for Bachelor of Science degree

Revised 5/2012

English Selective List

ENGL 23000	Great Narrative Works
ENGL 26600	World Literature: From The Beginnings To 1700 A.D.
ENGL 26700	World Literature: From 1700 A.D. To The Present
ENGL 30400	Advanced Composition
ENGL 30600	Introduction To Professional Writing
ENGL 42000	Business Writing
ENGL 42100	Technical Writing

General Science Selective List

AT 57200	Human Error
CHM 22400	Introductory Quantitative Analysis
CHM 25500	Organic Chemistry
CHM 25501	Organic Chemistry Laboratory
CHM 25600	Organic Chemistry
CHM 25601	Organic Chemistry Laboratory
CHM 33300	Principles of Biochemistry
HSCI 34500	Introduction To Occupational and Environmental Health Science
BIOL 41500	Introduction To Molecular Biology
BIOL 44400	Human Genetics
BIOL 54200	Animal Cell Culture
BIOL 51600	Molecular Biology Of Cancer
HK 44500	Principles of Epidemiology
HSCI 54700	Environmental Epidemiology
HSCI 55100	Health Effects of Non-ionizing Radiation
HSCI 55200	Introduction to Aerosol Science
HSCI 56000	Toxicology
HSCI 58000	Occupational Ergonomics
PHIL 27000	Biomedical Ethics
PHIL 29000	Environmental Ethics
PHIL 35000	Philosophy and Probability
PHYS 22000	General Physics
PHYS 22100	General Physics
PHYS 31000	Intermediate Mechanics
PHYS 36000	Quantum Mechanics
PHYS 55000	Introduction To Quantum Mechanics
PHYS 55600	Introductory Nuclear Physics
PHYS 56400	Introduction To Elements Particle Physics
PHYS 56500	Introduction To Elementary Particle Physics II

Health Physics Selective List

HSCI 39000	Radiological Emergency Management
HSCI 48500	Health Physics Internship
HSCI 54700	Environmental Epidemiology
HSCI 55100	Health Effects of Non-ionizing Radiation
HSCI 55200	Introduction to Aerosol Science
HSCI 59000	Public Health Law and Policy
ME 20000	Thermodynamics I
ME 27000	Basic Mechanics I
NRES 28000	Hazardous Waste Handling
NUCL 30000	Nuclear Structure and Radiation Interactions
NUCL 31000	Introduction to Neutron Physics
NUCL 35000	Nuclear Thermal–Hydraulics I
NUCL 35100	Nuclear Thermal-Hydraulics II
NUCL 50100	Nuclear Engineering Principles
NUCL 50300	Radioactive Waste Management
NUCL 50400	Nuclear Engineering Experiments
NUCL 51000	Nuclear Reactor Theory I

Math and Computer Science Selective List

CS 15800	C Programming
CS 15900	Programming Applications for Engineers
CS 18000	Programming I
CS 31400	Numerical Methods
CS 47800	Introduction to Bioinformatics
MA 26200	Linear Algebra and Differential Equations
MA 41600	Probability
MA 52700	Advanced Mathematics for Engineers and Physicists I
MA 52800	Advanced Mathematics for Engineers and Physicists II
PHYS 58000	Computational Physics
STAT 31100	Introductory Probability
STAT 51200	Applied Regression Analysis

Radiological Health Sciences Selective List

Any course on the Health Physics Selective List

HSCI 19000, 29000, 39000, 49000, 59000	Special Topics in Radiological Health Sciences
HSCI 57000	Introduction to Medical Diagnostic Imaging
HSCI 57200	Radiation Oncology Physics
HSCI 69000	Molecular Radiobiology
NUPH 41200	Diagnostic Imaging I
NUPH 41300	Diagnostic Imaging II
NUPH 41400	Nuclear Pharmacy Laboratory
NUPH 53000	Applied Nuclear Pharmacy
NUPH 55000	Introduction to Positron Emission Tomography

Humanities Selective List - select any course from the following subjects:

Anthropology (ANTH)
Art & Design (AD)
Classics (CLCS)
Communication (COM)
Dance (DANC)
Economics (ECON)
English (ENGL)
Foreign Languages & Literatures (FLL)
History (HIST)
Interdisciplinary Studies (IDIS)
Music (MUS)
Philosophy (PHIL)
Political Science (POL)
Psychology (PSY)
Sociology (SOC)
Theatre (THTR)

RADH
revised 5/2012