

BSc (Hons) in Health Physics and Radiation Science - 2019 Entry
(pre/co-req in brackets)

Year	Course	Course	Course	Course	Course	Course
1-1	CHEM 1010 Chemistry I	COMM 1050 Technical Communications	MATH 1010 Calculus I	MATH 1850 Linear Algebra for Engineers (Coreq: MATH 1010)	PHY 1010 Physics I	
1-2	BIOL1011 Introductory Cell and Molecular Biology	CHEM 1020 Chemistry II	ENGR 1200 Introduction to Programming	MATH 1020 Calculus II (MATH 1010)	NUCL 1530 Radiation and Nuclear Technologies	PHY 1020 Physics II (PHY 1010)
2-1	CHEM 2020 Intro to Organic Chemistry (CHEM 1020)	ELEE 2790 Electric Circuits (MATH 1020, PHY 1020, MATH 1850)	ENGR 2140 Problem Solving, Modelling and Simulation (MATH 1020, PHY 1020, ENGR 1200) (Coreq: MATH 2860)	MATH 2860 Differential Equations for Engineers (MATH 1020, MATH 1850)	NUCL 2500 Introduction to Nuclear Physics (MATH 1020, PHY 1020)	
2-2	ENVS 1000 Environmental Science	MATH 2810 Adv Engineering Mathematics (MATH 1020) <u>OR</u> MATH 2070 Numerical Methods (MATH 1020, MATH 1850)	NUCL 2950 Radiation Protection (NUCL 2500)	SSCI 1470 Impact of Science and Technology on Society	STAT 2800 Statistics and Probability for Engineers (MATH 1020)	
3-1	ENGR 3860 Introduction to Nuclear Reactor Technology (PHY 1020)	HLSC 1200 Anatomy and Physiology I	NUCL 3740 Scientific Instrumentation (ELEE 2790, STAT 2800)	RADI 3200 Medical Imaging (NUCL 2950)	RADI 4550 Radiation Detection and Measurement (NUCL 2500, NUCL 2950)	
3-2	ENGR 3360 Engineering Economics	RADI 4220 Radiation Biophysics and Dosimetry (BIOL 1011, NUCL 2950)	RADI 4440 Radioisotopes and Radiation Machines (NUCL 2950)	Basic Science or Engineering Elective	Complimentary Studies Elective (BUSI or Liberal)	
4-1	RADI 3570 Environmental Effects of Radiation (NUCL 2950)	ENGR 4660 Risk Analysis Methods (STAT 2800)	RADI 4430 Industrial Applications of Radiation Techniques (RADI 4550, NUCL 3740)	RADI 4995 Thesis Design Project I (All courses from years 1-3 completed)	Liberal Studies Elective	
4-2	RADI 4320 Therapeutic Applications of Radiation Techniques (NUCL 2950)	RADI 4999 Thesis Design Project II (RADI 4995)	Senior Science or Engineering Elective	Senior Science or Engineering Elective	Liberal Studies Elective	