

**BSc (Hons) in Health Physics and Radiation Science - 2010 Entry**
**(pre/co-req in brackets)**

Year	Course	Course	Course	Course	Course	Course
1-1	<b>CHEM 1010</b> Chemistry I	<b>EDUC 1050</b> Technical Communications	<b>MATH 1010</b> Calculus I	<b>MATH 1850</b> Linear Algebra for Engineers (Coreq: MATH 1010)	<b>PHY 1010</b> Physics I	<b>SSCI 1210</b> History of Science and Technology
1-2	<b>BIOL1840</b> Biology for Engineers	<b>CHEM 1020</b> Chemistry II	<b>ENGR 1200</b> Introduction to Programming	<b>MATH 1020</b> Calculus II (MATH 1010 )	<b>NUCL 1530</b> Radiation and Nuclear Technologies	<b>PHY 1020</b> Physics II (PHY 1010)
2-1	<b>BIOL1840</b> Cell and Molecular Biology (BIOL 1010 or BIOL 1840)	<b>CHEM 2020</b> Intro to Organic Chemistry (CHEM 1020)	<b>ENGR 2140</b> Problem Solving, Modelling and Simulation (MATH 1020 , PHY 1020, ENGR 1200 ) (Coreq: MATH 2860)	<b>ENGR 2500</b> Introduction to Nuclear Physics (MATH 1020 , PHY 1020 )	<b>ENGR 2790</b> Electric Circuits (MATH 1020 , PHY 1020 )	<b>MATH 2860</b> Differential Equations for Engineers (MATH 1020, MATH 1850)
2-2	<b>ENVS 1000</b> Environmental Science	<b>MATH 2810</b> Adv Engineering Mathematics (MATH 1020) <u>OR</u> <b>MATH 2070</b> Numerical Methods (MATH 1020, MATH 1850)	<b>RADI 2100</b> Radiological and Health Physics (ENGR 2500 or PHY 2060) (co-req RADI 2110)	<b>RADI 2110</b> Health Physics Laboratory (ENGR 2500 or PHY 2060) (co-req RADI 2100)	<b>SSCI 1470</b> Impact of Science and Technology on Society	<b>STAT 2800</b> Statistics and Probability for Engineers (MATH 1020)
3-1	<b>ENGR 3740</b> Scientific Instrumentation (ENGR 2790, STAT 2800)	<b>ENGR 3860</b> Introduction to Nuclear Reactor Technology (PHY 1020)	<b>HLSC 1200</b> Anatomy and Physiology I	<b>RADI 3200</b> Medical Imaging (ENGR 2950 or RADI 2100)	<b>RADI 4550</b> Radiation Detection and Measurement (ENGR 2500, ENGR 2950 or RADI 2100 and RADI 2110)	
3-2	<b>ENGR 3360</b> Engineering Economics	<b>RADI 4220</b> Radiation Biophysics and Dosimetry (BIOL 1840, ENGR 2950 or RADI 2100)	<b>RADI 4440</b> Radioisotopes and Radiation Machines (ENGR 2950 or RADI 2100)	<b>Basic Science or Engineering Elective</b>	<b>Complimentary Studies Elective (BUSI or Liberal)</b>	
4-1	<b>ENGR 3570</b> Environmental Effects of Radiation (ENGR 2950 or RADI 2100 and RADI 2110)	<b>ENGR 4660</b> Risk Analysis Methods (STAT 2800 Statistics and Probability for Engineers)	<b>RADI 4430</b> Industrial Applications of Radiation Techniques (ENGR 3740 RADI 4550)	<b>RADI 4995</b> Thesis Design Project I (See Advisor)	<b>Liberal Studies Elective</b>	
4-2	<b>RADI 4320</b> Therapeutic Applications of Radiation Techniques (ENGR 2950 or RADI 2100)	<b>RADI 4999</b> Thesis Design Project II (See Advisor)	<b>Senior Science or Engineering Elective</b>	<b>Senior Science or Engineering Elective</b>	<b>Liberal Studies Elective</b>	