

**CURRICULUM FOR MS & PHD
MEDICAL PHYSICS CONCENTRATION
DEPARTMENT OF BIOMEDICAL ENGINEERING**

PROGRAM PREREQUISITES			
1. Equivalent of a minor in Physics			
If not completed prior to admission, UF Courses: PHY 3101 and two courses of PHY 32XX or greater must be taken			
2. Course in Radiation Detection and Instrumentation (UF Course: ENU4612C or equivalent).			
If not taken undergrad, ENU5615C must be taken			
FIRST FALL SEMESTER		Pre-Reqs	CREDITS
ENU 6051	Radiation Interaction Basics & Applications I	Upper Level College Physics	3
ENU 6061	Survey of Medical Radiological Physics	Upper Level College Physics	1
BME 6936	Graduate Colloquium	None	1
<i>Total:</i>			5
FIRST SPRING SEMESTER			
ENU 6627	Therapeutic Radiological Physics	ENU 5615, 6051	3
ENU 6657	Diagnostic Radiological Physics	ENU 5615, 6051	3
ENU 6659	Nuclear Medicine Physics	ENU 5615, 6051	3
<i>Total:</i>			9
FIRST SUMMER SEMESTER			
ENU 6652	Practicum in Diagnostic Radiological Physics	ENU 6657	1-3
ENU 6651	Practicum in Therapeutic Radiological Physics	ENU 6627	3
BME 6971 or	Masters Research*		3
BME 6907	Non-thesis Research Projects*		
<i>Total:</i>			7-9
SECOND FALL SEMESTER			
ENU 5626	Radiation Biology	1 yr each of college Biology, Chemistry, and Physics or Permission of Instructor	3
Specialization Course – select one of the following:			
ENU 5658	Image Analysis with Medical Physics Applications	ENU 6657 or instructor permission	3
BME 6505	Advanced Diagnostic Radiological Physics	ENU 6657	3
BME 6534	Advanced Therapeutic Radiological Physics	ENU 6627	3
<i>Total:</i>			6
SECOND SPRING SEMESTER			
ENU 6636	Medical Radiation Shielding and Protection	ENU 6051	3
BME 6533	Radiologic Anatomy	ENU 6657	3
ENU 6623	Radiation Dosimetry	ENU 6051	3
Total Hours			36-38

* A minimum of 3 hours of either Masters Research or Non-Thesis Research must be completed as part of the graduate program. It is suggested that students begin their research in the first summer, but may be varied at the discretion of the student's research advisor and supervisory committee. It is anticipated that most students will register for additional research credits throughout their academic program. Note also that during the term in which the final examination is given and during the term the degree is awarded, a student must be registered in the appropriate research course for **at least three credits** in fall or spring and **two credits** in the summer

Ph.D. Curriculum

The Ph.D. Curriculum largely consists of research performed under supervision of a supervisory committee culminating in the defense of a dissertation. Requirements for the Medical Physics specialization Ph.D. are:

- all courses (or equivalent subject coverage) from the Medical Physics MS curriculum (except for research courses)
- pass the qualifying exam
- Research credits (BME7979 before qualifying exam, BME7980 after qualifying exam passed)
- additional coursework as specified by the supervisory committee
- a minimum of 90 credits
- successful defense of a dissertation