

MEDICAL PHYSICS (CERTIFICATE)

The Graduate Certificate Program in Medical Physics provides medical physics education to students who already have earned doctorates in physics or a related discipline and who wish to retrain as medical physicists. A total of 30 semester credit hours are required for completion of the Graduate Certificate Program in Medical Physics.

In order to become a practicing medical physicist who is recognized by the American College of Radiology (ACR) as a Qualified Medical Physicist, one must become certified by the American Board of Radiology (ABR). Board certification is also necessary in order to become a Licensed Medical Physicist in the State of Texas. The ABR requires that those whom it examines for certification have completed a residency program that is accredited by the Commission on the Accreditation of Medical Physics Education Programs (CAMPEP). In order to enter such a residency, one must have graduated from a CAMPEP-accredited graduate program. CAMPEP has recognized that PhDs who wish to retrain need not take the gamut of graduate education, some of which is common to all subjects, and thus accredits certificate programs, such as this one, which teach only the core topics of medical physics in a well-defined curriculum.

The Graduate Certificate Program in Medical Physics is accredited by the Commission on Accreditation of Medical Physics Education Programs, Inc., located at
1631 Prince Street
Arlington, VA 22231
Telephone: 517.298.1239 Fax: 571.298.1301
CAMPEP Website (<http://www.campep.org>)

Information for applicants is available on the GSBS website. Further information may be obtained by writing to:

Rebecca M. Howell, PhD
Director, Graduate Program in Medical Physics
The University of Texas MD Anderson Cancer Center
Department of Radiation Physics
8060 El Rio Street, Unit 605
Houston, Texas 77054
rhowell@mdanderson.org

Coursework

Students must complete 30 semester credit hours of required courses:

Code	Title	Hours
GS02 1093	Introduction to Medical Physics I:Basic Interactions	3
GS02 1103	Introduction to Medical Physics II: Medical Imaging	3
GS02 1113	Introduction to Medical Physics III: Therapy	3
GS02 1193	Introduction to Medical Physics IV: The Physics of Nuclear Medicine	3
GS02 1213	Therapy Medical Physics II	3
GS02 1223	Diagnostic Medical Physics II	3
GS02 1053	Radiation Detection, Instrumentation, and Data Analysis	3

GS02 1063	Fundamental Anatomy, Physiology, and Biology for Medical Physics I	3
GS02 1073	Fundamental Anatomy, Physiology, and Biology for Medical Physics II	3
GS02 1133	Introduction to Radiation Protection	3

Prerequisites

- A doctoral degree (typically a PhD or a DSc) in physics or a closely related scientific or engineering discipline, and
- A present or past pre-doctoral or post-doctoral research experience related to medical physics at The University of Texas MD Anderson Cancer Center or The University of Texas Health Science Center at Houston, which are the parent institutions of The University of Texas MD Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences.