



# Medical Dosimetry

Bachelor of Science

THE UNIVERSITY OF TEXAS

MD Anderson  
~~Cancer~~ Center

Making Cancer History®

# Medical Dosimetry

Medical Dosimetrists are vital members of the radiation oncology team, working closely with radiation oncologists, medical physicists and radiation therapists to create customized radiation treatment plans designed to target cancer while sparing normal tissue. In order to carry out this work, medical dosimetrists must develop a knowledge base that includes, but is not limited to, human anatomy, clinical disease processes, radiation physics, and computer technology. Medical dosimetrists use multimodality imaging, including CT, MRI and PET scans, to construct three-dimensional treatment plans that will allow the delivery of high doses of radiation to a tumor while minimizing the risk to sensitive surrounding tissues. In the course of their work, medical dosimetrists also contribute to excellence in patient care by participating in quality assurance and cutting edge clinical research.

The program in Medical Dosimetry prepares students for the technical, theoretical, and psychological aspects of a career in this field. Students acquire the professional skills of dose calculation, computerized treatment design, and quality assurance through intensive education in classroom, laboratory, and clinical settings.

## Careers

Medical Dosimetrists are in high demand in hospitals and radiation treatment facilities in the United States. They have a wide range of career options that include: patient care, education, management, medical sales and technical training positions for emerging technology and treatment techniques.

## Clinical education

The program in Medical Dosimetry provides students with approximately 1,000 guided clinical rotation hours. This experience builds on the treatment-planning skills mastered in MD Anderson's advanced laboratory and clinical facilities where students are exposed to the latest in treatment planning technology and learn from experienced faculty and clinicians. Clinical faculty instruct and mentor students as they participate in treatment planning for conventional

radiation therapy, intensity-modulated radiation therapy (IMRT), volumetric-modulated arc therapy (VMAT), brachytherapy and advanced treatment techniques. Affiliation sites include the MD Anderson clinical sites within the Texas Medical Center and beyond.

Distance-learning students placed in affiliated clinics beyond MD Anderson in Texas receive their didactic education through synchronous delivery and clinical education under the supervision of clinical staff at these clinics.

- **In-person program**
- **Distance-learning program available in select regions**
- **Admits new students Fall semester only**
- **Full-time enrollment**
- **Degree completion in 2 years**

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[Medical Dosimetry](#)  
[Current affiliations](#)



# Competitive Application Process

The School of Health Professions admits new students once a year for entry each Fall semester.

Applicants will be selected through competitive and holistic admission process. A minimum overall GPA, prerequisite GPA, and prerequisite science GPA of 2.50 on a 4.0 scale is required for application. Meeting the minimum GPA does not guarantee acceptance.

## Required documents for application:

- Prerequisite coursework
- Online application, including essay
- Three professional recommendation forms
- Official transcript from each college attended
- TOEFL exam scores for international applicants
- Foreign college transcript should include a course-by-course and grade-by-grade evaluation from an approved agency

For a complete list of admission requirements, application deadlines, admission forms and a list of the prerequisite course requirements, visit [www.mdanderson.org/SHPapply](http://www.mdanderson.org/SHPapply)



[Learn more](#)  
about the  
undergraduate  
application



[Learn more](#)  
about the School of  
Health Professions

## Estimated costs

Based on 15 semester credit hours

<b>Texas resident</b>	Tuition and Fees   <b>\$2,300</b>
	Books and Supplies   <b>\$650</b>
<b>Non-resident</b>	Tuition and Fees   <b>\$8,400</b>
	Books and Supplies   <b>\$650</b>

## Tuition and fees

Cost of books and supplies vary by program. All students are required to be covered by health insurance. This expense is not reflected above.

## Financial aid

More than 87% of students attending the School of Health Professions receive some form of financial aid. Learn more about federal student aid and complete the Free Application for Federal Student Aid (FAFSA) online at [www.studentaid.gov](http://www.studentaid.gov)

While there is no application deadline for financial aid, it is recommended that students complete the required documents as soon as possible to be considered for institutional funds. Students should select the appropriate school code to avoid delays in the award process.

**FAFSA code: 017249**

## Scholarships

The School of Health Professions offers both guaranteed and competitive scholarships to newly admitted students.



[Learn more](#)  
about tuition  
and fees



[Learn more](#)  
about financial aid  
and scholarships