



Specialize with a Medical Diagnostics Certificate

Apply your engineering experience to the medical field. With a Medical Diagnostics Certificate, you get the education required to transition to this exciting, innovative field.

Use Your Engineering Expertise in Medical Diagnostics

The field of medical diagnostics continues to expand, creating career opportunities for those with the right education. Medical diagnostics involves the screening, detection, diagnosis and monitoring of disease, but students with a background in engineering are well-equipped to transition to this particular field with a University of Washington Medical Diagnostics certificate. This program gives you the specialized skills required to pursue a medical career as you learn about:

- Medical imaging diagnostics, including X-ray, computed tomography, ultrasound and magnetic resonance methods
- Clinical diagnostics, including disease presentation and pathology identification
- Epidemiologic methods using quantitative and biomedical information

The program is taught by faculty from the UW Department of Radiology, the UW School of Public Health and Community Medicine, and recognized professionals in the biomedical field.

Earn a Master's Degree in Medical Engineering

The Medical Diagnostics certificate is one of four programs that can be combined to earn a Master of Medical Engineering degree. This program integrates your knowledge of engineering with basic medicine and applications in biomaterials, biosensors, medical imaging, diagnostic methods, and physiological assessment.

The Job Outlook

According to the U.S. Department of Labor, biomedical engineers are expected to have employment growth that is much faster than the average for all occupations through 2014. This market demand is driven by an aging of the population, a focus on health issues that will drive demand for better medical devices and equipment, and a growing concern over cost-effectiveness in pharmaceutical manufacturing and related industries.

Medical Diagnostics Courses

You must complete the Basic Medical Sciences Certificate program before registering for this certificate. The following courses are required for the Medical Diagnostics certificate:

Medical Imaging Diagnostics

Focuses on disease presentation and identifying pathology as seen in medical images, including X-ray, computed tomography, ultrasound and magnetic resonance methods. Learn to analyze disease on the basis of the modern imaging methods most appropriate for its diagnosis, and on the basis of its appearance and diagnostic indicators in those images. Disease is demonstrated in a range of organ systems, including the reproductive, digestive, respiratory, cardiovascular, neurological and musculo-skeletal systems.

Clinical Diagnostics

Through lecture and demonstration, become familiar with the diagnostic process, beginning with the presentation of the patient, the steps for evaluating the patient, medical charting and documentation, communicating between specialties, reaching a diagnosis, deciding on therapeutic options, rehabilitation and follow-up, and outcome measurements.

Introduction to Epidemiology

Learn about research designs and methods to describe disease occurrence and risk factor associations; uses quantitative and biomedical information to infer whether causal relationships exist between potential causes and disease in populations.

About UW Extension


Learning through UW Extension gives working professionals the quality education that will take your career to the next level, whether you long for a promotion or a shift to a completely new field. All UW Extension programs are designed by UW faculty, industry experts and community leaders. To ensure you receive first-rate instruction, every UW Extension program must be approved by the corresponding University of Washington academic department. UW advisory boards are continually reviewing programs and updating the curriculum to meet the evolving demands of specific fields.

About UW Certificate Programs

You already work hard at your existing job, and going back to school is a serious commitment. That's why UW certificate programs are designed around you, with flexible schedules and a choice of part-time, full-time or even online study, depending on the program. A UW certificate gives you the knowledge and credibility to open doors for the rest of your professional life, whether you're moving up the career ladder or switching careers altogether.

Learn more about the program

For complete details, visit the Web site:

 WWW.EXTENSION.WASHINGTON.EDU

Attend an information meeting.

Interested in a certificate? You can ask questions and meet instructors and former students at these free meetings. For meeting dates, times and locations, please go to our Web site.

Questions? Ask away

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