

Biotechnology & Biomedical



The Demand for Biotech and Biomedical Highly Skilled Workers Keeps Growing

If you're already working in the field, be ready for the increased demand for highly educated employees with a Biotechnology or Biomedical University of Washington professional degree or certificate. If your company is looking for highly skilled employees, our evening, weekend and online classes for working adults can provide the specialized knowledge and skills that your employees need.

University of Washington certificate programs and master's degrees offer specialized curriculums designed to meet the educational needs of experienced life sciences, medical device, biotechnology or pharmaceutical employees in such areas as medical engineering, clinical trials, regulatory affairs and project management.

To ensure you receive first-rate, professionally relevant instruction, programs are designed by UW faculty, industry experts and community leaders. In addition, all UW Extension programs are approved by the corresponding University of Washington academic department. The programs found in the following pages are contributed to and approved by the UW's highly ranked Department of Bioengineering, School of Medicine, School of Pharmacy and School of Law.



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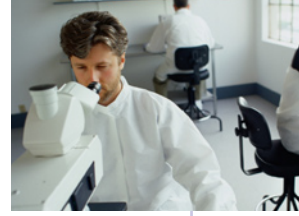
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Professional Degree Programs

Designed to accommodate working professionals' busy schedules, master's degrees are offered in the evenings, on weekends or online. Each degree is approved by the University of Washington and developed by an advisory board made up of faculty and industry experts. Whether your goal is career advancement or career change, earn the degree that can take you there at the University of Washington.



Master of Medical Engineering

Become a leader in developing the technologies and products that will become the standard of healthcare with this evening professional degree program. Intended for those who already have an engineering background, the Master of Medical Engineering curriculum includes basic medical sciences and applications to biomaterials, biosensors, medical imaging, diagnostics and physiological assessment. In addition, the program covers research, development, manufacturing and sales and marketing. The Master of Medical Engineering consists of four certificate programs, which may be taken as part of the degree program or individually. Find out more about the medical engineering certificate programs on page 6.



Professional Master of Science in Biomedical Regulatory Affairs

Play a pivotal role in the development and commercialization of new medical products (drug, device, biologic) by ensuring compliance with applicable laws and regulations with this evening and weekend professional degree program. The UW Master's in Biomedical Regulatory Affairs focuses on management aspects of taking a medical product from conceptualization to clinical trials to marketing, including post-marketing risk-management. A practicum provides focused, in-depth learning opportunities and the on-the-job experience, which is especially important for those entering the field.



Certificate Programs

A University of Washington Extension certificate program is a sequence of three or more linked courses that build on each other, typically offered over six to nine months. The curriculum of each program is kept current and relevant by an advisory board made up of UW faculty and professionals from leading Puget Sound area employers. Taught by outstanding UW faculty and other experts in their field, these practical, affordable programs are especially designed to meet the professional and personal educational needs of busy adults.

NEW Basic Bioscience

Starts in winter

Gain an understanding of the core disciplines involved in drug discovery and development in this evening program designed for life science professionals involved in drug design, development, manufacturing and sales. Topics include introduction to pharmaceuticals, molecular biology, experimental design, statistics, biochemistry, molecular genetics, drug discovery and translational science.

Biomedical Regulatory Affairs

Starts in autumn

In this evening program, you will develop a comprehensive overview of the knowledge and skills necessary to be an effective regulatory affairs and compliance specialist in the medical products industry. Such specialists oversee the design, development testing and production of drugs, biotechnology-derived therapeutics, or medical devices. For information about the Professional Master of Science Degree in Biomedical Regulatory Affairs, see page 4.

Biotech Project Management (ONLINE)

Starts in autumn

Master the unique project management challenges within the highly regulated biotech environment. This program covers managing various discoveries, development, testing and manufacturing processes. University of California-San Diego Extension and UW Extension have jointly developed this online program to meet the emerging needs of the biotech industry.

Clinical Trials

Starts in autumn

Understand the scientific, ethical, practical, regulatory and economic concepts critical to clinical trials in this evening program designed for those entering the field or currently working as clinical research coordinators or clinical research associates. Courses are taught by professionals and faculty active in clinical research for hospitals, companies and academic institutions. Guest speakers bring their knowledge and experience to the program, and provide networking opportunities for students.



Medical Engineering: Basic Medical Sciences

Starts in autumn

The first in a series of four medical engineering certificates that integrate a foundation in engineering with specific applications to the medical device industry, this program introduces the biological sciences that are the basis of medicine, healthcare and medical device development. Evening and weekend coursework includes a cell biology seminar and lab, a physiology seminar and lab and an anatomy seminar and lab. Program instructors are faculty members from the UW Department of Bioengineering, the UW School of Medicine, and professionals working in the field.

Medical Engineering: Biosensors and Biomaterials (ONLINE)

Starts in autumn

Gain an understanding of how biosensors and biomaterials are used and developed. Learn about basic medical chemistry concepts—including organic, inorganic and physical chemistry—and why they are important to biosensor and biomaterial development. The program is taught by UW Bioengineering and Chemical Engineering faculty with guidance from recognized professionals in the biomedical field.

Medical Engineering: Medical Devices and Commercialization

Starts in autumn

In this evening program, you will understand the process of designing and developing a new medical device, as well as how to take that device to market. Bridge the gap between research and development, manufacturing, and marketing/sales, with increased knowledge in human factors, intellectual property, regulatory affairs and commercialization strategies.

Medical Engineering: Medical Diagnostics

Starts in autumn

Learn about disease presentation and pathology identification for medical imaging diagnostics—including X-ray, computed tomography, ultrasound and magnetic resonance methods— and clinical diagnostics—including physical examination, chemical analysis, and microbiological analysis that complement medical imaging in disease diagnosis. Evening coursework also includes epidemiologic methods using quantitative and biomedical information. The program is taught by faculty from the UW Department of Radiology and School of Public Health and Community Medicine, and professionals in the biomedical field.

NEW Medical Imaging *Starts in autumn*

If you are responsible for the design, development, manufacturing or sales of medical imaging products, this certificate program is designed for you. Deepen your understanding of current imaging modalities and your awareness of the technological advances, market forces and trends influencing the medical imaging field today. Gain a high level of industry knowledge and the ability to problem solve and collaborate with medical imaging industry leaders and practitioners.



What's next?



Get all the details on the Web site.

WWW.EXTENSION.WASHINGTON.EDU

Learn more about our programs by visiting our Web site. Link to degree program sites, full certificate descriptions as well as dates, days, times and locations. To receive information about future programs, sign up to receive email updates.



Attend an information meeting.

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 at www.extension.washington.edu



Questions? Contact our staff.

206-685-8936 OR 1-888-469-6499
EXTNADVISING@EXTN.WASHINGTON.EDU



PROFESSIONAL DEVELOPMENT & CONTINUING EDUCATION

The University of Washington offers a broad range of programs to meet your professional development and continuing education needs. Visit our Web site to learn more about programs in the following subject areas.

WWW.EXTENSION.WASHINGTON.EDU

PROFESSIONAL DEVELOPMENT

Arts & Writing
Biotechnology & Biomedical
Building Construction, Design & Real Estate
Business
Computing & Information Technology
Education
Engineering
Health, Medicine & Social Work
Law & Regulation
Nonprofit & Public Sector

CONTINUING EDUCATION

Evening Degree
English Language Programs
Osher Lifelong Learning Institute
Open UW
UW in the High School
Summer Youth Programs
Travel Study Tours

UW Extension
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Seattle, WA 98195-9451

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