Imaging Science

The PhD in Imaging Science program at Washington University in St. Louis is *one of only two* such programs in the United States. This program offers an interdisciplinary curriculum that focuses on the technology of imaging with applications that range from cancer diagnosis to virtual reality.

What Is Imaging Science?

Imaging science is an interdisciplinary academic discipline that broadly addresses the design and optimization of imaging systems and the extraction of information from images. It builds on contributions from traditional fields such as biomedical engineering, electrical engineering and computer science as well as from physics, applied mathematics, biology and chemistry.

What Can You Do With an Advanced Degree in Imaging Science?

The high demand for personnel with training in imaging science is reflected in government policy and funding opportunities. Many academic, industrial and national laboratory positions exist for highly qualified candidates. Graduates of the program will be prepared for careers in academic research or in industries that require expertise in the quantitative principles of imaging.

Curriculum Focus

- Mathematical and computational principles of image formation
- Image analysis
- Image understanding
- Image quality assessment

This interdisciplinary program is unique in that it brings together expert faculty from the McKelvey School of Engineering and the School of Medicine to provide students with the freedom and flexibility to learn from leading imaging experts and to engage in impactful research.

History

Washington University has been a leader in the technology and advancement of imaging science for more than 125 years. During the 1920s, Washington University researchers were the first to use X-rays to view the gallbladder. During the 1970s, research by Michel Ter-Pogossian at the university's Mallinckrodt Institute of Radiology led to the development of the PET scanner.

Website:	https://engineering.wustl.edu/academics/programs/imaging-science/index.html