

Master of Science in Physics

INTRODUCTION

Medical physics, medical imaging, optics and materials are expanding fields of physics. Medical physicists are responsible for all aspects of quality assurance for radioactive isotopes and procedures used in both therapy and diagnosis in hospitals and regional cancer centers. Optical sensors are used for non-intrusive detection and characterization of chemicals.

The Physics Department offers three specializations in its professional MS program: Optics and Materials, Medical Physics, and Optics and Medical Imaging. The medical physics program is jointly offered by CSU and the Department of Radiation Oncology at the Cleveland Clinic Foundation.

CSU's Master of Science in Physics program is in the "strongest professional programs" category according to a 2005 American Institute of Physics (AIP) report. The criteria used by AIP include enrollment, graduates' employability, the availability of evening courses, and the presence of an active external advisory committee.

PROGRAM DESCRIPTION

The physics MS program is tailored to scientists and engineers working in the Greater Cleveland Area. All the courses are offered in the late afternoons and evenings.

RESEARCH

Areas of research in the Physics Department include light scattering theory and experiment, x-ray crystallography of proteins, electrical properties of materials used for space flight applications, nanotechnology, and statistical mechanics applied to disease detection. Students may carry out research projects in any of these areas.



DEGREE REQUIREMENTS

The physics MS degree is based on the completion of 32 or 33 credit hours of coursework in optics, materials, medical physics and imaging. It includes either the capstone research project or the medical physics practicum at the Cleveland Clinic Foundation.

For admission information contact:

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For program information contact:

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