

Photonics

Fitzpatrick Institute for Photonics • Graduate Certificate Program



2008-2009 OPTIONS

In recognition of the growing importance of photonics as an enabling multidisciplinary field, Duke University's world-class Fitzpatrick Institute for Photonics (FIP) and the Pratt School of Engineering provide Masters and Doctoral candidates with the following options in the study of photonics.

Earn a Photonics Certificate in conjunction with your Doctoral (PhD), Masters of Science (MS), or Master of Engineering Management (MEM) degree.

The Photonics Graduate Certificate enables students to broaden the scope of the typical disciplinary graduate student-training program. Students are encouraged to develop interdisciplinary and transferable sets of skills in their coursework and research activities.

Certificate requirements include:

- Four photonics courses from approved course listings, one of which must be a qualified "Introductory Survey Course"
- One research presentation for the Fitzpatrick Institute Student Groups
- Attend at least four FIP seminars per year
- *PhD candidates only:* dissertation committee must include one member of the FIP

Further information, including approved course listings and the application process, is available at www.fitzpatrick.duke.edu/; choose Education from the menu.

Concentrate on Photonics as part of your Master of Engineering Management degree.

Duke's MEM Program enables students to build upon their undergraduate degrees in engineering or science and develop marketable skills in business, technology management, or entrepreneurship. The program combines a core management curriculum with a masters level technical education, and candidates can focus on photonics courses to satisfy technical elective degree requirements, choosing from an interdisciplinary set of courses in various engineering disciplines as well as other departments such as physics.

Further information on MEM technical electives and concentrations is available at <http://memp.pratt.duke.edu/>; choose Interdisciplinary Courses and Curriculum from the menu.



"Photonics has been at the heart of the information technology revolution, and it can have similar impact in many critical areas such as medicine at the point-of-care, energy, national defense, and global health. Optical technology will lead to tools that can provide real time, non-invasive diagnostics and therapy. This could change the course of medicine in diagnosing early stages of disease because no tissue has to be removed and the diagnosis is made instantly."

- TUAN VO-DINH, PHD
Director of the Fitzpatrick Institute for Photonics
R. Eugene and Susie E. Goodson Professor of Biomedical Engineering
Professor of Chemistry

"The partnership between the Fitzpatrick Institute for Photonics and the Master of Engineering Management Program at Duke University offers students a unique opportunity to integrate a core management curriculum with state of the art coursework in photonics. This allows students to study photonics science and technology AND to understand how such technology is managed in the business world. It is a rare benefit to have a world-class program in photonics and engineering management within the same institution!"

- JEFFREY T. GLASS, PHD, MBA
Hogg Family Director of Engineering Management and Entrepreneurship
Professor of Electrical and Computer Engineering

"Photonics technology has the ability to change everything from communications to process control to patient care, and Duke's Fitzpatrick Institute is positioned to provide the kind of market facing innovations that will drive that change."

- BARRY S. MYERS, MD, PHD, MBA
Senior Associate Dean for Industrial Partnerships and Research Commercialization
Director of Center for Entrepreneurship and Research Commercialization
Professor of Biomedical Engineering

Visit: www.fitzpatrick.duke.edu and <http://memp.pratt.duke.edu>