

IMAGING AND PHOTOGRAPHIC TECHNOLOGY

<http://www.rit.edu/~andpph/ipt.html>

PROGRAM OVERVIEW FOR EMPLOYERS

Imaging and Photographic Technology is a unique program in photography which includes specialized education in technical, industrial, and scientific imaging applications. Graduates of this program are well-rounded individuals, with skills adaptable to a variety of photography and imaging-related fields. Their technical education is complemented by traditional coursework in mathematics, computers, science, and liberal arts including technical writing. The solid base of skills acquired by the graduates of this program prepares them for a variety of positions within the field of technical photography and imaging technology. They can also elect to specialize in a concentration area such as graphic arts, color technology, still photography, digital imaging and electronic photography, science, engineering and others. The co-op requirement enhances student knowledge acquired in the classroom and the laboratory.

Degree(s) Awarded

Bachelor of Science

Enrollment

Approximately 85 students are enrolled.

Cooperative Education Component

Students are required to complete at least two co-op work assignments.

Salary Information (Avg/Range):

Co-op:	\$12.61	\$7.00 - \$21.50
BS:	\$44,267	\$37,800 - \$48,000

Equipment & Facilities

Student have access to the following laboratories (not all inclusive):

- Photoinstrumentation
- Optics/Holography
- Color Measurement
- Chemistry (Emulsion)
- Electronic Still Photography
- Forensic Photography
- Imaging
- Traditional Studios/Darkrooms

Accreditation

The computer engineering program is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering & Technology (ABET). The program and its option are evaluated using the program criteria for Electrical, Computer and similarly named engineering programs.

Student Skills & Capabilities

At the completion of two years of study students are expected to possess skills in the following areas: black and white sensitometric evaluation methods, tone reproduction, micro-image evaluation, color photographic theory, light sources, photometry and color specification and measurement along with introductory concepts related to electronic imaging. Students should be able to operate cameras, be familiar with a variety of film types, characteristics and applications, know how to properly use reflected and incident light meters to determine exposure, know basic lighting schemes, produce quality printing of black and white and color materials, be proficient in print presentation and finishing operations. General knowledge of geometrical optics as applied to photographic systems, lens testing and evaluation procedures. Background in photographic chemistry, processing chemicals and their formulations. The student will have completed computing courses in C & C++ and software such as Director, Excel, HTML, IDL (scripting) and will be proficient in the use of computers as word processors as well as their application to problems in photographic technology.

At the completion of three years of study students are expected to possess fundamental knowledge in a number of areas, as well as entry level skills (12 credit hours) in their area of concentration. Color knowledge is acquired (light and quality, color contrast) as it pertains to photo materials. Coursework in graphics/multimedia is introduced, such as the use of photography in publication and Web publishing. Most students will have developed their own home page. Digital Imaging Processing Technology and Application of DIP equipment and procedures is understood. Students understand computer processing techniques of images to enhance/modify/use images. Additionally, knowledge of machine vision and virtual reality as it pertains to the interface of computers and images is acquired. Students will also possess basic theoretical and applied video production skills and fundamental skills in the preparation of websites and materials for the internet.

At the completion of four years of study students are expected to possess knowledge & skills in a number of photographic/imaging areas, as well as skills in their area of concentration (24 credit hours). Student will have completed two cooperative work experiences, each consisting of ten weeks of full-time employment. In their last year, students learn to operate high speed photographic and video cameras for qualitative as well as quantitative purposes, and understand fundamental theory and applications of a variety of digital image processing routines and procedures. They also receive instruction in theory and practice of UV and IR Imaging, 3D Photography, Holography, X-Ray, Non-silver and Electrophotography. Students will also have a completed an Intro to Research course and should have additional skills in management & quality control. At this level students should be able to function as a skilled laboratory assistant in most any photographically related endeavor, at the junior engineering level in a number of imaging related disciplines, as skilled research or technical associates or as photographic technologists or research associates in various industrial, scientific, or business enterprises.

Imaging and Photographic Technology

Course Sequence BS degree

First Year:

Photographic Technology I
Photography I
Materials & Processes of Photography
Intro to Programming
Program Design & Validation
Systems Design/Graphic Presentation
Introductory Calculus
Liberal Arts (Core)
Physical Education

Third Year:

Concentration Electives
Photographic Technology III
Color Photo/Design
Nature Photography or Architectural
Photography
Intro to Digital Image Processing
Electronic Sensitometry
Intro to Portable Video
Or Intro to Multimedia
Technical Writing
Liberal Arts
Cooperative Education (Summer)

Second Year:

Photographic Technology II
Photographic Sensitometry
Technical Photographic Chemistry
Photographic Optics
Color Photographic Systems
Color Printing Theory
Color Measurement
College Physics
College Physics Lab
Liberal Arts (Core)
Physical Education
Cooperative Education (Summer)

Fourth Year:

Concentration Electives
Photographic Technology IV
High-Speed/Time-Lapse
Introduction to Research
Survey of Nonconventional Imaging
Organizational Behavior
Business or Statistics Elective
Department Elective
Liberal Arts (Concentration/Elective)
Liberal Arts (Senior Seminar)

Employers of Imaging and Photographic Technology Co-op and Graduating Students:

Eastman Kodak Company, IBM, Konica, Los Alamos National Lab, MacBeth, Moore Graphic Services, NASA, Polaroid Corporation, RIT Research Corp, UR Lab for Laser Energetics, White Oak Research Lab, Xerox Corporation, X-Rite, Defense Info Agency, Fuji, Ilford Corporation, Iris Graphics, Leaf Systems, National Graphic, Popular Photography, Scitex, Sinar Bron

Contact Us:

We appreciate your interest in hiring RIT co-op, graduating students or alumni. We will make every effort to make your recruiting endeavor a success. Call our office and ask to speak with Lisa Vasaturo, the program coordinator who works with the Imaging and Photographic Technology program. For your convenience, you can access information and services through our web site at www.rit.edu/co-op/careers.

Lisa M. Vasaturo

Program Coordinator

Office of Cooperative Education and Career Services
RIT . Bausch & Lomb Center . 57 Lomb Memorial Drive . Rochester NY 14623-5603
716.475.5460
lmvoce@rit.edu