Optical Systems Technology A.A.S.

CLEARLY ONE OF THE FASTEST-GROWING CAREERS IN TODAY'S JOB MARKET. Optics are an essential part of the design and production of consumer electronics, lasers, eyeglasses, telescopes and cameras, to name just a few. As an optical systems technician, you'll work with engineers and scientists using high technology to inspect and test optical components and assembly systems. Optics skills open the door to fantastic opportunities with top Rochester and Fortune 500 companies.

PROGRAM DESCRIPTION
This program's curriculum combines the study of optics with electronics for careers in electro-optics/photonics or traditional optics. You'll have many opportunities to work with the same precision equipment and technology used in today's optics and photonics fields. MCC's Optical Systems Technology program is based on guidance from leading employers.

CURRICULUM OVERVIEW
Please note: Courses are subject to change. See an academic advisor for the most current curriculum requirements.

TRADITIONAL OPTICS OPTION
FIRST SEMESTER:
MTH 140 Technical Mathematics I
TEK 101 Computer Applications for Technicians
OPT 110 Intro to Optical Technology
OPT 131 Optical Elements and Ray Optics
OPT 135 Measurement and Analysis
ENGLISH ELECTIVE
PHYSICAL/HEALTH EDUCATION
SECOND SEMESTER
ENG 101 College Composition
MTH 141 Technical Mathematics II
PHY 131 Applied Physics I
OPT 151 Optical Instruments and Testing
OPT 153 Fiber Optics
THIRD SEMESTER
MTH 175 Precalculus Mathematics with Analytic Geometry
OPT 211 Wave Optics and Applications
OPT 213 Optical Processes
ELT 121 AC/DC Circuit Analysis
SOCIAL SCIENCE ELECTIVE
FOURTH SEMESTER
OPT 201 Photo Science
OPT 215 Electro-Optical Devices and Systems
OPT 231 Lasers: Technology and Applications
OPT 235 Advanced Optical Manufacturing
SOCIAL SCIENCE ELECTIVE
PHYSICAL/HEALTH EDUCATION
TOTAL CREDITS 70

ELECTRO-OPTICS OPTION
FIRST SEMESTER:
ELT 111 Electronic Technology I
ELT 121 AC/DC Circuit Analysis
MTH 140 Technical Mathematics I
TEK 101 Computer Applications for Technicians
OPT 131 Optical Elements and Ray Optics
ENG 101 College Composition
SECOND SEMESTER
ELT 102 Electric Circuit Analysis II
ELT 112 Electronic Technology II
MTH 141 Technical Mathematics II
ENGLISH ELECTIVE
OPT 153 Fiber Optics
THIRD SEMESTER
MTH 175 Precalculus Mathematics with Analytic Geometry
ELT 202 Pulse and Digital Circuits
OPT 135 Measurement and Analysis
OPT 211 Wave Optics and Applications
SOCIAL SCIENCE ELECTIVE
FOURTH SEMESTER
OPT 215 Electro-Optical Devices and Systems
SOCIAL SCIENCE ELECTIVE
PHY 131 Applied Physics I
ELT 206 Digital Systems and Microprocessors
PHYSICAL/HEALTH EDUCATION
TOTAL CREDITS 76

“When I get a resume from an MCC graduate, it goes to the top of the pile.”
–Jim Sydor
Sydor Optics
GET THE LATEST ON CAREERS IN OUR AREA, INCLUDING EMPLOYMENT PROJECTIONS, EARNINGS, AND JOB OPENINGS AT CAREERCOACH.MONROECC.EDU

Start your career with employers like these:

• Harris RF Communications
• JML Optical Industries
• Melles Griot
• OptiPro Systems, LLC
• QED Technologies
• Rochester Precision Optics
• Corning, Inc.
• Sydor Optics

Your job title could be:

• Optical Systems Laboratory Technician
• Laser Technician
• Test and Quality Technician
• Electro-Mechanical Technician
• Electronics Engineering Technician

Average starting salary: $35,500 per year.

A STRONG START—ACADEMICALLY AND FINANCIALLY!
MCC’s low tuition ($2,050 per semester) plus financial aid opportunities help make a high-quality education affordable. You could qualify for federal grants, workforce grants, scholarships, and more. Visit www.monroecc.edu/go/finaid or call 585.292.2050.

AMONG THE BEST COMMUNITY COLLEGES
MCC is part of the State University of New York (SUNY) and recognized as being among the 19 most innovative community colleges in the United States as a member of the League for Innovation in the Community College. The League’s members demonstrate educational leadership in academics, technology, workforce development, and administration.

FIND OUT MORE
To learn more about MCC, visit us on the web at www.monroecc.edu. Apply today at admissions.monroecc.edu or contact the Admissions Office at 585.292.2200 to schedule a visit.