

MEMS

ENGINEER



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<http://www.fusiongrant.org/educational.php>

Description:

A Micro-Electro Mechanical Systems engineer (MEMS) uses knowledge of microelectronics and micromechanics as well as biological, chemical, and physical phenomena to research, design, build, and test Microsystems that provide sensor and actuation solutions for many industries including:

- Food and Agriculture
- Biology and Medicine
- Telecommunications
- Automotive Engineering
- Defense and Security

Median Wage (as of 2005):

\$76,060

Level of Education:

A.A.S., B.S., M.S., Ph.D.

Job Outlook (through 2014):

9-17% increase in number of jobs

Examples of Colleges & Affiliated Programs:

Cornell University – Biological & Environmental Engineering; Centers for Nanoscale Engineering; Nanofabrication; Nano-Bioengineering; Chemical & Biomolecular Engineering; Electrical & Computer Engineering; Materials Science; Biological Science

University of Rochester – Mechanical Engineering; Electrical and Computer Engineering; Biomedical Center for Future Health

Rochester Institute of Technology (RIT) – Microsystems Engineering; Biotechnology; Biochemistry; Bioinformatics; Electrical Engineering Technology; Manufacturing Engineering Technology; Mechanical Engineering; Packaging Science; Materials Science and Engineering

Employers (NY):

College & Universities – Cornell University; New York State Agricultural Experiment Station; University of Rochester; Rochester Institute of Technology (RIT); Clarkson University

Private Sector – Infotonics Technology Center, Inc.; Xerox; Bell Telephone; Eastman Kodak, Inc.; Corning, Inc.; Sun Microsystems; CMC Microsystems; Texas Instruments; NetLogic Microsystems; Lockheed Martin; Northrop Grumman

High School/College Courses to Take:

Algebra, Geometry, Trigonometry and Calculus, Physics, Chemistry, Biology, Statistics, Oral & Written Communications

Electrical, Mechanical & Optical Engineering Courses

(Preferred but not required – English, Social Studies, and Humanities)



Cornell University