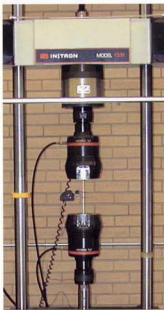


Mechanical Engineering and Manufacturing Engineering



ST. CLOUD STATE
UNIVERSITY
A tradition of excellence and opportunity



Manufacturing Engineering

Manufacturing Engineering is the science of converting raw materials with low value into products of high value to satisfy human needs. Manufacturing Engineers work in a number of areas including:

- Product Design
- Quality
- Production Management
- Process Design and Improvement
- Robotics
- Tool Design and Material Selection

A Manufacturing Engineer leads a team at the forefront of technology to develop usable, marketable products. With a strong science and mathematics background, a Manufacturing Engineer often is an innovator and creator of new manufacturing strategies, systems, and facilities.

The Bachelor of Science Degree in Manufacturing Engineering is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology. This program is the only such accredited program in Minnesota and one of only 16 in the United States.

What is Engineering?

Engineering is the profession in which knowledge of the mathematical and natural sciences gained by study, experience, and practice is applied with judgment to develop ways to use, economically, the materials and forces of nature for the benefit of mankind.



Career Preparation

Engineering involves the application of science, mathematics, and logic to practical problems. A strong aptitude in these areas is essential. Entering students should prepare for this challenge and have an understanding of high school algebra, trigonometry, pre-calculus, chemistry, and computer skills. Grades in these courses and the standardized tests such as PSAT, SAT, and ACT should be above average. Courses are available at SCSU for students whose high schools do not offer the course work. Here are some suggestions:

- Excel in your science and math courses
- Visit your guidance counselor or the engineering program for additional information
- Watch for special high school programs sponsored by the engineering departments at SCSU
- Participate in Math, Science, and Engineering related programs at your high school



Mechanical Engineering

Mechanical Engineers apply scientific and engineering principles to the design, manufacture, installation, and operation of engines, machines, systems, and manufacturing processes. Mechanical Engineering encompasses a large number of areas including:

- Mechanical Design
- Thermal Sciences
- Fluid Mechanics
- Control Systems
- Automation
- Numerical Modeling

Mechanical Engineers use this knowledge to design transportation systems, consumer goods, factory equipment, and automation. Products from hand tools to factories, from bicycles to spacecraft are made possible by Mechanical Engineers.

Why St. Cloud State University?

- Small class size
- State-of-the-art laboratories
- Individual attention
- Integration of theory and hands-on experiences
- Modern and multidisciplinary engineering curriculum
- Dedicated and experienced faculty
- Funded projects from industry
- Excellent job opportunities
- Preparation for graduate studies
- Low cost
- A small town community within an hour of the Twin Cities

Master of Science Program

St. Cloud State University also offers a Master of Science program in Mechanical Engineering. This program will allow graduates to increase their skills and expand their careers to the next level.

Evening classes are taught in a convenient off-campus location, with distance learning available. Courses are organized to allow fully-employed students to earn a degree. The program has options for a thesis or an all coursework curriculum.

The graduate faculty come from a wide variety of backgrounds, insuring students will have an advisor familiar with their area of interest.



For Further Information About This Program:

Mechanical and Manufacturing Engineering
St. Cloud State University
101 Engineering and Computing Center
720 Fourth Avenue South
St. Cloud, MN 56301-4498
Phone (320) 229-5654
Toll Free (888) 664-3277
Fax (320) 229-5653
<http://www.stcloudstate.edu/~mme>

For Admissions and University Information:

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