

Safety Engineer

What Do They Do?

Safety Engineers make sure workplaces are safe. They monitor the general work environment, inspect buildings and machines for hazards and safety violations, and recommend safety features in new processes and products. Safety Engineers evaluate plans for new equipment to assure that it is safe to operate and investigate accidents to determine the cause and how to keep them from happening again. Safety Engineers also design special safety clothing and safety devices to protect workers from injury when operating machines. They may educate workers through safety campaigns or classes.

Some Safety Engineers specialize in fire prevention. They analyze the design of buildings and the items in them to determine the best place to put fire extinguishers, sprinklers and emergency exits. Others specialize in product safety. They conduct research to make sure products are safe and recommend how a company can change its product design to make it safe.

What Do I Have To Do To Be One?

To work as a Safety Engineer, you must have a Bachelor's Degree in Industrial Engineering; Industrial Management or a related field. People who work in this occupation are curious and detail-oriented; have strong analytical skills; and are creative.

Some courses to take to prepare you for this occupation include: Chemistry, Computers, Communications, English, Math, and Science. You should also be able to present your ideas effectively both orally and in writing. You should be able to work within precise limits or standards of accuracy and rate information using standards that can be measured or checked.

How Much Do They Make?

Salaries of Safety Engineers usually depend on their education level, work experience, area of specialization and level of responsibility. The type, size and location of the employer also come into play.

Nationally, college graduates with a Bachelor's Degree in Industrial Engineering, which includes Safety Engineering, were offered average annual starting salaries of \$48,234 in 2001. Entry-level Safety Engineers earned average annual salaries of \$45,500, while salaries for top safety managers may exceed \$120,000 per year.

What Can I Expect From The Job Market?

Nationally, about 44,000 Health and Safety Engineers were employed in 2000. Employment of Safety Engineers is expected to increase about as fast as the average for all occupations through 2010.

There are about 8,075 Industrial Engineers (including Safety Engineers) employed in Michigan. About 10 percent are Safety Engineers. Most worked in urban areas for manufacturing companies. Many worked in heavy industries such as construction and utilities. Others worked for hotels, hospitals, colleges, consulting firms, and insurance companies.

Employment of Safety Engineers in Michigan is expected to increase about as fast as the average for all occupations through the year 2008. The demand for Safety Engineers in Michigan is depends on economic activity, particularly in the auto industry. However, the increased recognition of the importance of occupational health management and Safety Engineering in reducing costs and job related accidents will create employment opportunities for Safety Engineers.

For more details click here: [Safety Engineer Career Information](#)

Factoid

Safety engineers look for ways to prevent accidents in the workplace. They inspect buildings and machines for hazards and safety violations, investigate accidents and determine what caused them and educate workers on how to use safety equipment. Some safety engineers specialize in certain areas such as fire prevention or product safety.

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