



Maintenance, Installation, and Repair is a program of study in the **Manufacturing Career Cluster**. A Career Cluster is a grouping of occupations and broad industries based on commonalities. There are 16 Career Clusters.

Career clusters link what students learn in school with the knowledge and skills they need for success in college and careers. The Manufacturing Cluster prepares learners for careers in planning, managing, and performing the processing of materials into intermediate or final products.

There are six programs of study in this cluster:

- Health, Safety, and Environmental Assurance
- Logistics and Inventory Control
- Manufacturing Production Process Development
- Maintenance, Installation, and Repair
- Production
- Quality Assurance

Employment Outlook

An **Industrial Technician** is an example career in this program of study. Industrial technicians solve problems that involve using or maintaining machines. The job outlook for industrial technicians is excellent. Competition will cause plants to purchase, install, and maintain new production equipment. They will also want to find better and less costly ways to keep machinery operating at peak efficiency. These two factors will result in a need for more industrial technicians. Many employers seek to employ high school graduate who take CTE related courses and who have some field experience. Nationally, the salary range is from \$20,350 to \$53,940 (Occupational Outlook Handbook, 2008-2009).

Using this brochure

Inside you will find a suggested **program of study** that has lots of helpful information. The model is an example of the types of courses and extended learning experiences that are important for the **Maintenance, Installation, and Repair Program of Study**. Use this model to plan your course schedule, educational experiences, and career choices.

At the top of the model, you will find **career goals** with the corresponding **O*NET code**. The O*NET code is an official classification of jobs and can be used to locate career-related information. Your teacher, counselor, or media center should be able to help you locate further information.

The upper left side of the model highlights the **core courses and career-related electives** in high school that will help prepare you for your career goal. This model is based upon the Recommended High School Graduation Plan and can easily be adapted for the Distinguished Achievement High School Graduation Plan.

The upper right side of the model highlights examples of **extended learning experiences** that can enhance your knowledge and skills for your career goal. You will find examples of curricular activities, such as participation in Career and Technical Student Organizations like Texas TSA, career learning experiences, service learning activities, and extracurricular activities.

The lower left side of the model indicates **industry licensures/certifications** and **on-the-job training experiences** that are available, some can be completed while still in high school. This section also highlights the various levels of **postsecondary education** and examples of **career options** available to you once you have completed that level of education and training.

The lower right side of the model contains examples of **professional associations** available for manufacturing professionals. Many of these organizations allow preprofessional membership while enrolled in a postsecondary program. Most organizations have websites which can be easily located by entering the organization name in available search engines.

