



**Production** 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 example career is **Welders and Solderers**, who use heat to join pieces of metal. The number of jobs for welders and solderers is expected to grow at the slower than average rate through the year 2016, job prospects for qualified welders and solderers should be excellent. This is due to a shortage of trained and experienced welders and solderers, whose skills are not easily replaced by technology. Wages usually depend on the employer, area of the country, and the types of materials being joined. Welders and solderers can earn from \$22,570 to \$50,700 (Occupational Outlook Handbook, 2008-2009). In Texas the average salary is \$35,445 (Texas Workforce Commission, 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 **Production 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.

