

Newspaper in Education Presents

inquiziKidz

BROUGHT TO YOU BY MANATEE COUNTY'S MAGNET SCHOOLS & ADULT CAREER & TECHNICAL EDUCATION

To weld or not to weld?

Discover the Future

Careers

- Welder
- Welding Instructor
- Welding Supervisor
- Welding Technician
- Welding Engineers
- Certified Welding Inspector
- Welding Quality Control Supervisor
- Welders, Cutters, and Welding Machine Operators

Welding Certifications

- Certified Welding Inspector
- Certified Associate Welding Inspector
- Senior Certified Welding Inspector
- Renewal & Upgrade - CWI, CAWI & SCWI
- 9-Year Re-Certification
- Reciprocity - CWB
- Certified Welding Educator
- Radiographic Interpreter
- Certified Welding Supervisor
- Certified Welding Engineer
- Certified Robotic Arc Welding
- Accredited Test Facility
- Certified Welding Fabricator
- Certified Welder

Professional Organizations

- The American Welding Society

For more career information see your school counselor and get information on-line at:

<http://www.khake.com/page42.html>

OR

<http://www.princetonol.com/groups/iad/lessons/middle/careers.htm>

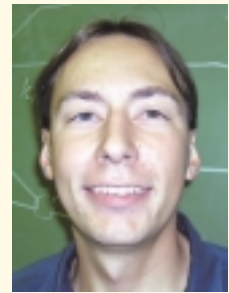
Kidzbiz

A Welding Race to the Finish

James Lewis is a highly motivated student who knows what he wants. Jim moved to Florida from Pennsylvania where he attended several classes in welding and motor sports technology. He immediately enrolled in the welding program at MTI. At MTI Jim is learning a wide variety of skills and knowledge preparing him for a career in welding. In the program he takes classes in reading blueprints and symbols; math and engineering; and OSHA safety and health standards. In addition to studying

math and engineering, every day Jim practices perfecting his welding skills. Welding engineering is a specialized skill and Jim takes pride in making a good weld and in the professional quality of his welding proficiency. He likes the program because it affords him the opportunity to practice welding full time, five days a week. As Jim says, "I like to work and weld."

Many career opportunities await Jim when he graduates. However, he has already decided, "no underwater or up in the sky welding for me. I am happy on the ground." When he graduates, Jim will seek a welding career working for a NASCAR team such as Richard Petty or Dale Earnhardt. NASCAR racing is a growing sport with an ever-increasing need for welders and fabricators. The MTI welding program will prepare Jim to achieve his career goals.



To Weld or Not to Weld

Welding is a course in the Manufacturing Technology Program offered at Manatee Technical Institute. The one-year (1170 hour) course includes specialized training in the selection and use of proper torch and filler rods; adjustment of gas pressure and flame; and the selection of proper electrodes and adjustment of voltage and current for welding different types of metals. To enter the program all students must pass the Test of Adult Basic Education. High school and adult students are enrolled in day and evening classes. The program, certified by the National Center for Construction Education and Research, follows educational standards established by the American Welders Society.

Welding, a cost-effective way to join metals for structural integrity, can be seen in many everyday objects we use and places we visit such as the ships we sail, bridges we travel, cars we drive, and buildings in which

we live and work. Welding is an integral part of many businesses such as the aerospace and automotive industries. Skilled welders provided the basic framework in the construction the natural gas pipeline in the Gulf of Mexico and the Parrish Power Plant. Underwater welding is specific type of welding requiring unique skills. The US Navy has a specialized, nationally recognized underwater welding program. Graduates from MTI are well prepared to enroll in this program.

Welding is here to stay and its future is strong in the 21st century. There is an increased demand for expert welders in Florida. Students who graduate from the MTI welding program are prepared to enter careers in the manufacturing, construction, petrochemical/energy, aerospace and automotive industries. The market for welders is strong and will continue to provide opportunities for growth in the profession especially in the booming construction industry in southwest Florida.



explore it

The Importance of Welding

Spend a day observing all the items you see or use that have been welded such as your car, a bridge you traveled, a chair you sat in, or a high rise under construction. Make a list of all the items that utilized welding in their construction. Visit MTI Welding Program. Ask the following questions.

1. What is involved in the welding process?
2. What are the different types of welding? Ask about the differences between electric, gas and forge welding?
3. What are the career opportunities for welders in Southwest Florida?

Revisit your list of everyday welded items? What would the world look like without all the items you identified? Which types of welding processes (electric, gas and forge) were used to weld the items on your list? After you revisit your list, test your welding vocabulary skills.

Match the Welding Process with their Letter Designations

Electric Welding	
Shielded metal arc welding	AAW
Metal inert gas welding	RW
Tungsten inert gas welding	OAW
Gas Welding	
Pressure gas welding	MIG
Oxyhydrogen welding	DW
Oxyacetylene welding	HW
Air-acetylene welding	DIG
Forge Welding	
Roll welding	SMAW
Die welding	PTW
Hammer welding	OHW

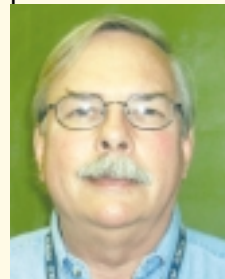


Answers: Electric Welding: Shielded metal arc welding, Metal inert gas welding, Tungsten inert gas welding; Gas Welding: Pressure gas welding, Oxyhydrogen welding, Oxyacetylene welding, Air-acetylene welding; Forge Welding: Roll welding, Die welding, Hammer welding.

School biz

Award Winning Welding

Instructor Alan Angel teaches welding and collaborates with local industry including Tropicana and Pierce Manufacturing. For Alan, "MTI produces more than just welders. We trained skilled professionals to read blueprints; exhibit quality craftsmanship and work ethics; and are prepared to become lead welders, foreman and supervisors at their site." Students progress through the program



mastering Basic, Advanced, and Expert Levels of welding proficiency. In addition to the academic skills of reading and math, learning OSHA safety standards are an integral component of the program. Students also learn basic engineering skills such as reading and interpreting drawings, blueprints, and welding symbols. Students enrolled in the high school program study academics at their districted high school and learn welding skills at MTI. After graduating, students can return and complete their program graduating as highly skilled welders.

The MTI program is exemplary winning many national, regional and state SkillsUSA awards in both the high school and adult competitions. Last year MTI welding students placed 3rd in a national event replicating the Skyway Bridge in stainless steel.

InquiziKidz page is published every Wednesday in The Herald.

Provided by Newspaper in Education, Kristin Lamphron, Education Manager (941) 748-0411 ext. 5031, Julie Beacham-Hooie, Ad Designer and © Knight-Ridder Productions, inc.

- Ballard Elementary Magnet
- Daughtrey Preparatory Magnet
- Harllee Middle Magnet
- Johnson Middle Magnet
- Lee Middle Magnet



- Lincoln Middle Magnet
- Manatee Elementary Magnet
- Rowlett Elementary Magnet
- Tillman Elementary Magnet
- Wakeland Elementary Magnet



- www.ewi.org
- www.aws.org
- www.aws.org/wj
- www.welding.org
- www.skillsusa.org
- www.weldinginfocenter.org
- HERALDTODAY.COM