Exploring Careers in Manufacturing Online Course

Exploring Careers in Manufacturing is a self-paced course that will introduce you to the many different career opportunities in manufacturing. It will also help you decide if a career in manufacturing is right for you, and what skills, education or training you might need to get started. Topics covered include the manufacturing process, what it’s like to work in manufacturing, different career paths, skills used in the manufacturing environments, and the various education and training opportunities available.

The course is a self-paced discovery experience and works best if followed in a sequential order. It provides a variety of learning modes, from assessments and simulations, videos, and reading. Content is both built within the site as well as linked to many informative sites found on the internet. It takes a total of 10 to 14 hours to complete, depending on your pace.

Course Objective

Upon completion of this course the student should:

Have a better understanding of today’s manufacturing environments.  
Possess a more complete idea as to the types of skills needed for a manufacturing career.  
Have a good idea as to whether a manufacturing career would be a good “fit”.  
Have a good knowledge of the training/education needed to pursue a manufacturing career path.

Course Topics

I. Module 1 – An Overview of Manufacturing
   A. Introduction
   B. Manufacturing Industries in the United States
   C. Manufacturing Career Areas - Overview
   D. The Manufacturing Skills Gap
   E. What is Advanced Manufacturing
   F. Manufacturing in Northeast Ohio and Lake County
   G. Module 1 - Quiz
   H. Module 1 Review
II. Module 2 – The Manufacturing Process
   A. Introduction
   B. Basic Manufacturing Processes
   C. Additional Steps and Definitions
   D. Typical Process - Precision Metal Parts Manufacturing
   E. Machining Overview
   F. Computer Numerical Control
   G. Processes in Non-Metals Related Manufacturing
   H. Module 2 - Assessment
   I. Module 2 Review

III. Module 3 – Career Assessment
   A. Introduction
   B. Basic Skills Needed in Manufacturing Jobs
   C. Activities/Abilities Inventory
   D. Interest Profiler
   E. Post-Assessment Review
   F. Module Review

IV. Module 4 - What It’s Like To Work In Manufacturing
   A. Introduction
   B. A Quick Look at Mis-Perceptions
   C. A Day in the Work Life
   D. Work Place Differences Between Industries
   E. Module 4 - Assessment
   F. Module 4 Review
V. Module 5 - Career Pathways in Manufacturing
   A. Introduction
   B. The Benefits of Manufacturing Jobs
   C. Entry Points: How and Where to Begin
   D. Examples of Entry Level Positions
   E. Different Types of Careers in Manufacturing
   F. Non-Technical Careers in Manufacturing
   G. Module 5 - Assessment
   H. Module 5 – Review

VI. Module 6 - Soft Skills
   A. What are soft skills?
   B. Importance of soft skills
   C. Unit Activity 1 - watch and read
   D. Unit Activity 2: Job Description
   E. Unit Activity 2: Job Description - Answers
   F. Unit Activity 3: Soft Skill Strengths and Weaknesses Quiz
   G. Unit Activity 4: Watch and read
   H. Knowledge Check
   I. Module 6 – Review

VII. Module 7 – Math and Measuring Skills
     A. Introduction
     B. The Emphasis on Math Skills in Manufacturing
     C. Quiz: Go Figure
     D. You might need some math review
     E. You've got Skills!
     F. Improving Your Math Skills
     G. Measurements and Measuring Tools
     H. Common Measuring Tools
     I. Identifying Measurement Tools
     J. Module 7 – Review
Course Evaluation -

There is no final grade for the course. However, if you wish to be considered for an AWT Scholarship at Lakeland Community College, you will need to complete the “quiz assignments” and other exercises in each module which will be submitted online. Once you have completed the online portion, you will schedule a visit with the course instructor. At that time, we will review your “assignments” with you with the goal of assessing your interest in a manufacturing career.

The Evaluation Process:
Student completes all modules and all parts of the module, which is demonstrated by their knowledge, review of materials and assessments, and time spent in each module.

The conclusions the student formed about their self-discovery and self-evaluation concerning their interest and “fit” as related toward a career in manufacturing, and shared during the Campus Visit.

Assistance Process:

After the Evaluation Process:

- The Course Instructor will determine the student’s eligibility for the AWT Scholarship, assist with the development of the student’s “next step” action plan, and/or assist the student in the process of enrolling into Lakeland Community College, or help refer elsewhere for other training opportunities. As an option, a site visit with a Lake County manufacturer can be arranged for a “real life” exposure to a manufacturing environment.

Course Policies

Although you may move back and forth through the material, for the best experience from the course, try to complete it in a sequential manner at a steady pace. It is recommended that, once started, to try and finish within a two a week period. You can always go back and review a module or even a section of a module.

To be considered for eligibility for the AWT Scholarship, you must complete all the modules, and the material within each module, including the Module 10 - Campus Visit.

Throughout the course, if you have questions concerning the course, please contact:

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or Randy Jeffries, 440.525.7453