

MODULE CON2190: MANUFACTURING SYSTEMS

Level:	Intermediate
Theme:	Manufacturing Systems (Processes and Applications)
Prerequisite:	None
Module Description:	Students investigate the nature of manufacturing systems used to produce durable goods.

Module Parameters: Access to in-school and community resources related to manufacturing.

Supporting Module: CON1010 Basic Tools & Materials

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
<p><i>The student will:</i></p> <ul style="list-style-type: none"> describe current production systems used to manufacture durable goods identify the lines of communication and decision making in a typical production system explain how the production of durable goods is being altered by the effects of technology and the global economy demonstrate basic competencies. 	<p><i>Assessment of student achievement should be based on:</i></p> <ul style="list-style-type: none"> the analysis of two systems of production currently in use and the presentation of a report that emphasizes the: <ul style="list-style-type: none"> advantages and disadvantages of each system lines of communication and decision making processes typical to each system how these systems are being altered to meet the needs of and competition in a global economy. <p><i>Assessment Tool</i> <i>Assessment Framework: Presentations/Reports, CONPRE</i></p> <p><i>Standard</i> <i>Performance rating of 2 for each applicable task</i></p> <ul style="list-style-type: none"> observations of individual effort and interpersonal interaction during the learning process. <p><i>Assessment Tool</i> <i>Basic Competencies Reference Guide and any assessment tools noted above</i></p>	<p>100</p> <p>Integrated throughout</p>

MODULE CON2190: MANUFACTURING SYSTEMS (continued)

Concept	Specific Learner Expectations	Notes
<p>Orientation</p> <ul style="list-style-type: none"> • History of Manufacturing • Economic Advantages • Organization 	<p><i>The student should:</i></p> <ul style="list-style-type: none"> • describe the development of modern manufacturing from its early routes in the domestic, cottage and factory systems • explain the advantages and disadvantages of a strong manufacturing base in a community • describe the operations of a typical manufacturing system's input requirements, types of processes and outputs as well as its feedback mechanisms • show how a typical manufacturer is able to: <ul style="list-style-type: none"> – increase productivity – provide for choice – reduce skill level requirements – reduce costs per unit produced • describe how computer-assisted manufacturing, just-in-time and total quality management systems increase: <ul style="list-style-type: none"> – productivity – quality – profitability • research a manufacturing company and describe its: <ul style="list-style-type: none"> – organizational structure – methods of decision making – methods of financing – training practices – research and development – marketing practices • explain why manufacturers are interested in locating near: <ul style="list-style-type: none"> – skilled population bases – resources – markets 	<p>This module is investigative in nature. Students should be encouraged to visit local manufacturers to obtain much of their information base.</p> <p>If possible, have students arrange an interview with a local manufacturer.</p>

MODULE CON2190: MANUFACTURING SYSTEMS (continued)

Concept	Specific Learner Expectations	Notes
<ul style="list-style-type: none">• Global Impact	<p><i>The student should:</i></p> <ul style="list-style-type: none">• describe the place organized labour has in manufacturing• explain how manufacturing is being altered by our global economy and the use of technology.	

