**MAN 4523 Production Information Systems**

**Course Description:**
This course presents the fundamental aspects of computer technology required by the systems that provide data to, and derive information from, production in manufacturing. Students will learn the techniques to organize, store, manipulate data, report, derive and analyze production information, basics networking used in production, as well as various forms of information systems.

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<tr>
<th>Course Competency</th>
<th>Learning Outcomes</th>
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<td><strong>Competency 1:</strong> The student will be able to understand the general principles of Production Information Systems by:</td>
<td>- Numbers / Data&lt;br&gt;- Critical thinking&lt;br&gt;- Information Literacy&lt;br&gt;- Cultural / Global Perspective</td>
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<tr>
<td>1. Defining Production Information Systems.</td>
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<td>2. Illustrating how Production Information Systems is an integral part of the management of production systems.</td>
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<td>3. Illustrating the fundamental aspects of production.</td>
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<td>4. Examining the basic theories, concepts, methods, and terminology used in Production Information Systems.</td>
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<td><strong>Competency 2:</strong> The student will demonstrate the underlying technologies that enable Production Information Systems by:</td>
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<td>1. Illustrating the various modes of telecommunications.</td>
<td>- Communication&lt;br&gt;- Numbers / Data&lt;br&gt;- Critical thinking&lt;br&gt;- Information Literacy&lt;br&gt;- Cultural / Global Perspective</td>
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<td>2. Assessing current network infrastructures used in industry.</td>
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<td>3. Depicting the various means by which data is sent to, and information is gathered from production information systems using the underlying networking technologies.</td>
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<td>4. Discussing how production systems communicate within their systems and to external monitoring/data gathering systems.</td>
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### Competency 3:
The student will demonstrate how Production Information Systems are developed by:

- Communication
- Numbers / Data
- Critical thinking
- Information Literacy
- Cultural / Global Perspective

1. Defining an algorithm and describing the phases of systems analysis and design.
2. Constructing a set of statements to be acted out to accomplish a simple task.
3. Describing and analyzing a sequence of instructions.
4. Performing the basic steps in algorithmic problem solving.
5. Creating each phase of the systems analysis and design methodology using the applicable automation tool.
6. Designing a basic production information system via a model.

### Competency 4:
The student will develop a desktop database application by:

- Communication
- Numbers / Data
- Critical thinking
- Information Literacy
- Cultural / Global Perspective

2. Defining Data Types that define the data being stored.
3. Creating Tables in design view.
4. Adding and deleting records in a table.
5. Creating and modifying a Form.