



Process Engineering Technology - Academic Planner

Industrial/Manufacturing Emphasis or Quality Assurance Emphasis

Associate of Applied Science Degree: 10-623-8

Campus: Fond du Lac, some courses available at the West Bend campus

Curriculum for 2015-2016

12/1/2014

Program Advisor: _____

| ✓ | T/G | Course | | Title | Hours / Week | | | Total | | Prerequisites and/or Corequisites | Typically Offered | | | Comments |
|--|-----|-------------------------------|-----|--|--------------|-----|-------|-------|---------|---|-------------------|---|----|---|
| | | Subj | Num | | Lec | Lab | Other | Hours | Credits | | S | F | SP | |
| Term 1: | | | | | | | | | | | | | | |
| New Program Students: Attend New Student Orientation and Your Priority Registration Session | | | | | | | | | | | | | | |
| | | 103 | 159 | **Computer Literacy - Microsoft Office | | 2 | | 36 | 1 | | x | x | x | **Institutional Requirement. May be eligible for Advanced Standing. |
| | T | 606 | 176 | CAD 2-D, AutoCAD | 2 | 2 | | 72 | 3 | | | x | x | No previous computer experience is required, but a background in fundamental blueprint reading and/or drafting skills is recommended. Previous drafting experience or course and previous work on computers (Microsoft products such as Word, Excel, etc.) is recommended |
| | T | 617 | 114 | CAD 3-D, SolidWorks | 2 | 2 | | 72 | 3 | | x | x | x | |
| | T | 623 | 162 | Manufacturing Processes | 2 | 2 | | 72 | 3 | | | x | x | |
| | G | 801 | 136 | English Composition 1 | 3 | | | 54 | 3 | | x | x | x | |
| | G | 804 | 113 | College Technical Mathematics 1A | 3 | | | 54 | 3 | | x | x | x | |
| | | 890 | 101 | **College 101 | 2 | | | 36 | 2 | | x | x | x | **Institutional Requirement |
| | | Total 1st Term Credits | | | | | | | | 18 | | | | |
| Term 2: | | | | | | | | | | | | | | |
| | T | 617 | 115 | Jig and Fixture Design | 1 | 4 | | 90 | 3 | Completion of or concurrent enrollment in 617-114 CAD 3-D, SolidWorks | | | x | |
| | T | 623 | 190 | Basic Metrology | 2 | 2 | | 72 | 3 | | | | x | |
| | T | 628 | 136 | Statistical Process Control | 2 | 2 | | 72 | 3 | 103-159 Computer Literacy - Microsoft Office; 890-101 College 101 | | | x | Recommended completion of 804-113 College Technical Mathematics 1A or proficient in performing mathematical computations prior to taking this course |
| | G | 801 | 196 | Oral and Interpersonal Communication (or) | 3 | | | 54 | 3 | | x | x | x | |
| | G | 801 | 197 | Technical Reporting | | | | | | 801-136 English Composition 1 | | x | x | |
| | G | 804 | 114 | College Technical Mathematics 1B | 2 | | | 36 | 2 | 804-113 College Technical Mathematics 1A | x | x | x | |
| | G | 809 | 166 | Introduction to Ethics: Theory and Application | 3 | | | 54 | 3 | 801-136 English Composition 1 | x | x | x | |
| | | Total 2nd Term Credits | | | | | | | | 17 | | | | |

| ✓ | T/G | Course | | Title | Hours / Week | | | Total Hours | Credits | Prerequisites and/or Corequisites | Typically Offered | | | Comments |
|-------------------------------|-----|--------|-----|--|--------------|-----|-------|-------------|---------|---|-------------------|---|----|--|
| | | Subj | Num | | Lec | Lab | Other | | | | S | F | SP | |
| Term 3: | | | | | | | | | | | S | F | SP | |
| | T | 623 | 118 | Gage Calibration, Repeatability and Reproducibility (or) | 2 | 2 | | 72 | 3 | 623-190 Basic Metrology; 628-136 Statistical Process Control | | x | | |
| | T | 628 | 122 | Basic CNC Programming and Operation | | | | | | 103-159 Computer Literacy - Microsoft Office; Completion of or concurrent enrollment in 623-162 Manufacturing Processes or dean consent | | x | | |
| | T | 623 | 151 | Lean Manufacturing | 2 | 2 | | 72 | 3 | 623-162 Manufacturing Processes or dean consent | | x | | |
| | T | 623 | 170 | Process Planning | 1 | 2 | | 54 | 2 | 623-162 Manufacturing Processes | | x | | |
| | T | 623 | 196 | Geometric Dimensioning and Tolerancing | 2 | 2 | | 72 | 3 | 804-113 College Technical Mathematics 1A | | x | | A print reading background is recommended. |
| | T | 628 | 110 | Integrated Manufacturing Planning - Process Engineering Technology | | 4 | | 72 | 2 | 623-162 Manufacturing Processes | | x | | |
| | G | 806 | 137 | Comprehensive Technical Physics | 3 | 2 | | 90 | 4 | 804-114 College Technical Mathematics 1B | | x | x | |
| Total 3rd Term Credits | | | | | | | | 17 | | | | | | |

| | | | | | | | | | | | | | | |
|--|---|-----|-----|---|---|---|--|-----------|---|--|---|---|----|--|
| Term 4: Industrial/Manufacturing Emphasis | | | | | | | | | | | S | F | SP | |
| Apply for Graduation when completing Term 4 registration. | | | | | | | | | | | | | | |
| | T | 628 | 111 | Integrated Manufacturing Production - Process Engineering Technology* | | 4 | | 72 | 2 | 628-110 Integrated Manufacturing Planning - Process Engineering Technology | | | x | |
| | T | 628 | 132 | Advanced CNC Programming and Operation | 2 | 2 | | 72 | 3 | | | x | | It is recommended students have taken 628-122 Basic CNC Programming and Operation or have industry experience in programming and setup of CNC machines using G-code programming, or dean consent |
| | T | 628 | 133 | Robotics and Automated Material Handling | 2 | 2 | | 72 | 3 | | | x | | Recommended completion of 628-122 Basic CNC Programming and Operation, or background in working with automated equipment |
| | T | 628 | 142 | Computer-Aided Manufacturing | 2 | 2 | | 72 | 3 | 628-122 Basic CNC Programming and Operation; 606-176 CAD 2-D, AutoCAD or dean consent | | | x | |
| | G | 809 | 195 | Economics | 3 | | | 54 | 3 | 801-136 English Composition 1 | x | x | x | |
| | G | 809 | 198 | Introduction to Psychology (or) | 3 | | | 54 | 3 | | x | x | x | |
| | G | 809 | 199 | Psychology of Human Relations | | | | | | | x | x | x | |
| Total 4th Term Credits | | | | | | | | 17 | | | | | | |

| | | | | | | | | | | | | | | |
|--|---|-----|-----|--|---|---|--|-----------|---|--|---|---|----|---|
| OR Term 4: Quality Assurance Emphasis | | | | | | | | | | | S | F | SP | |
| Apply for Graduation when completing Term 4 registration. | | | | | | | | | | | | | | |
| | T | 623 | 106 | Quality Tools | 2 | 2 | | 72 | 3 | | | | x | |
| | T | 623 | 134 | Basic CMM Programming and Operation | 1 | 4 | | 90 | 3 | | | | x | It is recommended that students have a background in print reading. |
| | T | 623 | 167 | ISO 9001 and Auditing | 2 | 2 | | 72 | 3 | | | | x | |
| | T | 628 | 111 | Integrated Manufacturing Production - Process Engineering Technology * | | 4 | | 72 | 2 | 628-110 Integrated Manufacturing Planning - Process Engineering Technology | | | x | |
| | G | 809 | 195 | Economics | 3 | | | 54 | 3 | 801-136 English Composition 1 | x | x | x | |
| | G | 809 | 198 | Introduction to Psychology (or) | 3 | | | 54 | 3 | | x | x | x | |
| | G | 809 | 199 | Psychology of Human Relations | | | | | | | x | x | x | |
| Total 4th Term Credits | | | | | | | | 17 | | | | | | |
| Additional Credits of Electives Required | | | | | | | | | | | | | | 3 |
| Total Program Credits and Institutional Requirements | | | | | | | | 72 | | | | | | |

****The credits for 103-159 Computer Literacy-Microsoft Office and 890-101 College 101 are Institutional Requirements for graduation. Consequently, they are not part of the program credit requirements.**

***Completion of SME Certified Manufacturing Technologist Practice Exam is a graduation requirement for the program.**

T/G: T - Technical Studies course; G - General Studies course
Semester Codes: S-Summer; F-Fall; SP-Spring
Curriculum and program acceptance requirements are subject to change.
If Student Success Center or General College courses (ie: 831-103 Introduction to College Writing, 838-105 Introduction to Reading and Study Skills, 834-109 Pre-Algebra) are required based on college placement; or if the student elects part-time enrollment, the time required to complete the program will increase.
For a complete list of course descriptions for this program, please consult the College Catalog at <http://www.morainepark.edu/MPTCCatalog>.

Suggested Elective: _____
Suggested Elective: _____