

AUTOMATION TECHNOLOGY PROGRAM

ASSOCIATES DEGREE IN AUTOMATION TECHNOLOGY

Curriculum

The matrix below is a sample plan for all coursework required for this program.

Fall and Spring

| Course Number and Name | Credits |
|--|-----------|
| AT 1103 PROGRAMMING I | 3 |
| AT 1123 SEMICONDUCTORS I | 3 |
| AT 1113 | 3 |
| AT 1163 FUND ELECTRICITY I (DC CRCTS) | 3 |
| AT 1173 FUND ELECTRICITY II (AC CRCTS) | 3 |
| TMAT 1203 Technical Mathematics | 3 |
| Total Hours | 18 |

Fall

| Course Number and Name | Credits |
|---------------------------------------|-----------|
| AT 1143 INTRODUCTION TO DIGITAL LOGIC | 3 |
| AT 2223 | 3 |
| AT 1133 | 3 |
| AT 2203 COMPUTER SYSTEM COMPONENTS | 3 |
| AT 2213 SEMICONDUCTORS II | 3 |
| ENGL 1013 | 3 |
| Total Hours | 18 |

Spring

| Course Number and Name | Credits |
|--|-----------|
| AT 2123 INDUSTRIAL FLUID POWER | 3 |
| AT 2133 INTRO TO PROGRAMMABLE CONTROLS | 3 |
| AT 2143 PROGRAMMABLE CONTROLLERS | 3 |
| AT 2153 INTRO TO INDUSTRIAL AUTOMATION | 3 |
| AT 2163 INDUSTRIAL AUTOMATION | 3 |
| Total Hours | 15 |

Fall and Spring

| Course Number and Name | Credits |
|--|---------|
| Any Approved Social Science ¹ | 3 |

| Course Number and Name | Credits |
|---|----------|
| BST 1303 Introduction to Computers or CIS 1113 Fundamental Computer Operation | 3 |
| ENGL 1023 | 3 |
| Total Hours | 9 |

(Concurrent students who earn a Certificate of Proficiency in Machining Concepts and Operations and a Certificate of Proficiency in Machining Operations Milling and Turning may progress to earn a Technical Certificate in Industrial Electronic Technology then an Associate of Applied Science degree by completing the remaining required courses below. Students pursuing the machining operations path will actually earn 62 hours.)

Certificate of Proficiency in Machining Concepts and Operations

| Course Number and Name | Credits |
|--|----------|
| AT 2513 BLUEPRINTS/MEASUREMENTS/SAFETY | 3 |
| AT 2523 MACHINING TECHNOLOGY | 3 |
| Total Hours | 6 |

Certificate of Proficiency in Machining Operations Milling and Turning

| Course Number and Name | Credits |
|------------------------|----------|
| AT 2514 CNC MILLING | 4 |
| AT 2424 | 4 |
| Total Hours | 8 |

Fall

| Course Number and Name | Credits |
|--|-----------|
| ENGL 1013 | 3 |
| AT 2123 INDUSTRIAL FLUID POWER | 3 |
| AT 1163 FUND ELECTRICITY I (DC CRCTS) | 3 |
| AT 1173 FUND ELECTRICITY II (AC CRCTS) | 3 |
| TMAT 1203 Technical Mathematics | 3 |
| Total Hours | 15 |

Spring

| Course Number and Name | Credits |
|---|---------|
| AT 1123 SEMICONDUCTORS I | 3 |
| AT 1143 INTRODUCTION TO DIGITAL LOGIC | 3 |
| ENGL 1023 | 3 |
| BST 1303 Introduction to Computers or CIS 1113 Fundamental Computer Operation | 3 |
| Approved Social Science | 3 |

| Course Number and Name | Credits |
|------------------------|-----------|
| Total Hours | 15 |

Fall

| Course Number and Name | Credits |
|--|-----------|
| AT 2133 INTRO TO PROGRAMMABLE CONTROLS | 3 |
| AT 2143 PROGRAMMABLE CONTROLLERS | 3 |
| AT 2153 INTRO TO INDUSTRIAL AUTOMATION | 3 |
| AT 2163 INDUSTRIAL AUTOMATION | 3 |
| AT 2213 SEMICONDUCTORS II | 3 |
| Total Hours | 15 |