



## **Career Pathways:**

- Diversified Manufacturing Technology - Certificate
- Advanced Manufacturing Design Technology (AMDT) – Diploma
- Advanced Manufacturing Design Technology (AMDT) – AAS Degree
- Manufacturing Drafting & Design Specialization (DSGN) – AAS Degree
- Welding Technology (WELD) - AAS Degree

[http://catalog.cccneb.edu/preview\\_program.php?catoid=29&poid=8623&returnto=2430](http://catalog.cccneb.edu/preview_program.php?catoid=29&poid=8623&returnto=2430)

## **Diversified Manufacturing Technology - Certificate**

AMDT 1100	Introduction to Industrial Safety
AMDT 1110	Introduction to Quality & Continuous Improvement
AMDT 1120	Introduction to Manufacturing Technology
AMDT 1130	Introduction to Maintenance Technology



## **Advanced Manufacturing Design Technology (AMDT) - Diploma**

### **SEMESTER 1**

AMDT 1100	Introduction to Industrial Safety
AMDT 1110	Introduction to Quality & Continuous Improvement
AMDT 1120	Introduction to Manufacturing Technology
AMDT 1130	Introduction to Maintenance Technology
MATH 1080	Technical Math (or Greater)

### **SEMESTER 2**

AMDT 1010	Safety & Machine Tool Fundamentals
DSGN 1050	Blueprint Reading for Industry
INDT 1180	Fundamentals of Mechanical Systems
QUCT 1710	Tools & Gauging
GEN ED	Elective from Group C, D or E
ENGL 1000	Applied Writing



## **Advanced Manufacturing Design Technology (AMDT) - AAS Degree**

### **SEMESTER 1**

AMDT 1100	Introduction to Industrial Safety
AMDT 1110	Introduction to Quality & Continuous Improvement
AMDT 1120	Introduction to Manufacturing Technology
AMDT 1130	Introduction to Maintenance Technology
MATH 1080	Technical Math (or Greater)

### **SEMESTER 2**

AMDT 1010	Safety & Machine Tool Fundamentals
AMDT 1020	Manual Lathe
AMDT 1040	Manual Mill
DSGN 1050	Blueprint Reading for Industry
GEN ED	Elective from Group C, D or E
ENGL 1000	Applied Writing

### **SEMESTER 3**

AMDT 1060	Heat Treating & Metallurgy/Grinding
AMDT 1200	CNC Lathe Operations
AMDT 1220	CNC Mill Operations
AMDT 1240	CAD/CAM Operations
GEN ED	Elective from Group A, B, C, D or E

### **SEMESTER 4**

GEN ED	Elective from Group A, B, C, D or E
#1 - Choose a Certificate from the list below & complete the required courses	

	<u>Credits Req'd/Cert.</u>
Production Welding Certificate (WELD)	12
Quality Inspection Certificate (QUCT)	12
Fluid Power Certificate (INDT)	14
Industrial Technology (INDT)	14
Drafting & Design Technology Certificate (DSGN)	12



## **Manufacturing Drafting & Design Specialization (DSGN) – AAS Degree**

### **SEMESTER 1**

AMDT 1100	Introduction to Industrial Safety
AMDT 1110	Introduction to Quality & Continuous Improvement
AMDT 1120	Introduction to Manufacturing Technology
AMDT 1130	Introduction to Maintenance Technology
MATH 1080	Technical Math (or Greater)

### **SEMESTER 2**

DSGN 1010	Fundamentals of Design
DSGN 1020	CAD Fundamentals
DSGN 1030	Manufacturing Processes & Safety
DSGN 1050	Blueprint Reading for Industry (or Welding)
GEN ED	Elective from Group C, D or E
ENGL 1000	Applied Writing

### **SEMESTER 3**

DSGN 1400	Manufacturing Design Documentation
DSGN 1430	Parametric Design: SolidWorks
DSGN 1450	Parametric Design: Inventor
DSGN 2460	Gears and Fasteners
GEN ED	Elective from Group A, B, C, D or E

### **SEMESTER 4**

DSGN 2480	Geometric Dimensioning & Tolerancing
DSGN 2500	Production Drawings I
DSGN 2520	Production Drawings II
DSGN ELEC	Drafting Elective
GEN ED	Elective from Group A, B, C, D or E



## **Welding Technology (WELD) - AAS Degree**

### **SEMESTER 1**

AMDT 1100	Introduction to Industrial Safety
AMDT 1110	Introduction to Quality & Continuous Improvement
AMDT 1120	Introduction to Manufacturing Technology
AMDT 1130	Introduction to Maintenance Technology
MATH 1080	Technical Math (or Greater)

### **SEMESTER 2**

WELD 1250	Blueprint Reading
WELD 1300	Oxyacetylene Welding
WELD 1320	Cutting
WELD 1340	Brazing & Braze Welding
WELD 1470	Shield Arc Welding I
GEN ED	Elective from Group C, D or E
ENGL 1000	Applied Writing

### **SEMESTER 3**

WELD 1360	Welding Repair & Troubleshooting
WELD 1450	Gas Metal Arc Welding I
WELD 1460	Gas Metal Arc Welding II
WELD 1480	Shield Metal Arc Welding II
WELD 1500	Gas Tungsten Arc Welding I
WELD 1510	Gas Tungsten Arc Welding II
GEN ED	Elective from Group A, B, C, D or E

### **SEMESTER 4**

WELD 1490	Shield Metal Arc Welding III
WELD 2480	Flux-Cored & Submerged Arc Welding
WELD 2610	Metals
WELD 2620	Layout & Assembly
WELD 2640	Miscellaneous Welding Processes
WELD 2700	Welding Codes & Standards
GEN ED	Elective from Group A, B, C, D or E



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