Skilled Trades-Tool & Die Maker-Designer A.A.S.

26-27 catalog

Full-time

Description: This program trains students in basic industrial machining. Coursework focuses on electronics, CNC, and tool & die design.

Completion Time: 2 Years

This is suggested course sequencing. Please see a counselor or advisor for individual adjustments.

Year 1

Fall Semester

☐ **Success Skills for the 21st Century**	GNST 100	*3 Cr.*
☐ **Industrial Applied Algebra**	INDS 122	*2 Cr.*
☐ **Industrial Documentation & Measurement**	TDSN 107	*4 Cr.*
☐ **Introduction to CAD**	TDSN 115	*4 Cr.*

Spring Semester

☐ **Freshman English I**	ENGL 100	*3 Cr.*
☐ **Industrial Applied Geometry**	INDS 124	*2 Cr.*
☐ **Geometric Dimensioning & Tolerancing**	TDSN 125	*2 Cr.*
☐ **Tool & Die Design Production**	TDSN 135	*2 Cr.*
☐ **Choose 1**		
Survey of General Chemistry	CHEM 105	*4 Cr.*
Physical Science	PHYS 101	*4 Cr.*
College Physics I	PHYS 230	*4 Cr.*
☐ ***Oral Communication Requirement***		*3 Cr.*

Summer Session

☐ **Humanities Requirement**		*3-4 Cr.*
☐ **Choose 1**		
American Political System	POLI 240	*3 Cr.*
United States History to 1865	HIST 250	*3 Cr.*
United States History Since 1865	HIST 251	*3 Cr.*

Year 2

Fall Semester

☐ **Introduction to Windows**	CMIS 102	*1 Cr.*
☐ **Basic Machine Operations**	INDS 129	*4 Cr.*
☐ **Tool & Die Design Forming**	TDSN 136	*2 Cr.*
☐ **Industrial Communications**	TDSN 103	*2 Cr.*
☐ **Fundamentals of Welding**	WELD 101	*3 Cr.*
☐ **Choose 1**		
MIG Welding	WELD 105	*3 Cr.*
TIG Welding	WELD 106	*3 Cr.*

Spring Semester

☐ **Industrial Applied Right Angle and Oblique Trigonometry**	INDS 127	*2 Cr.*
☐ **Basic CNC Machining**	INDS 131	*3 Cr.*
☐ **Industrial First Aid**	INDS 156	*0.5 Cr.*
☐ **Industrial Safety**	INDS 157	*1 Cr.*
☐ **Choose 1**		
Computer Literacy	CMIS 101	*3 Cr.*
Introduction to Computer Information Systems	CMIS 115	*3 Cr.*
☐ ***Mathematics Requirement***		*4 Cr.*

Academic Advising: You should meet with an academic counselor prior to registering for classes.

Note: Prerequisite courses may apply to this program. A minimum of 60 unduplicated credits (100 level or higher) are required for all certificate programs.

Courses in italics may be taken in the summer term.

Total Minimum Credits: 63.5

Skilled Trades-Tool & Die Maker-Designer A.A.S.

26-27 catalog

Part-time

Description: This program trains students in basic industrial machining. Coursework focuses on electronics, CNC, and tool & die design.

Completion Time: 5 Years

This is suggested course sequencing. Please see a counselor or advisor for individual adjustments.

Year 1

Fall Semester

☐ **Success Skills for the 21st Century**	GNST 100	*3 Cr.*
☐ **Industrial Documentation & Measurement**	TDSN 107	*4 Cr.*

Spring Semester

☐ **Geometric Dimensioning & Tolerancing**	TDSN 125	*2 Cr.*
☐ ***Mathematics Requirement***		*4 Cr.*

Year 2

Fall Semester

☐ **Industrial Applied Algebra**	INDS 122	*2 Cr.*
☐ **Basic Machine Operations**	INDS 129	*4 Cr.*

Spring Semester

☐ **Industrial Applied Geometry**	INDS 124	*2 Cr.*
☐ **Basic CNC Machining**	INDS 131	*3 Cr.*
☐ **Industrial First Aid**	INDS 156	*0.5 Cr.*
☐ **Industrial Safety**	INDS 157	*1 Cr.*

Year 3

Fall Semester

☐ **Industrial Communications**	TDSN 103	*2 Cr.*
☐ **Introduction to CAD**	TDSN 115	*4 Cr.*

Spring Semester

☐ **Freshman English I**	ENGL 100	*3 Cr.*
☐ **Industrial Applied Right Angle and Oblique Trigonometry**	INDS 127	*2 Cr.*
☐ **Tool & Die Design Production**	TDSN 135	*2 Cr.*

Year 4

Fall Semester

☐ **Introduction to Windows**	CMIS 102	*1 Cr.*
☐ **Tool & Die Design Forming**	TDSN 136	*2 Cr.*
☐ **Choose 1**		
United States History to 1865	HIST 250	*3 Cr.*
Oral Communication Requirement		3 Cr.

Spring Semester

☐ **Choose 1**		
Computer Literacy	CMIS 101	*3 Cr.*
Introduction to Computer Information Systems	CMIS 115	*3 Cr.*
☐ **Choose 1**		
Survey of General Chemistry	CHEM 105	*4 Cr.*
Physical Science	PHYS 101	*4 Cr.*
College Physics I	PHYS 230	*4 Cr.*

Year 5

Fall Semester

☐ **Fundamentals of Welding**	WELD 101	*3 Cr.*
☐ **Choose 1**		
MIG Welding	WELD 105	*3 Cr.*
TIG Welding	WELD 106	*3 Cr.*

Spring Semester

☐ ***Humanities Requirement***		*3-4 Cr.*
☐ **Choose 1**		
American Political System	POLI 240	*3 Cr.*
United States History Since 1865	HIST 251	*3 Cr.*
Oral Communication Requirement		*3 Cr.*

*One Social Science class (POLI 240, HIST 250, HIST 251) must be taken

Academic Advising: You should meet with an academic counselor prior to registering for classes.

Note: Prerequisite courses may apply to this program. A minimum of 60 unduplicated credits (100 level or higher) are required for all certificate programs.

Courses in italics may be taken in the summer term.

Total Minimum Credits: 63.5

Skilled Trades-Tool & Die Maker-Designer A.A.S.

26-27 catalog

Full-time spring start

Description: This program trains students in basic industrial machining. Coursework focuses on electronics, CNC, and tool & die design.

Completion Time: 2.5 Years

This is suggested course sequencing. Please see a counselor or advisor for individual adjustments.

Year 1

Spring Semester

☐ **Success Skills for the 21st Century**	GNST 100	*3 Cr.*
☐ **Freshman English I**	ENGL 100	*3 Cr.*
☐ **Industrial Documentation & Measurement**	TDSN 107	*4 Cr.*
☐ ***Mathematics Requirement***		*4 Cr.*

Summer Session

☐ **Oral Communication Requirement**		*3 Cr.*
☐ **Choose 1**		
American Political System	POLI 240	*3 Cr.*
United States History to 1865	HIST 250	*3 Cr.*
United States History Since 1865	HIST 251	*3 Cr.*

Fall Semester

☐ **Industrial Applied Algebra**	INDS 122	*2 Cr.*
☐ **Introduction to CAD**	TDSN 115	*4 Cr.*
☐ **Basic Machine Operations**	INDS 129	*4 Cr.*
☐ **Industrial Communications**	TDSN 103	*2 Cr.*

Academic Advising: You should meet with an academic counselor prior to registering for classes.

Note: Prerequisite courses may apply to this program. A minimum of 60 unduplicated credits (100 level or higher) are required for all associate degree programs.

Year 2

Spring Semester

☐ **Choose 1**		
Computer Literacy	CMIS 101	*3 Cr.*
Introduction to Computer Information Systems	CMIS 115	*3 Cr.*
☐ **Industrial Applied Geometry**	INDS 124	*2 Cr.*
☐ **Geometric Dimensioning & Tolerancing**	TDSN 125	*2 Cr.*
☐ **Tool & Die Design Production**	TDSN 135	*2 Cr.*
☐ ***Humanities Requirement***		*3-4 Cr.*

Fall Semester

☐ **Introduction to Windows**	CMIS 102	*1 Cr.*
☐ **Tool & Die Design Forming**	TDSN 136	*2 Cr.*
☐ **Fundamentals of Welding**	WELD 101	*3 Cr.*
☐ **Choose 1**		
MIG Welding	WELD 105	*3 Cr.*
TIG Welding	WELD 106	*3 Cr.*

Year 3

Spring Semester

☐ **Industrial Applied Right Angle and Oblique Trigonometry**	INDS 127	*2 Cr.*
☐ **Basic CNC Machining**	INDS 131	*3 Cr.*
☐ **Industrial First Aid**	INDS 156	*0.5 Cr.*
☐ **Industrial Safety**	INDS 157	*1 Cr.*
☐ **Choose 1**		
Survey of General Chemistry	CHEM 105	*4 Cr.*
Physical Science	PHYS 101	*4 Cr.*
College Physics I	PHYS 230	*4 Cr.*

Courses in italics may be taken in the summer term.

Total Minimum Credits: 63.5