

Technical Design in Manufacturing, A.A.S. 26-27 catalog

Full-time

Description: This program is designed to prepare students for employment or advancement in the fields of industrial design, fabrication, and manufacturing with an emphasis on emerging technologies and strategies. Students will be well equipped to compete in today's job market, as the program combines traditional fabrication tools with new design and fabrication processes. A counselor should be consulted if the student plans to transfer to a four-year institution.

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.
☐ Freshman English I	ENGL 100	3 Cr.
☐ Industrial Documentation & Measurement	TDSN 107	4 Cr.
☐ Introduction to CAD	TDSN 115	4 Cr.

Spring Semester

☐ Geometric Dimensioning & Tolerancing	TDSN 125	2 Cr.
☐ Tool & Die Design Production	TDSN 135	2 Cr.
☐ Advanced CAD	TDSN 251	4 Cr.
☐ Mathematics Requirement		4 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

☐ Basic Machine Operations	INDS 129	4 Cr.
☐ Manufacturing Processes	INDS 260	2 Cr.
☐ Industrial Communications	TDSN 103	2 Cr.
☐ Tool & Die Design Forming	TDSN 136	2 Cr.
☐ Oral Communication Requirement		3 Cr.

Spring Semester

☐ Tool & Die Design Transfers	TDSN 235	4 Cr.
☐ Integrated Design for Manufacturing	TDSN 285	3 Cr.
☐ Choose 1		
Physical Science	PHYS 101	4 Cr.
College Physics I	PHYS 230	4 Cr.
☐ Electives in ATMN, INDS, TDNS, or WELD*		3-4 Cr.

*Electives as needed to get to 60 credits.

Total Minimum Credits: 60

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.

Technical Design in Manufacturing, A.A.S. 26-27 catalog

Part-time

Description: This program is designed to prepare students for employment or advancement in the fields of industrial design, fabrication, and manufacturing with an emphasis on emerging technologies and strategies. Students will be well equipped to compete in today's job market, as the program combines traditional fabrication tools with new design and fabrication processes. A counselor should be consulted if the student plans to transfer to a four-year institution.

Completion Time: 4.5 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.
- Introduction to CAD TDSN 115 4 Cr.

Spring Semester

- Tool & Die Design Production TDSN 135 2 Cr.
- Advanced CAD TDSN 251 4 Cr.

Year 2

Fall Semester

- Industrial Documentation & Measurement TDSN 107 4 Cr.
- Tool & Die Design Forming TDSN 136 2 Cr.

Spring Semester

- Tool & Die Design Transfers TDSN 235 4 Cr.
- Integrated Design for Manufacturing TDSN 285 3 Cr.

Year 3

Fall Semester

- Basic Machine Operations INDS 129 4 Cr.
- Industrial Communications TDSN 103 2 Cr.

Spring Semester

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

Year 4

Fall Semester

- Manufacturing Processes INDS 260 2 Cr.
- Freshman English I ENGL 100 3 Cr.
- Oral Communication Requirement 3 Cr.

Spring Semester

- Choose 1
 - Physical Science PHYS 101 4 Cr.
 - College Physics I PHYS 230 4 Cr.
- Choose 1
 - United States History Since 1865 HIST 251 3 Cr.
 - Electives in ATMN, INDS, TDSN, or WELD 3-4 Cr.

Year 5

Fall Semester

- Choose 1
 - American Political System POLI 240 3 Cr.
 - United States History to 1865 HIST 250 3 Cr.
 - Electives in ATMN, INDS, TDSN, or WELD 3-4 Cr.

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

- Electives in ATMN, INDS, TDNS, or WELD* 3-4 Cr.

*Electives as needed to get to 60 credits.

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.

Courses in italics may be taken in the summer term.

Total Minimum Credits: 60

Technical Design in Manufacturing, A.A.S. 26-27 catalog

Full-time spring start

Description: This program is designed to prepare students for employment or advancement in the fields of industrial design, fabrication, and manufacturing with an emphasis on emerging technologies and strategies. Students will be well equipped to compete in today's job market, as the program combines traditional fabrication tools with new design and fabrication processes. A counselor should be consulted if the student plans to transfer to a four-year institution.

Completion Time: 2 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.
☐ Oral Communication Requirement		3 Cr.

Fall Semester

☐ Basic Machine Operations	INDS 129	4 Cr.
☐ Introduction to CAD	TDSN 115	4 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 associate degree programs.

Year 2

Spring Semester

☐ Geometric Dimensioning & Tolerancing	TDSN 125	2 Cr.
☐ Tool & Die Design Production	TDSN 135	2 Cr.
☐ Advanced CAD	TDSN 251	4 Cr.
☐ Choose 1		
Physical Science	PHYS 101	4 Cr.
College Physics I	PHYS 230	4 Cr.

Fall Semester

☐ Manufacturing Processes	INDS 260	2 Cr.
☐ Industrial Communications	TDSN 103	2 Cr.
☐ Tool & Die Design Forming	TDSN 136	2 Cr.
☐ Humanities Requirement		3-4 Cr.
☐ Choose 1		
American Political System	POLI 240	3 Cr.
United States History to 1865	HIST 250	3 Cr.
Electives in ATMN, INDS, TDSN, or WELD		3-4 Cr.

Year 3

Spring Semester

☐ Tool & Die Design Transfers	TDSN 235	4 Cr.
☐ Integrated Design for Manufacturing	TDSN 285	3 Cr.
☐ Choose 1		
United States History Since 1865	HIST 251	3 Cr.
Electives in ATMN, INDS, TDSN, or WELD*		3-4 Cr.

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

*Electives as needed to get to 60 credits.

Total Minimum Credits: 60