

2024-2025 TTC Catalog

General Technology - Engineering Design Graphics

Associate in Applied Science in General Technology

Engineering Design Graphics Career Path

62-63 Credit Hours

This career path prepares students for employment in the broad field of drafting with opportunities in both government and industry. Training emphasizes the development of computer- aided design and drafting skills. Graduates typically obtain drafting and technical illustration jobs in the architectural, civil, construction, electrical, or mechanical field.

Students can earn only one General Technology degree in a single career path.

General Education Core Requirements

IDS 109 First Year Experience Seminar 3

MAT 170 Algebra, Geometry and Trigonometry I 3

| | | |
|---------|-------------------------------|---|
| REQ COM | Select from | 3 |
| | Communication | |

| | | |
|---------|----------------------------|---|
| REQ HUM | Select from | 3 |
| | Humanities | |

| | | |
|---------|--|---|
| REQ SSC | Select from | 3 |
| | Behavioral/Social Sciences | |

Total: 15

Primary Technical Specialty Requirements

EGT 130 Geometric Dimensioning and Tolerancing Applications 3

EGT 151 Introduction to CAD 3

EGT 152 Fundamentals of CAD 3

EGT 220 Structural and Piping Application 4

EGT 245 Principles of Parametric CAD 3

EGT 251 Principles of CAD 3

EGT 252 Advanced CAD 3

EGT 258 Applications of CAD 3

EGT 261 Model Design and Simulation 4

EGT 265 CAD/CAM Applications 3

Total: 32

Secondary Technical Specialty Requirements

AET 111 Architectural Computer Graphics I 3

AET 221 Architectural Computer Graphics II 4

EGT 172 Electronic Drafting 2

*Choose one of the Drafting Options listed below to meet the Secondary Specialty Requirements (6/7 credits).

Total: 7

***Additional Requirements - Architectural Drafting Option**

AET 202 History of Architecture 3

CET 120 Construction Materials 3

Total: 6

***Additional Requirements - Civil Drafting Option**

CET 204 Fundamentals of Surveying 4

EGT 257 Advanced Civil CAD 3

Total: 7

***Additional Requirements - Electrical Drafting Option**

EGR 104 Engineering Technology Foundations 3

EET 113 Electrical Circuits I 4

Total: 7

***Additional Requirements - Mechanical Drafting Option**

EGR 170 Engineering Materials 3

or

EGR 175 Manufacturing Processes 3

EGT 115 Engineering Graphics II 4

Total: 7

Admission Requirements

Admission into this program requires proof of high school graduation (or GED) and qualifying scores on SAT, ACT or the TTC placement test.