Utah System of Higher Education
The Gateway, Salt Lake City, UT 84101
801-646-4784

Drafting and Design

Technical Certificate (Catalog Year: 2026)

Foundational Courses (16 Credits / 480 Clock-Hours)

		Credits	Clock-Hours
TEDR 1000	Technical Drafting	4	120
TEDR 1010	Advanced Technical Drafting	3	90

Architectural Drafting (9 Credits / 270 Clock-Hours)

		Credits	Clock-Hours
TEDR 1100	Residential Drafting	3	90
TEDR 1110	Introduction to Building Information Modeling	3	90
TEDR 2800	Capstone Project	3	90

Mechanical Drafting (9 Credits / 270 Clock-Hours)

		Credits	Clock-Hours
TEDR 1200	Parametric Solid Modeling	3	90
TEDR 2200	Advanced Solid Modeling	3	90
TEDR 2800	Capstone Project	3	90

Civil Drafting (9 Credits / 270 Clock-Hours)

		Credits	Clock-Hours
TEDR 1130	Commercial Drafting	3	90
TEDR 1300	Civil Drafting	3	90
TEDR 2800	Capstone Project	3	90

Supplemental Courses Varies by Institution

Bridgerland (14 Credits / 420 Clock-Hours)

		Credits	Clock-Hours
TEDR 1003	Career and Workplace Relations	1	30
TEDR 1015	Applied Technical Math	1	30
TEDR 1020	Computer Illustration	2	60
TEDR 1130	Commercial Drafting	3	90
TEDR 1170	Structural Steel Detailing	3	90
TEDR 1210	Mechanical Design	4	120
TEDR 1220	Production Drafting	4	120
TEDR 1240	Rapid Prototyping	1	30
TEDR 2000	Portfolio Development	1	30
TEDR 2050	Small Business	2	60
TEDR 2110	Intermediate Architectural Drafting	4	120
TEDR 2205	Solid Modeling Certification	3	90

Davis (14 Credits / 420 Clock-Hours)

		Credits	Clock-Hours
TEDR 1030	Materials and Methods I	2	60
TEDR 1031	Materials and Methods II	2	60
TEDR 1135	Commercial Drafting I	2	60

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TEDR 1136	Commercial Drafting II	3	90
TEDR 1160	Design Integration	3	90
TEDR 1165	Virtual Design for Construction	2	60
TEDR 1221	Production Drafting I	1	30
TEDR 1222	Production Drafting II	2	60
TEDR 1223	Production Drafting III	2	60
TEDR 1230	Reverse Engineering	3	90
TEDR 1245	Rapid Prototyping	2	60
Dixie (14 Credits / 420 Clock-Hours)		Credits	Clock-Hours
TEDR 1015	Applied Technical Math	1	30
TEDR 1115	Applied Building Modeling	3	90
TEDR 1150	Architectural Print Reading	1	30
TEDR 1180	Residential Construction Documents	3	90
TEDR 1181	Commercial Construction Documents	4	120
TEDR 1205	Parametric Applications	3	90
TEDR 1250	Mechanical Print Reading	1	30
TEDR 1260	Drafting GD&T, FEA, CAM	2	60
TEDR 1535	Design to Manufacturing	3	90
TEDR 2810	Architectural Special Projects	2	60
TEDR 2815	Mechanical Special Projects	1	30
Ogden-Weber (14 Credits / 420 Clock-Hours)		Credits	Clock-Hours
TEDR 1035	Construction Materials and Methods	3	90
TEDR 1108	Architectural CAD Modeling Interior Design	4	120
TEDR 1120	Residential Architectural Design	4	120
TEDR 1125	Structural Design	4	120
TEDR 1145	Architectural Rendering	3	90
TEDR 1220	Production Drafting	4	120
TEDR 1255	Engineering Drawings	4	120
TEDR 1270	Metal Processes	3	90
TEDR 1275	Milling Machining	3	90
TEDR 1280	Surface Modeling	2	60
TEDR 1310	Civil Design	4	120
TEDR 1320	Civil Surveying	3	90
TEDR 1330	Civil Geographic Information System	4	120
TEDR 2100	Advanced BIM	4	120
TEDR 2105	BIM Coordination	3	90
TEDR 2180	Architectural Standards	4	120
TEDR 2181	Commercial Standards	4	120
TEDR 2210	Photoshop for Interior Designers	3	90

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TEDR 2220	Mold Design	2	60
TEDR 2230	Machine Power Design	2	60
TEDR 2240	3D Printing and Advanced Manufacturing	3	90
Salt Lake (14 Credits / 420 Clock-Hours)		Credits	Clock-Hours
TEDR 1015	Applied Technical Math	1	30
TEDR 1025	Introduction to AutoCAD	3	90
TEDR 1210	Mechanical Design	4	120
TEDR 1310	Civil Design	4	120
TEDR 1320	Civil Surveying	3	90
TEDR 1330	Civil Geographic Information System	4	120
TEDR 1400	Introduction to Engineering and Design	3	90
TEDR 1410	Engineering Graphics	3	90
TEDR 1420	Electronics Drafting	3	90
TEDR 1425	Altium Electronic Drafting	3	90
TEDR 1430	Advanced 3D Modeling	3	90
TEDR 1435	Product Design Fundamentals 3D Printing	3	90
TEDR 1440	Schematic Capture	3	90
TEDR 1450	Robotics in the World	3	90
TEDR 1460	Geometric Dimensioning and Tolerancing	3	90
TEDR 1470	Manual Machine Shop	3	90
TEDR 1475	CNC Programming	3	90
TEDR 1480	Manufacturing Processes	3	90
TEDR 1490	Product Design and Development CAD/CAM	3	90
TEDR 2020	Advanced AutoCAD	2	60
USU - Eastern (14 Credits / 420 Clock-Hours)		Credits	Clock-Hours
TEDR 1003	Career and Workplace Relations	1	30
TEDR 1015	Applied Technical Math	1	30
TEDR 1130	Commercial Drafting	3	90
TEDR 1220	Production Drafting	4	120
TEDR 1500	Construction Site Planning	2	60
TEDR 1510	Construction Materials, Methods, and Design	3	90
TEDR 1520	Advanced Design Concepts	3	90
TEDR 1530	Design for Manufacturing	3	90
TEDR 1540	Manufacturing Principles	2	60