



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

Automation Technology

Certificate of Completion (Catalog Year: 2024)

Foundational Courses (21 Credits / 630 Clock-Hours)

Aligned Courses (21 Credits / 630 Clock-Hours)

		Credits	Clock-Hours
TEAM 1010	Essential Skills and Safety	3	90
TEAM 1020	Pneumatics	2	60
TEAM 1030	Hydraulics	2	60
TEAM 1040	Industrial Mechanics	3	90
TEAM 1050	Electrical Systems	2	60
TEAM 1060	Motor Controls	3	90
TEAM 1070	Programmable Logic Controllers	4	120
TEAM 1080	Applied System Diagnostics	2	60

Supplemental Courses Varies by Institution

Bridgerland Courses (9 Credits / 270 Clock-Hours)

		Credits	Clock-Hours
TEAM 1100	Electric Motors and Drives	1	30
TEAM 1110	Introduction to Industrial Robotics	2	60
TEAM 1120	3D Modeling	2	60
TEAM 1125	Solidworks CSWA Certification	1	30
TEAM 1700	Introduction to Studio 5000	1	30
TEAM 1200	HVAC Refrigeration	3	90
TEAM 1300	Building Control Panels	3	90
TEAM 1005	Computer Tools for Technology	1	30
TEAM 1003	Spreadsheets for Automation	2	60
TEAM 1400	GD&T Blueprint Reading	2	60
TEAM 1450	Introduction to Quality	2	60
TEAM 1500	Instrumentation Process Control	3	90
TEAM 1900	Automated Technology Externship	4	180
TEET 1040	Electronics Assembly and Soldering	1	30
TEET 1060	DC Electronics	4	120
TEET 1070	AC Electronics	4	120
TEET 1100	Microcontrollers I	2	60
TEET 1105	Microcontrollers II	2	60
TEMT 1005	Machining for Manufacturing Trades	3	90
TEWT 1005	Welding Overview	3	90
TEWT 1105	Welding Qualifications	3	90

Davis (9 Credits / 270 Clock-Hours)

		Credits	Clock-Hours
TEAM 1015	Electronic Fundamentals for Industrial Automation	4	120



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TEAM 1800	Renewable Energy	2	60
TEAM 1810	Lean Manufacturing (Six Sigma)	1	30
TEAM 1250	Plumbing for Automation Technology	1	30
TEAM 1200	HVAC Refrigeration	3	90
TEAM 1170	UAV Drone Technology	3	90
TEAM 1820	Semiconductor Devices	4	120
TEAM 1300	Building Control Panels	3	90
TEAM 1500	Instrumentation Process Control	3	90
TEAM 1550	Process Technology Equipment and System Operators	3	90
TEAM 1600	Microcontroller and Microprocessor Programming	2	60
TEAM 1620	Electronics Assembly and Soldering	2	60
TEAM 1830	Aerospace Technician	2	60
TEAM 1910	Automated Externship	2	90
TEDR 1005	Interpreting Engineering Drawings	1	30
TEMT 1001	Introduction to Machining	2	60
WKSK 1500	Job Seeking Skills	1	30
TEWT 1008	Welding for Manufacturing	2	60
TEAM 1105	Electric Motors and Drives	3	90
TEAM 1135	FANUC IR Vision Systems	1	30
TEAM 1137	Vision System Basics	1	30
TEAM 2020	Human Machine Interface Programming	3	90
TEAM 2000	Programmable Logic Controllers II	3	90
TEAM 1140	Industrial Robotics	3	90
TEAM 1710	Industrial Networking	3	90
TEAM 1720	Controls Integration	3	90
TEAM 2800	Final Project	1	30
Mountainland (9 Credits / 270 Clock-Hours)		Credits	Clock-Hours
TEAM 1625	Electronics Soldering	1	30
TEAM 1115	Robotics I	1	30
TEAM 1615	Conduit Bending	1	30
TEAM 2300	Introduction to RF Plasma	1	30
TEAM 1590	Introduction to Statistical Process Control	1	30
TEAM 1840	Introduction to Semiconductor Manufacturing	2	60
TEAM 1630	Sensors and Timers	1	30
TEAM 1670	Wiring Boards	1	30
TEAM 1112	Rotating Machines	2	60
TEAM 2030	HMI and PLC Troubleshooting	3	90
TEAM 1130	FANUC Robots	1	30
TEAM 2145	Electro-Fluid Power	1	30



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TEAM 1240	Welding Simulator	1	30
TEAM 1122	SolidWorks	1	30
TEAM 1815	Lean and Six Sigma	1	30
TEAM 1730	Basic VFD Operation	1	30
TEAM 1045	Mechanical Drives and Laser Alignment	2	60
Ogden-Weber (9 Credits / 270 Clock-Hours)		Credits	Clock-Hours
TEAM 1650	Advanced Electrical Systems	3	90
TEAM 1660	Advanced Motor Controls	3	90
TEAM 1145	Industrial Robotics	3	90
Salt Lake (9 Credits / 270 Clock-Hours)		Credits	Clock-Hours
TEAM 2010	Programmable Logic Controllers II	4	120
TEAM 2025	HMI Programming	2	60
TEAM 2040	PLC Troubleshooting	2	60
TEAM 2080	PLC Capstone Project	1	30
TEAM 1520	Process Control Level/Flow	4	120
TEAM 1580	Process Capstone Project	2	60
TEAM 2200	Troubleshooting Automated Systems	3	90
TEAM 1610	Electric Motor Control Systems	4	120
TEAM 1680	Motor Capstone Project	2	60
Snow (9 Credits / 270 Clock-Hours)		Credits	Clock-Hours
TEAM 2100	Industrial Mechanics II	2	60
TEAM 2045	Programmable Logic Controllers Troubleshooting	2	60
TEAM 2110	Laser Shaft Alignment	2	60
TEAM 2120	Vibration Analysis	2	60
TEAM 2130	Industrial Rigging	2	60
TEAM 2140	Industrial Hydraulics Troubleshooting	3	90
TEAM 2150	Industrial Pumps	3	90
Southwest (9 Credits / 270 Clock-Hours)		Credits	Clock-Hours
TEAM 2005	Programmable Logic Controllers II	3	90
TEAM 2210	Fabrication and Repair	3	90
TEAM 1510	Process Control Components and Systems	2	60
TEAM 1640	Electrical Systems II	1	30
Tooele (9 Credits / 270 Clock-Hours)		Credits	Clock-Hours
TEAM 1260	Introduction to Manual Machining	5	150
TEAM 1270	Welding for Automation Technology	4	120