Welding Technology • Precision Machining Option

Semester Course Outline • 2024 – 2025

18 Months (4 Semesters) • Revised: 1/24/24

Associate of Applied Science (A.A.S.) Degree • Credits Required for Graduation: 70

First Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
WLD 105	Oxyacetylene Safety	28	1
WLD 110	Proper Use of the Cutting Torch	14	.5
WLD 111	Shop Orientation Maintenance and Safety	28	1
WLD 113	Shielded Metal Arc Welding I	42	1.5
WLD 114	Ferrous Metallurgy	14	.5
WLD 115	Shielded Metal Arc Welding II	105	3.75
WLD 120	Metal Fabrication	28	1
WLD 123	Blueprint Reading	28	1
WLD 161	Gas Tungsten Arc Welding	84	3
AED 100	Automated External Defibrillator	14	.5
CSC 102	Windows Application for Technicians	45	3
	Total	430	16.75

First Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
WLD 140	Flux-Cored Arc Welding	28	1
WLD 141	Gas Metal Arc Welding A	42	1.5
WLD 143	Gas Metal Arc Welding B	84	3
WLD 145	Gas Metal Arch Welding C	84	3
WLD 147	Gas Metal Arch Welding D	119	4.25
WLD 151	Shop Math	56	2
• Selected Communications Course (Choose one) CMST 101 – Foundations of Communication * (CSS 100 – Career Search Strategies .5 credit) COMM 101 – Communications and Career Strategies ENGL 101 – Composition * (CSS 100 – Career Search Strategies .5 credit)		45	3
	Total	458	17.75

Second Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
PM 106	Blueprint Reading	15	1
PM 107	Computer Numerical Control (CNC) Operations I	56	2
PM 110	Precision Measuring	28	1
PM 117	Applied Trigonometry	56	2
PM 131	Mill and Lathe Operations I	56	2
PM 133	Mill and Lathe Operations II	56	2
PM 134	Machine Toll Fundamentals	28	1
PM 167	Introduction to Computer Numerical Control (CNC)	15	1
• Selected Social Science Course (Choose one) ECON 105 – Leadership in the Global Workplace ECON 201 – Principles of Microeconomics I * ECON 202 – Principles of Macroeconomics II * SOC 100 – Introduction to Sociology *		45	3
• Selected Mathematics Course (Choose one) MATH 100 – Applied General Math MATH 101 – Intermediate Algebra MATH 114 – College Algebra *		45	3
	Total	400	18

Second Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
PM 152	Advanced Mill and Lathe Theory	15	1
PM 154	Computer Numerical Control (CNC) Operations II	140	5
PM 160	Advanced Mill and Lathe Operations I	28	1
PM 162	Advanced Mill and Lathe Operations II	154	5.5
PM 168	Precision Grinding	56	2
PSYC 100	Psychology of Human Relations	45	3
	Total	438	17.5

Elective Course: With the instructor's approval, SCT 100 – Solar Car Team may be substituted for up to 6 credits of course work or taken as an additional elective.

All elective and/or additional courses not listed on your current program outline must be approved by your adviser and appropriately identified on the current program semester outline of Financial Services, Welding, or Precision Machining.

- Students will select a course in each of the areas listed to meet general education requirements. Courses marked with an asterisk (*) can be transferred directly to the university system and may be substituted for recommended courses on the outline. Students should speak with an advisor before doing so.

  Students who select to take transferable communications course CMST 101 or ENGL 101, must also register for CSS 100 – Career Search Strategies for .5 credit. This curriculum is required for all Lake Area Tech graduates and is included in the COMM 101 course but is separate from the university system.