

TOPS University Associate of Applied Science: Technical Studies in Welding

Postsecondary Partner: [South Louisiana Community College](#)

Overview

This welding program prepares students for gainful employment. Students who complete the program are equipped to meet the needs of the welding technology fields. Instruction is provided in various processes and techniques of welding including Oxyfuel cutting, carbon arc cutting, shielded metal arc welding, gas tungsten arc welding, flux cored arc welding, gas metal arc welding, plasma arc cutting, blueprint reading, weld symbols and joints.

Capstone Credentials

Regional (emerging)	Basic	Advanced	Fast Forward Advanced Plus
- NCCER Welder Helper - OSHA 30	-Certificate of Technical Studies: Welder Helper/Thermal Cutter - Basic Access Industrial Scaffolding - NCCER Welder Level 1	-Technical Diploma: Welding - AutoDesk Inventor Certified User - NCCER Welder Level 2	Associate of Applied Science: Technical Studies in Welding

*Core Academic Course

**Jump Start CTE Course

Grade 9	
Semester 1	Semester 2
LDOE Course/Code	LDOE Course/Code
*English I 120331	*English II 120332
*Algebra I 160321	*Algebra II 160322
*World Geography 220300	*Environmental Science: AP Environmental Science 150311 or Earth Science 150901
*Physical Education I 190105	*½ Physical Education II 190106 ½ Health Education 190500



Grade 10	
Semester 1	Semester 2
LDOE Course/Code	LDOE Course/Code
*Geometry 160323	*Core art selection
*Biology 150301	*U.S. History 220403
*World History 220401	*Chemistry 150401
*Foreign Language I	*Foreign Language II

Additional and/or equivalent TOPS core aligned courses can be found in Bulletin 741.

Grade 11			
Semester 1		Semester 2	
Postsecondary Course	LDOE Course/Code	Postsecondary Course	LDOE Course/Code
*Rhetoric & Composition ENGL 1010	*English III: DE - CENL 1013 English Composition I 120601	*Introduction to Fiction ENGL 2055 or British Literature ENGL 2020	*English IV: DE - CENL 2303 Introduction to Fiction 120614 or CENL 2103 British Literature I 120608
*Environmental Science ENSC 1000	*Environmental Science: DE - CEVS 1103 Environmental Science 150914	*College Algebra MATH 1105	*Algebra III: DE - CMAT 1213 College Algebra 160500
**Mathematics for Workforce Occupations WFMA 1003	**DE Technical Math 165010	**Shielded Metal Arc Welding I WELD 1205	**DE Shielded Metal Arc Welding I 890716
**Occupational Orientation and Safety WELD 1003	**DE Workplace Safety 311923	**Electrical Fundamentals and Inspection WELD 1403	**DE Electrical Fundamentals and Inspection 890703
**Cutting Processes WELD 1103	**DE Cutting Processes 890701	**Pneumatic/Hydraulic Power Systems OGPT 1500	**DE Pneumatic/Hydraulic Power Systems 890715



Grade 12			
Semester 1		Semester 2	
Postsecondary Course	LDOE Course/Code	Postsecondary Course	LDOE Course/Code
*American National Government POLI 1100	*US Government: DE - CPOL 2013 Intro to American Government 220514	**Gas Tungsten Arc Welding WELD 2103	**DE Gas Tungsten Arc Welding 890708
**Shielded Metal Arc Welding II WELD 1304	**DE Shielded Metal Arc Welding II 890717	**Gas Metal Arc Welding & Flux Cored Arc Welding II WELD 2205	**DE Gas Metal Arc Welding & Flux Cored Arc Welding II 890707
**Metallurgy and Symbols WELD 1123	**DE Metallurgy and Symbols 890712	**Advanced Shielded Metal Arc Welding V-Groove WELD 2225	**DE Advanced Shielded Metal Arc Welding V-Groove 890700
**Gas Metal Arc Welding & Flux Cored Arc Welding I WELD 2115	**DE Gas Metal Arc Welding & Flux Cored Arc Welding I 890706	**Manufacturing Procedures WELD 2213	**DE Manufacturing Procedures 890603
		**Basic Industrial Scaffolding (SLCC Corporate College)	**DE Fundamentals of Industrial Scaffolding 310631

This pathway framework is an outline of how the approved courses can be implemented. Schools may opt to rearrange the order of course sequencing in order to meet local scheduling requirements. Additionally, Fast Forward pathways are dynamic and the Jump Start Review panel will consider course equivalents on an as needed basis.