

IGNITE SOUTH ACADEMIC PLAN

Welder-Entry Level Career Pathway CIP 48.0508.01

A student must have 6 courses each semester

Graduation Requirements

Total: 22

Grade 9		Grade 10		Grade 11		Grade 12	
Required Courses		Required Courses		Required Courses		Required Courses	
Courses	Credit	Courses	Credit	Courses	Credit	Courses	Credit
Eng I or Hon Eng I	1	Eng II or Hon Eng II	1	Eng III, AP Language Composition or Dual Credit	1	Eng IV, AP Eng, Eng 101/102, or ENG-Based College Class	1
Alg I , Honors Algebra I, Geometry or Honors Geometry	1	Geometry or Honors Geometry or Algebra II	1	Math Course Suggested: Algebra II or Honors Algebra II or Pre-Cal	1	Math Course Dual Credit, Financial Literacy, Medical Math, or Other	1
Science Foundations/ Hon Science Foundations	1	Biology or AP Biology	1	Chemistry, Physics or Conceptual Science	1	10 Hours of Service Learning Meet ACT Benchmarks Pass Civics Test	
Integrated Social Studies or AP Human Government	1	Western (World) Civilization or AP European History	1	U.S. History or AP U.S History	1		
PE 1 (AFROTC)	1/2						
Health (AFROTC Online)	1/2						

*Students are required to earn **1 credit of Humanities** before graduation. Humanities can be 1 credit of band, art, music, drama, or humanities course.*

*** Pre-college curriculum recommends 2 consecutive years of a foreign language be taken before graduation. This is not a MSHS Graduation Requirement.*

*** To Co-op when you are a senior. (Must have earned 4 credits in a pathway or earned 2 credits and be enrolled in a 3rd class in your pathway + co-op.) See Pathway handout.*

Pathway Courses (currently offered in bold)

480505 Blueprint Reading for Welding (.5-1 credit)	480523 Oxy-Fuel Systems (.5-1 credit)	480522 Gas Metal Arc Welding and Lab (.5-1 credit)	480535 SMAW Open Groove Lab (1 credit)
499920 Basic Blueprint Reading (0.5 credit)	480501 Cutting Processes and Lab (.5-1 credit)	480533 GMAW Groove Lab (1 credit)	480525 Gas Tungsten Arc Welding and Lab (1 credit)
480524 Basic Welding (.5-1 credit)	480521 Shielded Metal Arc Welding and Lab (1 credit)	480528 SMAW Groove Welds with Backing Lab (1 credit)	480538 Gas Tungsten Pipe Welding Pipe Lab A (1 credit)
480530 GTAW Groove Lab (1 credit)	480510 GMAW Pipe Lab A (1 credit)	480534 GMAW Aluminum Lab (.5 credit)	480536 Shielded Metal Arc Welding Pipe Lab A (1 credit)
480541 Co-Op I (Welding) OR 480544 Internship (1 credit)	332001 Introduction to 3D Printing Technology (1 credit)	210221 Engineering I (1 credit)	

Possible Occupations

Jobs you can obtain after graduating with this high school training:

Welding technician Production welder Welding fitter Welding machine operator Maintenance Technician Fabricator Apprentice pipe welder/ underwater welder/iron

Jobs you can obtain with two-years post-high school training: Iron worker Pipe welder Maintenance welder Aerospace welder

Jobs you can get with four or more years post-high school training: Engineers (multiple areas) Nuclear welder Underwater welder Metallurgist