WELDING
Associate in Applied Science (AAS) Degree

Minimum Credits: 62.0
Contact Hours: 85.0

INTRODUCTION: This Associate degree program is a continuation of the Welding Fabrication certificate program. The degree introduces the student to more specialized structural and pipe welding skill training with related technical and general education courses. Graduates in this program could work in the aerospace, boiler and petroleum piping, construction, mining, manufacturing and fabrication, and maintenance welding industries. This degree is also transferrable to Ferris State University's Welding Engineering Technology baccalaureate program. Students have the option of concurrently working toward completing their AWS Sense Level I and II welding certificates.

GENERAL EDUCATION COURSES

COURSE	TITLE	CREDITS	CONTACT HOURS
ENG 120 or ENG 111	Applied Communications or English Composition I	3.0	3.0
ENG 123 or ENG 112	Technical Communications or English Composition II	3.0	3.0
PLS 221	American Government & Politics	3.0	3.0
PHY 111	Applied Physics	3.0	4.0
	GENERAL EDUCATION CREDITS/CONTACT HOURS:	12.0	13.0

CORE PROGRAM COURSES

COURSE	TITLE	CREDITS	CONTACT HOURS
APP 100E	Electrical Studies for Trades	3.0	4.0
CAD 150	3D Modeling [A]	3.0	4.0
MET 200	Material Science [A]	3.0	4.0
MFG 101	Machining Processes I [A]	4.0	6.0
MFG 120	Print Interpretation & Processes [A]	3.0	4.0
MTH 110 or MTH 113	Technical Math I or Intermediate Algebra	3.0-4.0	4.0
MTH 112 or MTH 122	Technical Math II or Plane Trigonometry	3.0	3.0-4.0
WLD 123	SMAW Welding Processes [A]	4.0	6.0
WLD 124	GMAW & FCAW Welding Processes [A]	4.0	6.0
WLD 240	Gas Tungsten Arc & Pipe Welding [A]	4.0	6.0
WLD 242	Welding Fabrication [A]	3.0	5.0
WLD 250	Advanced Pipe Welding [A]	5.0	8.0
WLD 252	Specialty Welding & Testing Procedures [A]	5.0	8.0
WLD 260	Welding Automation [A]	3.0	4.0
	CORE PROGRAM CREDITS/CONTACT HOURS:	50.0-51.0	72.0-73.0
	TOTAL MINIMUM PROGRAM CREDITS/CONTACT HOURS:	62.0	85.0

SUGGESTED SEQUENCING OF COURSES

YEAR 1 (FALL SEMESTER) 17.0 CREDITS	CREDITS	CONTACT HRS	YEAR 1 (SPRING SEMESTER) 17.0 CREDITS	CREDITS	CONTACT HRS
MFG 101 Machining Processes I	4.0	6.0	CAD 150 3D Modeling	3.0	4.0
MFG 120 Print Interpret & Process	3.0	4.0	WLD 124 GMAW & FCAW Welding	4.0	6.0
MTH 110 or MTH 113 Tech Math I or Intermediate Algebra	3.0-4.0	4.0	MTH 112 or MTH 122 Tech Math II or Plane Trigonometry	3.0	3.0-4.0
WLD 123 SMAW Welding Processes	4.0	6.0	WLD 240 Gas Tung Arc & Pipe Weld	4.0	6.0
MET 200 Material Science	3.0	4.0	WLD 242 Welding Fabrication	3.0	5.0
TOTAL	17.0	24.0	TOTAL	17.0	24.0-25.0
YEAR 2 (FALL SEMESTER) 14.0 CREDITS	**CREDITS**	**CONTACT HRS**	**YEAR 2 (SPRING SEMESTER) 14.0 CREDITS**	**CREDITS**	**CONTACT HRS**
ENG120 or ENG111 Applied Comm or English Composition I	3.0	3.0	ENG123 or ENG112 Tech Communication or English Composition II	3.0	3.0
WLD 250 Advanced Pipe Welding	5.0	8.0	WLD 252 Specialty Weld/Test Proc	5.0	8.0
PLS 221 American Gov't & Politics	3.0	3.0	WLD 260 Welding Automation	3.0	4.0
APP 100E Electrical Studies for Trades	3.0	4.0	PHY 111 Applied Physics	3.0	4.0
TOTAL	14.0	18.0	TOTAL	14.0	19.0

NOTES:

[A] Included in occupational specialty – GPA of 2.0 or higher must be maintained in the area of occupational specialty.

[B] Students should meet with Welding program advisor when registering for courses or planning to transfer for additional information and course recommendations.