

PROGRAM ARTICULATION DEGREE PLAN				
Richland Community College			Southern Illinois University Carbondale	
2022-2023			BS Industrial Management and Applied Engineering (IMAE) - 120 hrs	
AAS Welding Technology - Construction and Pipe Speciality- 68 hrs			University Core Curriculum (UCC) Capstone Option - 30 hrs	
		Hrs		Hrs
ENGL 101	English Composition I	3	UNIV 101	Saluki Success
			ENGL 101	English Composition I
			ENGL 102	English Composition II
COMM 101	Public Speaking	3	CMST 101	Intro to Oral Communication
MATH 116*	College Algebra	4	MATH 108 (Required for BS degree)	College Algebra
	IAI SOCIAL SCIENCE	3	SOCIAL SCIENCE	(See SIUC Equivalency Guide)
			SOCIAL SCIENCE	
			HUMANITIES	
			HUMANITIES	
PHYS 101*	Intro to Physics I	4	PHYS 203/253A (Required for BS degree)	College Physics/Lab
			LIFE SCIENCE, GRP II	Students take 2 physics courses
			FINE ARTS	
			HUMAN HEALTH	
			MULTICULTURAL	
*Recommended to fulfill BS requirement		17		
Program Requirements			Program Requirements	
ENGT 105	Occupational Safety	3	The AAS degree in Welding Technology - Construction and Pipe Speciality as articulated fulfills the 22 hrs of technical electives required for the BS degree in Industrial Management & Applied Engineering.	
WELD 100	Welding Fundamentals	2		
WELD 101	Shielded Metal Arc Welding	4		
WELD 120	Intermediate Shielded Metal Arc Welding	3		
WELD 125	Gas Metal Arc/Flux Core Arc Welding (MIG)	2		
WELD 130	Gas Tungsten Arc Welding	3		
WELD 135	Advanced Shielded Metal Arc Welding	3		
WELD 140	Pipe Welding	4		
WELD 145	Welding Tools and Safety	3		
WELD 190	Maintenance Repair Welding	2		
WELD 202	Welder Certification	2		
WELD 208	Pipefitting Fundamentals	4		
WELD 215	Pipefitting Applications	4		
WELD 243	Aluminum and Stainless Steel Welding	4		
WELD 245	GMAW/FCAW Pipe Welding	3		
WELD 290 or WELD 295	Work Exp Practicum & Seminar or Workplace Simulation/Project	3		
ENGT 102	Blueprint Reading	3	IMAE 110 (Required for BS degree)	Geometric Dimensioning & Tolerancing
		52		T
			PHYS 203B/253B	College Physics/Lab
			IMAE 208	Manufacturing Processes
			IMAE 305	Industrial Safety
			IMAE 307 -or- MATH 140	Applied Calculus for Technology -or- Short Course in Calculus
			IMAE 340 -or- PSYC 323**	Intro to Supervision -or- Organizational Psychology
			IMAE 375	Production & Inventory Management
			IMAE 390	Cost Estimating
			IMAE 392	Facilities Planning & Workplace Design
			IMAE 442	Fundamentals of Leadership
			IMAE 445	Computer Integrated Manufacturing
			IMAE 450	Project Management
			IMAE 465	Lean Manufacturing
			IMAE 470A	Six Sigma Green Belt I
			IMAE 470B	Six Sigma Green Belt II
			IMAE 476	Supply Chain Management
			IMAE Electives	(Must be at 300/400 level)
				52-53
Total semester hrs completed w/ AAS degree		69	Total semester hrs completed w/ BS degree	64-65
<i>Degree Plan created 4/1/2022 by SW</i>			Total hours to BS degree:	133-134
			**PSYC 323 is an option for on-campus students only & requires PSYC 102 as a prerequisite	