Richland Community College	2022-2023		Southern Illinois University Carbondale		
AS Welding Technology - Industrial and I	Equipment Speciality- 64 hrs		BS Industrial Management and Applied Enginee	ring (IMAE) - 120 hrs	
· · · ·			University Core Curriculum (UCC) Capstone	Option - 30 hrs	
		Hrs	· · · · · · · · · · · · · · · · · · ·		Hrs
			UNIV 101	Saluki Success	NA
ENGL 101	English Composition I	3	ENGL 101	English Composition I	T
	English Composition i	5	ENGL 102	English Composition II	NA
COMM 101	Public Speaking	3	CMST 101	Intro to Oral Communication	T
		4			T
MATH 116*	College Algebra IAI SOCIAL SCIENCE		MATH 108 (Required for BS degree)	College Algebra	T
	IAI SOCIAL SCIENCE	3	SOCIAL SCIENCE	(See SIUC Equivalency Guide)	
			SOCIAL SCIENCE		3
			HUMANITIES		3
			HUMANITIES		NA
PHYS 101*	Intro to Physics I	4	PHYS 203/253A (Required for BS degree)	College Physics/Lab	Т
			LIFE SCIENCE, GRP II	Students take 2 physics courses	NA
			FINE ARTS		3
			HUMAN HEALTH		NA
*Recommended to fulfill BS requirement			MULTICULTURAL		3
		17			12
Program Requirements			Program Requirements		
ENGT 105	Occupational Safety	3		·	
ENGT 131	Maintenance Fundamentals	4	1		
ENGT 200	Industrial Materials	3	1		
INGT 231	Piping Fundamentals	2	-		
ENGT 232	Rigging & Cranes	2	-		
VELD 100	Welding Fundamentals	2	_		
VELD 100	Shielded Metal Arc Welding	4	_		
			The AAC designs in Welding Technology	la durataial and Equipment Operaiality on anticulated fulfills that	
			The AAS degree in Welding Technology - Industrial and Equipment Speciality as articulated fulfills the 22 hrs of		
VELD 120	Intermediate Shielded Metal Arc Welding	3			
VELD 125	Gas Metal Arc/Flux Core Arc Welding (MIG)	2		e BS degree in Industrial Management & Applied Engineering.	
VELD 125 VELD 130	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding	2 3			
VELD 125 VELD 130 VELD 135	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding	2 3 3			
VELD 125 VELD 130 VELD 135 VELD 140	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding	2 3 3 4			
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety	2 3 3 4 3			
VELD 125 VELD 130 VELD 135 VELD 140	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding	2 3 3 4 3 2			
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety	2 3 3 4 3			
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding	2 3 3 4 3 2			
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3	technical electives required for the	e BS degree in Industrial Management & Applied Engineering.	
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 190 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification	2 3 4 3 2 2			
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the	e BS degree in Industrial Management & Applied Engineering.	T
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the IMAE 110 (Required for BS degree) PHYS 203B/253B	e BS degree in Industrial Management & Applied Engineering. Geometric Dimensioning & Tolerancing College Physics/Lab	T4
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208	e BS degree in Industrial Management & Applied Engineering. Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes	T 4 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305	e BS degree in Industrial Management & Applied Engineering. Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety	T 4 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 305 IMAE 307 -or- MATH 140	e BS degree in Industrial Management & Applied Engineering. Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus	T 4 3 3-4
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 307 -or- MATH 140 IMAE 307 -or- PSYC 323**	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology	T 4 3 3-4 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 - or- MATH 140 IMAE 340 - or- PSYC 323** IMAE 375	e BS degree in Industrial Management & Applied Engineering. Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management	T 4 3 3-4 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323** IMAE 375 IMAE 390	e BS degree in Industrial Management & Applied Engineering. Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating	T 4 3 3-4 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 305 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323** IMAE 375 IMAE 390 IMAE 390 IMAE 392	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design	T 4 3 3-4 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323** IMAE 375 IMAE 392 IMAE 442	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 - or- MATH 140 IMAE 340 - or- PSYC 323** IMAE 375 IMAE 390 IMAE 392 IMAE 442 IMAE 445	e BS degree in Industrial Management & Applied Engineering. Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing	T 4 3 3.4 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323** IMAE 375 IMAE 390 IMAE 390 IMAE 392 IMAE 445 IMAE 445 IMAE 450	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323** IMAE 390 IMAE 442 IMAE 445 IMAE 445 IMAE 450 IMAE 465	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323** IMAE 375 IMAE 390 IMAE 390 IMAE 392 IMAE 445 IMAE 445 IMAE 450	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323** IMAE 390 IMAE 442 IMAE 445 IMAE 445 IMAE 450 IMAE 465	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323** IMAE 375 IMAE 392 IMAE 442 IMAE 442 IMAE 445 IMAE 455 IMAE 470A	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II	T 4 3 3 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree)         IMAE 110 (Required for BS degree)         PHYS 203B/253B         IMAE 305         IMAE 307 -or- MATH 140         IMAE 307 -or- PSYC 323**         IMAE 375         IMAE 390         IMAE 392         IMAE 445         IMAE 445         IMAE 445         IMAE 470B         IMAE 476	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt I Six Sigma Green Belt I	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	technical electives required for the iMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 375 IMAE 375 IMAE 375 IMAE 375 IMAE 390 IMAE 390 IMAE 420 IMAE 445 IMAE 445 IMAE 445 IMAE 445 IMAE 470A IMAE 470B	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree)         IMAE 110 (Required for BS degree)         PHYS 203B/253B         IMAE 305         IMAE 307 -or- MATH 140         IMAE 307 -or- PSYC 323**         IMAE 375         IMAE 390         IMAE 392         IMAE 445         IMAE 445         IMAE 445         IMAE 470B         IMAE 476	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt I Six Sigma Green Belt I Supply Chain Management	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 190 VELD 202 VELD 200 or WELD 295 ENGT 102	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project Blueprint Reading	2 3 4 3 2 2 3 3 3 <b>48</b>	technical electives required for the iMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 307 -or- PSYC 323** IMAE 375 IMAE 375 IMAE 375 IMAE 390 IMAE 375 IMAE 420 IMAE 445 IMAE 445 IMAE 445 IMAE 445 IMAE 470A IMAE 470B IMAE 470B IMAE 476 IMAE Electives	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt I Six Sigma Green Belt I Supply Chain Management	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 145 VELD 190 VELD 202 VELD 202	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project Blueprint Reading	2 3 4 3 2 2 3 3 3	IMAE 110 (Required for BS degree)         IMAE 110 (Required for BS degree)         PHYS 203B/253B         IMAE 305         IMAE 307 -or- MATH 140         IMAE 307 -or- PSYC 323**         IMAE 375         IMAE 390         IMAE 392         IMAE 445         IMAE 445         IMAE 445         IMAE 470B         IMAE 476	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt I Six Sigma Green Belt I Supply Chain Management	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
VELD 125 VELD 130 VELD 135 VELD 140 VELD 145 VELD 190 VELD 202 VELD 200 or WELD 295 ENGT 102	Gas Metal Arc/Flux Core Arc Welding (MIG) Gas Tungsten Arc Welding Advanced Shielded Metal Arc Welding Pipe Welding Welding Tools and Safety Maintenance Repair Welding Welder Certification Work Exp Practicum & Seminar or Workplace Simulation/Project Blueprint Reading	2 3 4 3 2 2 3 3 3 <b>48</b>	technical electives required for the iMAE 110 (Required for BS degree) PHYS 203B/253B IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 307 -or- PSYC 323** IMAE 375 IMAE 375 IMAE 375 IMAE 390 IMAE 375 IMAE 420 IMAE 445 IMAE 445 IMAE 445 IMAE 445 IMAE 470A IMAE 470B IMAE 470B IMAE 476 IMAE Electives	Geometric Dimensioning & Tolerancing College Physics/Lab Manufacturing Processes Industrial Safety Applied Calculus for Technology -or- Short Course in Calculus Intro to Supervision -or- Organizational Psychology Production & Inventory Management Cost Estimating Facilities Planning & Workplace Design Fundamentals of Leadership Computer Integrated Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt I Six Sigma Green Belt I Supply Chain Management	T 4 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3