PROGRAM ARTICULATION DEGREE PLAN

Richland Community College	***2021-2022***		***Southern Illinois University Carbondale***		
AAS Engineering Technology - CNC Technology Specialty - 69 hrs			BS Industrial Management and Applied Engineering (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
			ENGL 102	English Composition II	NA
COMM 101	Public Speaking	3	CMST 101	Intro to Oral Communication	T
MATH 116*	College Algebra	4	MATH 108 (Required for BS degree)	College Algebra	T
	IAI SOCIAL SCIENCE	3	SOCIAL SCIENCE	*(See SIUC Equivalency Guide)*	T
			SOCIAL SCIENCE		3
			HUMANITIES		3
			HUMANITIES		NA
PHYS 101	Intro to Physics I	4	PHYS 203/253A (Required for BS degree)	College Physics/Lab	T
			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**		
DRAFT 103 or 236	AutoCAD, Introductory -or- Solid Modeling I	4	**The AAS degree in Engineering Technology - CNC Technology as articulated fulfills the 22 hrs of technical electives required for the BS degree in Industrial Management & Applied Engineering.**		
ENGT 101	Motor Control Fundamentals	4			
ENGT 103	Fluid Power Fundamentals	3			
ENGT 104	CNC Fundamentals	3			
ENGT 105	Occupational Safety	3			
ENGT 131	Maintenance Fundamentals	4			
ENGT 150	Machining Fundamentals	2			
ENGT 151	Cutting and Workholding	2			
ENGT 160	Metrology and Quality Control	3			
ENGT 200	Industrial Materials	3			
ENGT 213	Robotic Fundamentals	3			
ENGT 250	CNC Turning	3			
ENGT 251	CNC Milling	3			
ENGT 252	CAM Applications	3			
ENGT 290 (or ENGT 295 or ENGT 299)	Workplace Exp. Practicum & Seminar (or Workplace Simulation & Project or Systems Integration)	3			
ENGT 100	Manufacturing Processes	3	IMAE 208 (Required for BS degree)	Manufacturing Processes	T
ENGT 102	Blueprint Reading	3	IMAE 110 (Required for BS degree)	Geometric Dimensioning & Tolerancing	T
		52			
			PHYS 203B/253B	College Physics/Lab	4
			IMAE 305	Industrial Safety	3
			IMAE 307 -or- MATH 140	Applied Calculus for Technology -or- Short Course in Calculus	3-4
			IMAE 340 -or- PSYC 323**	Intro to Supervision -or- Organizational Psychology	3
			IMAE 375	Production & Inventory Management	3
			IMAE 390	Cost Estimating	3
			IMAE 392	Facilities Planning & Workplace Design	3
			IMAE 442	Fundamentals of Leadership	3
			IMAE 445	Computer Integrated Manufacturing	3
			IMAE 450	Project Management	3
			IMAE 465	Lean Manufacturing	3
			IMAE 470A	Six Sigma Green Belt I	3
			IMAE 470B	Six Sigma Green Belt II	3
			IMAE 476	Supply Chain Management	3
			IMAE Electives	(Must be at 300/400 level)	6
					49-50
Total semester hrs completed w/ AAS degree		**69**	**Total semester hrs completed w/ BS degree**		**61-62**
Degree Plan created 2/28/2022 by SW			**Total hours to BS degree:**		**130-131**
			**PSYC 323 is an option for on-campus students only & requires PSYC 102 as a prerequisite		