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Elgin Community College 2022-2023				Southern Illinois University Carbondale	
AAS Energy Management - Renewable Energy - 67 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
			CMST 101	Intro:Oral Communication	3
ENG 101	English Composition I	3	ENGL 101	English Composition I	T
ENG 102	English Composition II	3	ENGL 102	English Composition II	T
IMT 107-or-MATH 112*	Technical Math I -or- College Algebra	4	MATH 108 (Required for Degree)	College Algebra	T
SOCIAL/BEHAVIORAL SCIENCE	(See SIUC Equivalency Guide)	3	SOCIAL SCIENCE	(See SIUC Equivalency Guide)	T
			SOCIAL SCIENCE		3
HUMANITIES/FINE ARTS**	(See SIUC Equivalency Guide)	3	HUMANITIES	(See SIUC Equivalency Guide)	T
			HUMANITIES		NA
			PHYS 203/253A (Required for BS degree)	College Physics/Lab	4
			LIFE SCIENCE	Students take 2 physics courses	3
			FINE ARTS		3
			HUMAN HEALTH		NA
*MTH 112 articulates as a Mathematics UCC requirement at SIUC			MULTICULTURAL		3
**Liberal Education Course		16			19
Program Requirements				Program Requirements	
ECS 111	Intro to Photovoltaic Systems	3	<p>The AAS degree in Energy Management - Renewable Energy as articulated fulfills the 22 hrs of technical electives and the following course requirements for the BS degree in Industrial Management & Applied Engineering.</p>		
ECS 112	Survey of Renewable Energy Systems	2			
ECS 113	Energy Auditing	3			
ECS 116	Intro to Wind Energy	3			
ECS 117	Intro to Sustainable Heating Systems	3			
ECS 118	Photovoltaic System Application	3			
ECS 119	Wind Turbine Service	3			
ECS 202	Commercial Load Calculations	3			
HAC 101	Air Conditioning and Refrigeration I	3			
HAC 102	Air Conditioning and Refrigeration II	4			
HAC 103	Basic Heating Gas/Oil	3			
HAC 110	Heat Pumps & Electrical Heat	3			
HAC 114	Basic Electricity and HVACR Controls	3			
IST 105	Electrical Control Circuits	3			
IST 140	Programmable Controllers I	3			
IST 142	Programmable Controllers II	3			
IST 235	AC Drives	3			
		51			
			PHYS 203/253B	College Physics/Lab	4
			IMAE 208	Fundamentals of Manufacturing Processes	3
			IMAE 110	Geometric Dimensioning & Tolerancing	3
			IMAE 305	Industrial Safety	3
			IMAE 307 -or- MATH 140	Applied Calc for Tech -or- Short Course in Calc	3
			IMAE 340 -or- PSYC 323**	Intro to Supervision -or- Organizational Psych	3
			IMAE 375	Production and 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
			**PSYC 323 is an option for on-campus students only & requires PSYC 102 as a prerequisite		55
Total semester hrs completed w/ AAS degree		67	Total semester hrs completed w/ BS degree		74
Plan updated 10/25/2022-LB			Total hours to BS degree:		141