

PROGRAM ARTICULATION DEGREE PLAN					
<b>Oakton Community College 2019-2020</b>				<b>Southern Illinois University Carbondale</b>	
AAS Facilities Energy Systems Technology - 61 hours				BS Industrial Management and Applied Engineering (IMAE) - 120 hrs	
		<b>Hrs</b>		<b>University Core Curriculum (UCC) Capstone Option - 30 hrs</b>	
					<b>Hrs</b>
SPE 103	Effective Speech	3	UNIV 101	Saluki Success	NA
EGL 101	Composition I	3	CMST 101	Intro to Oral Communication	T
			ENGL 101	English Composition I	T
			ENGL 102	English Composition II	NA
MAT 140	College Algebra	3	MATH 108 (Required for BS degree)	College Algebra	T
SOCIAL SCIENCE	(See SIUC Equivalency Guide)	3	SOCIAL SCIENCE		T
			SOCIAL SCIENCE		3
HUMANITIES/FINE ARTS	(See SIUC Equivalency Guide)	3	HUMANITIES		T
			HUMANITIES		NA
PHY 101 -or- PHY 131	Applied Physics -or- College Physics I	4	PHYS 203/253A (Required for BS degree)	College Physics/Lab	T
			LIFE SCIENCE, GRP II		3
			FINE ARTS		3
			HUMAN HEALTH		NA
			MULTICULTURAL		3
					<b>12</b>
		<b>19</b>			
*Student must choose courses that fulfill both the Global Studies and U.S. Diversity Studies requirements					
<b>Major Requirements-28</b>			<b>Program Requirements</b>		
AHR 101	Introduction to Air Conditioning and Refrigeration	4	The AAS degree in Facilities Energy Systems Technology as articulated fulfills the 22 hours of technical elective course requirements for the BS degree in Industrial Management & Applied Engineering.		
AHR 105	EPA Section 608 Certification	1			
AHR 206	Residential Hot Water Boilers and Hydronics Technology	3			
CIS 101 -or- CIS 103	Introduction to Computer Info Systems -or- Computer Software Concepts	3			
FME 101	Introduction to Facilities Management and Engineering	3			
FME 107	Blue Print Reading for Building Trades	4			
FME 201	Mechanical and Electrical Systems in Buildings	4			
FME 240	Energy Management and DDC Controls	3			
MFG 135	Hydraulics, Pneumatics and Controls	3			
		<b>28</b>			
<b>Major Electives-14</b>					
Choose at least 14 hrs from the following courses:					
AHR 104	Intro to Electricity and Automatic Controls	4			
AHR 208	Advanced Automatic Controls	4			
AHR 209	Low Pressure Steam Boilers and Operation	3			
AHR 212	Indoor Air Quality	3			
AHR 213	Commercial HVAC Systems Applications	4			
AHR 214	Energy Audit, Analysis and Management	4			
CAD 116	Basic AutoCAD	3			
ELT 101	Introduction to Electronics	5			
FME 251	Facilities Engineering Practicum	3			
MFG 240	Programmable Controllers (PLC)	4			
		<b>14</b>			
			PHYS 203B/253B	College Physics/Lab	4
			IMAE 110	Geometric Dimensioning and Tolerancing	3
			IMAE 208	Manufacturing Processes	3
			IMAE 305	Industrial Safety	3
			IMAE 307 -or- MATH 140	Applied Calculus for Technology -or- Short Course in Calculus	3
			IMAE 340 -or- PSYC 323*	Intro to Supervision -or- Organizational Psychology	3
			IMAE 376	Supply Chain Operations & Logistics	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 Design & Strategy	3
			IMAE Electives	(Must be at 300/400 level)	3
					<b>52</b>
<b>Total semester hrs completed w/ AAS degree</b>		<b>61</b>	<b>Total semester hrs completed w/ BS degree</b>		<b>64</b>
			<b>Total hours to BS degree:</b>		<b>125</b>
*PSYC 323 is an option for on-campus students only & requires PSYC 102 as a prerequisite					