PROGRAM ARTICULATION DEGREE PLAN					
College of Lake County 2021-2022			***Southern Illinois University Carbondale***		
AAS Laser/Photonics/Optics - 66-70 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
CMM 121	Fundamentals of Speech	3	CMST 101	Intro to Oral Communication	T
ENG 121	English Composition I	3	ENGL 101	English Composition I	T
			ENGL 102	English Composition II	NA
MTH 122	College Algebra	5	MATH 108	College Algebra	T
ECO 110	Economics for Business and Industry	3	ECON 113	Economics of Contemporary Social Issues	T
			SOCIAL SCIENCE		3
HUM 127 -or- PHI 125	Critical Thinking -or- Ethics	3	PHIL 105 -or- PHIL 04	Elementary Logic -or- Ethics	T
			HUMANITIES		NA
PHY 121	General Physics I	5	PHYS 203/253A	College Physics	T
			LIFE SCIENCE, GRP II	Students take 2 physics courses	NA
			FINE ARTS		3
			HUMAN HEALTH		NA
			MULTICULTURAL		3
		22			**9**
Program Requirements			**Program Requirements**		
CLC 120	College Success Seminar	2			
ARM 156/157/158 -or- EET 115/170/174	Electrical Systems I/II/III -or- Electronic Laboratory Techniques/DC Circuit Fundamentals/AC Fundamentals	3-6			
CAD 170	Intro to SolidWorks	3			
EET 223	Introduction to Digital Electronics	4			
EWE 120 -or- LPO 290	Job Readiness Skills -or- LPO Capstone Proposal	1			
LPO 112	Elements of Photonics	3			
LPO 113	Photonics-Enabled Technologies	3			
LPO 145 -or- EET 216	Photonics CAD Apps -or- Microprocessors	3-4			
LPO 211	Quality Assurance for Precision Optics	3			
LPO 212	Elements of Photonics II	3			
LPO 250	Laser and Electro-Optic Devices	3			
LPO 291 -or- EWE 220	LPO Project or Research Capstone -or- Internship I	3			
CMM 122 -or- CMM 128	Business & Prof Speaking -or- Interviewing Practices	3	CMST 280 or GENL 1XX	Bu & Prof Comm -or- Interviewing Practices	T
Recommended LPO Electives					
MET 111	Manufacturing Processes (LPO Elective)	3	IMAE 208 (Required for BS degree)	Fundamentals of Manufacturing Processess	T
PHY 122*	General Physics II (LPO Elective)	5	Phys 203B/253B (Required for BS degree)	College Physics II w/ Lab	T
		46-50	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	3-4
*Recommended to fulfill BS degree requirements			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)	3
					45-46
Total semester hrs completed w/ AAS degree		**68-71**	**Total semester hrs completed w/ BS degree**		**54-55**
			Total hours to BS degree:		**121-126**

The AAS degree in Laser/Photonics/Optics as articulated fulfills the 22 hrs of technical electives and the following course requirements for the BS degree in Industrial Management & Applied Engineering.