

PROGRAM ARTICULATION DEGREE PLAN			
College of DuPage 2017-2018		Southern Illinois University Carbondale	
AAS Manufacturing Technology/Drafting/Design - 67 hrs		BS Industrial Management and Applied Engineering (IMAE) - 120 hrs	
General Education		University Core Curriculum (UCC) CAPSTONE OPTION - 30 hrs	
	Hrs		Hrs
ENGLI 1101	English Composition I	UCOL 101	Foundations of Inquiry
	3	ENGL 101	English Composition I
		ENGL 102	English Composition II
SPEEC 1100 or SPEEC 1150	Fundamentals of Speech or Intro: Business Communication	CMST 101	Intro: Oral Communication
MATH 1431	Precalculus I	MATH 108 (Required for BS degree)	College Algebra
PSYCH 1100	General Psychology	PSYC 102	Intro to Psychology
IAI HUMANITIES/FINE ARTS	(See SIUC Equivalency Guide)	SOCIAL SCIENCE	
	3	HUMANITIES	
		HUMANITIES	
PHYSI 1201	General Physics I	PHYS 203/253A (required for BS degree)	College Physics/Lab
	5	LIFE SCIENCE, GRP II	
		FINE ARTS	
		HUMAN HEALTH	
		MULTICULTURAL	
	22		12
Program Requirements		Program Requirements	
ELECT 1100	Electricity and Electronics Fundamentals	Technical Electives - 22 hrs (Any unarticulated course will be used to satisfy technical electives.)	
MANUF 1101	Industrial Design/CAD	IMAE 105	Computer-Aided Drafting
MANUF 1104	Technical Mechanics		
MANUF 1121	Physical Metallurgy		
MANUF 1151	Machine Shop I	IMAE 208 (Required for BS degree)	Fundamentals of Manufacturing Processes
MANUF 1180	Quality Control		
MANUF 2202	Solid Modeling and Design		
MANUF 2203	Manufacturing Processes and Design		
MANUF 2206	Mechanical Computer-Aided Drafting/Design		
MANUF 2207	Tool Design		
MANUF 2208	Mechanical Design Portfolio		
	32		
Program Electives			
Select at least 13 hrs from the following courses:			
ELMEC 1141	Hydraulics and Pneumatics		
ELMEC 1171	Introduction to Robotic Technology		
ELMEC 1190	Introduction to Programmable Logic Controllers		
MANUF 1110	Metrology		
MANUF 2201 *	Geometric Dimensioning and Tolerancing	IMAE 110 (Required for BS degree)	Geometric Dimensioning and Tolerancing
MANUF 2251	Computer Numerical Control (CNC)		
MANUF 2280	Industrial Safety		
MANUF 2281	Cost Analysis		
WELD 1100	Welding I		
	13		
* Required to fulfill SIUC degree requirements		MATH 140* or IMAE 307	Short Course in Calculus or Applied Calculus
		PHYS 203/253B	College Physics/Lab
		IMAE 305	Industrial Safety
		PSYC 323 or IMAE 340	Organizational Psychology or Intro to Supervision
		IMAE 376	Supply Chain Operations & Logistics
		IMAE 390	Cost Estimating
		IMAE 392	Facilities Plan/Workplace Dsgn
		IMAE 442	Fundamentals of Leadership
		IMAE 445	Computer-Aided Manufacturing
		IMAE 450	Project Management
		IMAE 465	Lean Manufacturing
		IMAE 470A	Six Sigma Green Belt I
		IMAE 470B	Six Sigma Green Belt II
		IMAE 476	Supply Chain Design & Strategy
		IMAE Electives	300/400 level
			6
Total semester hrs completed w/ AS degree:	67	*Students that take MATH 140 will not be able to count course toward senior hours	49-50
		Total semester hrs completed w/ BS degree:	61-62
		Total to BS Degree:	128-129

PROGRAM ARTICULATION DEGREE PLAN			
College of DuPage 2017-208		Southern Illinois University Carbondale	
AAS Manufacturing Engineering Technology - 65 hrs		BS Industrial Management and Applied Engineering (IMAE) - 120 hrs	
General Education		University Core Curriculum (UCC) CAPSTONE OPTION - 30 hrs	
		Hrs	Hrs
		UCOL 101	Foundations of Inquiry
ENGLI 1101	English Composition I	3 ENGL 101	English Composition I
		ENGL 102	English Composition II
SPEEC 1100 or SPEEC 1150	Fundamentals of Speech or Intro: Business Communication	3 CMST 101	Intro: Oral Communication
MATH 1431	Precalculus I	5 MATH 108 (Required for BS degree)	College Algebra
PSYCH 1100	General Psychology	3 PSYC 102	Intro to Psychology
IAI HUMANITIES/FINE ARTS	(See SIUC Equivalency Guide)	SOCIAL SCIENCE 3	
		HUMANITIES T	
		HUMANITIES NA	
PHYSI 1201	General Physics I	5 PHYS 203/253A (required for BS degree)	College Physics/Lab
		LIFE SCIENCE, GRP II 3	
		FINE ARTS 3	
		HUMAN HEALTH NA	
		MULTICULTURAL 3	
		22	12
Program Requirements		Program Requirements	
ELECT 1100	Electricity and Electronics Fundamentals	3	Technical Electives - 22 hrs (Any unarticulated course will be used to satisfy technical electives.)
ELMEC 1141	Hydraulics and Pneumatics	3	
MANUF 1101	Industrial Design/CAD	3	IMAE 105
MANUF 1121	Physical Metallurgy	3	Computer-Aided Drafting
MANUF 1151	Machine Shop I	3	IMAE 208 (Required for BS degree)
MANUF 1160	Technical Static and Strength of Material	4	Fundamentals of Manufacturing Processes
MANUF 1180	Quality Control	3	
MANUF 2202	Solid Modeling and Design	3	
MANUF 2203	Manufacturing Processes and Design	3	
MANUF 2251	Computer Numerical Control (CNC)	3	
MANUF 2253	Computer-Aided Manufacturing (CAM)	3	
MANUF 2281	Cost Analysis	2	
MATH 1432	Precalculus II: Trigonometry	3	
MATH 1635	Statistics	4	MATH 109
		43	MATH 282
			Trigonometry and Analytic Geometry
			Intro to Statistics
			IMAE 110
			Geometric Dimensioning and Tolerancing
			MATH 140* or IMAE 307
			Short Course in Calculus or Applied Calculus
			PHYS 203/253B
			College Physics/Lab
			IMAE 305
			Industrial Safety
			PSYC 323 or IMAE 340
			Organizational Psychology or Intro to Supervision
			IMAE 376
			Supply Chain Operations & Logistics
			IMAE 390
			Cost Estimating
			IMAE 392
			Facilities Plan/Workplace Dsgn
			IMAE 442
			Fundamentals of Leadership
			IMAE 445
			Computer-Aided Manufacturing
			IMAE 450
			Project Management
			IMAE 465
			Lean Manufacturing
			IMAE 470A
			Six Sigma Green Belt I
			IMAE 470B
			Six Sigma Green Belt II
			IMAE 476
			Supply Chain Design & Strategy
			IMAE Electives
			300/400 level
			*Students that take MATH 140 will not be able to count course toward senior hours
			52-53
Total semester hrs completed w/ AS degree:		65	Total semester hrs completed w/ BS degree:
			64-65
			Total to BS Degree:
			129-130

PROGRAM ARTICULATION DEGREE PLAN			
College of DuPage 2017-2018		Southern Illinois University Carbondale	
AAS Manufacturing Technology - 87 hrs		BS Industrial Management and Applied Engineering (IMAE) - 120 hrs	
General Education		University Core Curriculum (UCC) CAPSTONE OPTION - 30 hrs	
		Hrs	Hrs
ENGLI 1101	English Composition I	3	ENGL 101 Foundations of Inquiry
			ENGL 102 English Composition I
			ENGL 102 English Composition II
SPEEC 1100 or SPEEC 1150	Fundamentals of Speech or Intro: Business Communication	3	CMST 101 Intro: Oral Communication
MATH 1431	Precalculus I	5	MATH 108 (Required for BS degree) College Algebra
PSYCH 1100	General Psychology	3	PSYC 102 Intro to Psychology
			SOCIAL SCIENCE
IAI HUMANITIES/FINE ARTS	(See SIUC Equivalency Guide)	3	HUMANITIES
			HUMANITIES
PHYSI 1201	General Physics I	5	PHYS 203/253A (required for BS degree) College Physics/Lab
			LIFE SCIENCE, GRP II
			FINE ARTS
			HUMAN HEALTH
			MULTICULTURAL
		22	12
Program Requirements		Program Requirements	
ELECT 1100	Electricity and Electronics Fundamentals	3	Technical Electives - 22 hrs (Any unarticulated course will be used to satisfy technical electives.)
ELMEC 1141	Hydraulics and Pneumatics	3	
MANUF 1101	Industrial Design/CAD	3	IMAE 105 Computer-Aided Drafting
MANUF 1104	Technical Mechanics	2	
MANUF 1110	Metrology	3	
MANUF 1151	Machine Shop I	3	IMAE 208 (Required for BS degree) Fundamentals of Manufacturing Processes
MANUF 1153	Advanced Machine Processes	3	IMAE 209 Manufacturing Process Laboratory
MANUF 1180	Quality Control	3	
MANUF 2251	Computer Numerical Control (CNC)	3	
WELD 1100	Welding I	3	
		29	
Program Electives			
Select at least 16 hrs from the following courses:			
ELMEC 1171	Introduction to Robotic Technology	3	
MANUF 1121	Physical Metallurgy	3	
MANUF 2201 *	Geometric Dimensioning and Tolerancing	3	IMAE 110 (Required for BS degree) Geometric Dimensioning and Tolerancing
MANUF 2202	Solid Modeling and Design	3	
WELD 1112	Oxy-Fuel, Welding, Plasma Cutting and Brazing	3	
WELD 1122	Shielded Metal Arc (SMAW)	3	
WELD 1132	Gas Metal Arc (MIG)	3	
WELD 1142	Gas Tungsten Arc (TIG)	3	
		16	
<i>* Recommended course to fulfill SIUC degree requirements</i>		MATH 140* or IMAE 307	Short Course in Calculus or Applied Calculus
		PHYS 203/253B	College Physics/Lab
		IMAE 305	Industrial Safety
		PSYC 323 or IMAE 340	Organizational Psychology or Intro to Supervision
		IMAE 376	Supply Chain Operations & Logistics
		IMAE 390	Cost Estimating
		IMAE 392	Facilities Plan/Workplace Dsgn
		IMAE 442	Fundamentals of Leadership
		IMAE 445	Computer-Aided Manufacturing
		IMAE 450	Project Management
		IMAE 465	Lean Manufacturing
		IMAE 470A	Six Sigma Green Belt I
		IMAE 470B	Six Sigma Green Belt II
		IMAE 476	Supply Chain Design & Strategy
		IMAE Electives	300/400 level
			6
			42
			49-50
Total semester hrs completed w/ AS degree:		67	61-62
		Total to BS Degree:	128-129

PROGRAM ARTICULATION DEGREE PLAN							
College of DuPage 2017-2018				Southern Illinois University Carbondale			
AS/Articulated Manufacturing Systems 68 hrs				BS Industrial Management and Applied Engineering (IMAE) 120 hrs			
General Education				University Core Curriculum (UCC) CAPSTONE OPTION - 30 hrs			
		Hrs				Hrs	
ENGLI 1101	English Composition I	3	UCOL 101	Foundations of Inquiry		NA	
			ENGL 101	English Composition I		T	
			ENGL 102	English Composition II		NA	
SPEEC 1100 or SPEEC 1150	Fundamentals of Speech or Intro: Business Communication	3	CMST 101	Intro: Oral Communication		T	
MATH 1431	Precalculus I	5	MATH 108 (Required for BS degree)	College Algebra		T	
PSYCH 1100	General Psychology	3	PSYC 102	Intro to Psychology		T	
			SOCIAL SCIENCE			3	
IAI HUMANITIES/FINE ARTS	(See SIUC Equivalency Guide)	3	HUMANITIES			T	
			HUMANITIES			NA	
PHYSI 1201	General Physics I	5	PHYS 203/253A (required for BS degree)	College Physics/Lab		T	
			LIFE SCIENCE: GRP II			3	
			FINE ARTS			3	
			HUMAN HEALTH			NA	
			MULTICULTURAL			3	
		22				12	
Program Requirements				Program Requirements			
ELECT 1100	Electricity and Electronics Fundamentals	3	Technical Electives - 22 hrs (Any unarticulated course will be used to satisfy technical electives.)				
ELMEC 1141	Hydraulics and Pneumatics	3					
ELMEC 1171	Introduction to Robotic Technology	3					
ELMEC 1190	Introduction to Programmable Logic Controllers	3					
MANUF 1101	Industrial Design/CAD	3	IMAE 105	Computer-Aided Drafting		T	
MANUF 1104	Technical Mechanics	2					
MANUF 1110	Metrology	3					
MANUF 1121	Physical Metallurgy	3					
MANUF 1151	Machine Shop I	3	IMAE 208 (Required for BS degree)	Fundamentals of Manufacturing Processes		T	
MANUF 1180	Quality Control	3					
MANUF 2202	Solid Modeling and Design	3					
MANUF 2251	Computer Numerical Control (CNC)	3					
MANUF 2253	Computer-Aided Manufacturing (CAM)	3					
MANUF 2280	Industrial Safety	2					
		40					
Program Electives							
Select at least 6 hrs from the following courses:							
MANUF 1153	Advanced Machine Processes	3	IMAE 209	Manufacturing Process Laboratory		T	
MANUF 1160	Technical Static and Strength of Material	4					
MANUF 2201 *	Geometric Dimensioning and Tolerancing	3	IMAE 110 (Required for BS degree)	Geometric Dimensioning and Tolerancing		T	
MANUF 2203	Manufacturing Processes and Design	3					
MANUF 2206	Mechanical Computer-Aided Drafting/Design	3					
MANUF 2207	Tool Design	3					
MANUF 2271	Robotic Application	3					
		6					
* Recommended course to fulfill SIUC degree requirements				MATH 140* or IMAE 307	Short Course in Calculus or Applied Calculus	3 or 4	
				PHYS 203/253B	College Physics/Lab	4	
				IMAE 305	Industrial Safety	3	
				PSYC 323 or IMAE 340	Organizational Psychology or Intro to Supervision	3	
				IMAE 376	Supply Chain Operations & Logistics	3	
				IMAE 390	Cost Estimating	3	
				IMAE 392	Facilities Plan/Workplace Dsgn	3	
				IMAE 442	Fundamentals of Leadership	3	
				IMAE 445	Computer-Aided 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	300/400 level	6	
				*Students that take MATH 140 will not be able to count course toward senior hours		49-50	
Total semester hrs completed w/ AS degree:		68	Total semester hrs completed w/ BS degree:			61-62	
			Total to BS Degree:			129-130	