Harper College 2021-2022			Southern Illinois University Carbondale		
AAS Manufacturing Technology	/ - Precision Machining - 60 hrs		BS Industrial Management and Applied Eng		
			University Core Curriculum (UCC) CAPST	ONE OPTION - 30 hrs	
		Hrs			Hrs
			UNIV 101	Foundations of Inquiry	NA
MTH 103	College Algebra	3	MATH 108 (Required for BS degree)	College Algebra	Т
SPE 101	Fund of Speech Communication	3	CMST 101	Intro: Oral Communication	Т
ENG 101	Composition	3	ENGL 101	English Composition I	Т
			ENGL 102	English Composition II	NA
	IAI Social Science*	3	SOCIAL SCIENCE	(See SIUC Equivalency Guide)	Т
			SOCIAL SCIENCE		3
	IAI Humanities*	3	HUMANITIES	(See SIUC Equivalency Guide)	Т
			HUMANITIES		NA
			PHYS 203/253A (Required for BS degree)	College Physics/Lab	4
			LIFE SCIENCE	Students take 2 physics courses	NA
			FINE ARTS	i í	3
			HUMAN HEALTH		NA
*One course must satisfy a World Cu	World Cultures and Diversity requirement		MULTICULTURAL		3
	Trong Cultures and Bivereity requirement	15	MOETIOGETOTOLE		13
		10			10
Program Requirements			Program Requirements		
MFT 102	Intro to Manufacturing and Safety	4	1 Togram Requirements		1
MFT 102	,	3	-		
	Machinging Processes I		-		
MFT 120	Machining Processes II	3	_		
	Machining Processes III	3			
MFT 121	-				
MFT 123	Intro to CNC Machininig	4			
	-	4	An AAS in Manufacturing Technolog	v - Precision Machining satisfies the 22 hours of tec	hnical
MFT 123	Intro to CNC Machininig	4		y - Precision Machining satisfies the 22 hours of tec	
MFT 123 MFT 125	Intro to CNC Machininig CNC Lathe Operation & Programming	4 4 3		y - Precision Machining satisfies the 22 hours of tec ree in Industrial Management and Applied Engineeri	
MFT 123 MFT 125 MFT 128	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming	4			
MFT 123 MFT 125 MFT 128 MFT 132	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology	4 4 3			
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry	4 4 3 3			
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance	4 4 3 3 3			
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3			
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5		ree in Industrial Management and Applied Engineeri	ng.
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg	ree in Industrial Management and Applied Engineerin College Physics/Lab	ng.
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110	ree in Industrial Management and Applied Engineerin College Physics/Lab Geometric Dimensioning & Tolerancing	4 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208	ree in Industrial Management and Applied Engineerin College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes	4 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety	4 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc	4 3 3 3 3-4
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323*	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology	4 3 3 3 3-4 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management	4 3 3 3 3-4 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 - or- MATH 140 IMAE 375 IMAE 390	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating	4 3 3 3 3-4 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375 IMAE 390 IMAE 392	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn	4 3 3 3-4 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375 IMAE 390 IMAE 392 IMAE 442	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership	4 3 3 3 3-4 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375 IMAE 390 IMAE 390 IMAE 392 IMAE 442 IMAE 445	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing	4 3 3 3-4 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375 IMAE 390 IMAE 392 IMAE 442	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership	4 3 3 3 3-4 3 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375 IMAE 390 IMAE 390 IMAE 392 IMAE 442 IMAE 445	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing	4 3 3 3-4 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 375 IMAE 375 IMAE 390 IMAE 392 IMAE 392 IMAE 442 IMAE 445 IMAE 450	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management	4 3 3 3 3-4 3 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 - or- MATH 140 IMAE 307 - or- PSYC 323* IMAE 390 IMAE 390 IMAE 392 IMAE 442 IMAE 445 IMAE 450 IMAE 450 IMAE 465	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I	4 3 3 3 3-4 3 3 3 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375 IMAE 390 IMAE 392 IMAE 442 IMAE 445 IMAE 445 IMAE 445 IMAE 450 IMAE 465 IMAE 470A	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management Lean Manufacturing	4 3 3 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 390 IMAE 392 IMAE 442 IMAE 445 IMAE 450 IMAE 450 IMAE 470A IMAE 470B	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II Supply Chain Management	4 3 3 3-4 3 3 3 3 3 3 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 390 IMAE 392 IMAE 450 IMAE 450 IMAE 450 IMAE 450 IMAE 470A IMAE 470B IMAE 476	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II	4 3 3 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturig	4 4 3 3 3 3 3 5	PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 390 IMAE 392 IMAE 450 IMAE 450 IMAE 450 IMAE 450 IMAE 470A IMAE 470B IMAE 476	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II Supply Chain Management	4 3 3 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturing Computer Aided Manufacturing	4 4 3 3 3 3 3 3 5 45	PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 390 IMAE 392 IMAE 450 IMAE 450 IMAE 450 IMAE 450 IMAE 470A IMAE 470B IMAE 476	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II Supply Chain Management (Must be at 300/400 level)	4 3 3 3 3-4 3 3 3 3 3 3 3 3 3 3 3 3 3 3
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220 Technical Electives	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturing Computer Aided Manufacturing	4 4 3 3 3 3 3 3 5 45	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375 IMAE 392 IMAE 4392 IMAE 442 IMAE 445 IMAE 450 IMAE 450 IMAE 470A IMAE 470B IMAE 470B IMAE Electives Total semester hrs completed w/ BS degree	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II Supply Chain Management (Must be at 300/400 level)	4 3 3 3 3 3 3 3 3 3 52-53 65-66
MFT 123 MFT 125 MFT 128 MFT 132 MFT 134 MFT 140 MFT 210 MFT 220 Technical Electives	Intro to CNC Machininig CNC Lathe Operation & Programming CNC Mill Operation & Programming Dimensional Metrology Print Reading for Industry Quality Assurance Computer Integrated Manufacturing Computer Aided Manufacturing	4 4 3 3 3 3 3 3 5 45	electives required for the BS deg PHYS 203/253B IMAE 110 IMAE 208 IMAE 305 IMAE 307 -or- MATH 140 IMAE 340 -or- PSYC 323* IMAE 375 IMAE 390 IMAE 392 IMAE 442 IMAE 445 IMAE 450 IMAE 450 IMAE 470A IMAE 470B IMAE 470B IMAE Electives Total semester hrs completed w/ BS degitation of the seminary of the s	College Physics/Lab Geometric Dimensioning & Tolerancing Fundamentals of Mfg Processes Industrial Safety Applied Calc for Tech -or- Short Course in Calc Intro to Supervision -or- Organizational Psychology Production and Inventory Management Cost Estimating Facilities Plan/Workplace Dsgn Fundamentals of Leadership Computer-Aided Manufacturing Project Management Lean Manufacturing Six Sigma Green Belt I Six Sigma Green Belt II Supply Chain Management (Must be at 300/400 level)	4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 52-53