

# Automotive Technology Associate in Applied Science to NIU Bachelor of Science in Applied Manufacturing (BS-AMT)

Students should use this guide, the NIU Plus Guide and see an IVCC Counselor to choose coursework.

FALL SEMESTER (YR1)		FALL SEMESTER (YR2)	
ATO 1210 Basic Gas Engines	5	ATO 2210 Adv Engine Performance & Driveability	5
ATO 1220 Basic Automotive Electricity	3	ATO 2220 Fuel Systems & Emission Controls	4.50
ATO 2200 Brake Systems	5	ATO 2230 Automatic Transmissions	4.50
ENG 1205 Writ Comm Skills for Bus Ind & Tech	3=16	MTH 1008 General Elementary Statistics	3=17
SPRING SEMESTER (YR1)		SPRING SEMESTER (YR2)	
ATO 1270 Service Management	1	ATO 2240 Automotive Accessories	3
ATO 1240 Power Trans & Manual Trans	3.50	ATO 2260 Advanced Drivelines	3
ATO 1250 Engine Performance	3	ATO 2270 Automotive Service	4
ATO 1260 Steering and Suspension Systems	4.50	ATO 2280 Computerized Engine Controls	3
NIU General Education Course (see NIU Plus Guide)	3=14	ATO 2290 Automotive Certification	1
		NIU Society & Culture Course (see NIU Plus Guide)	3=17
SUMMER SEMESTER		TOTAL= 71	
NIU General Education Course (see NIU Plus Guide)	3		
ATO 2250 Heating and Air Conditioning	3=6		

To be eligible for admission to the B.S. in Engineering Technology degree-completion program, with an emphasis in Applied Manufacturing Technology, you must have completed – or be working to complete – an Associate of Applied Science (AAS) degree in a technology-oriented related field. The courses below must be completed in order to be eligible for the program. Some of these courses may be completed as a part of your AAS degree. Use the [NIU Plus Guide @IVCC](#) for course selection. See a IVCC Counselor for details.

General Education Requirements + Technology Foundations*		Illinois Valley CC Equivalents	
General Education (35 Hrs)	Foundational Studies (12 Hrs)	1 <sup>st</sup> + 2 <sup>nd</sup> Year Rhetoric/Composition (6 Hrs)	ENG 1001 + 1002
		Oral Communications (3 Hrs)	SPH 1001
		Quantitative Literacy (3 Hrs)	Trigonometry or Pre-calculus is required: MTH 1003 & 1004 (both courses); or MTH 1005 = MATH 155 at NIU
	Knowledge Domain Studies (23 Hrs)	Creativity & Critical Analysis (6 Hrs)	See NIU Articulation Tables
		Nature & Technology (8 Hrs)	• CHM 1004 • PHY 2003
		Society & Culture (6 Hrs)	See NIU Articulation Tables
		Gen Ed from any of the Knowledge Domain areas above (3 hrs)	See NIU Articulation Tables
Human Diversity Requirement (3 hrs) refer to NIU catalog		Can be satisfied with a Gen Ed course	
Additional Technology Foundations	Basic Statistics (3 Hrs)	MTH 1008	
	Technical Writing (3 Hrs)	ENG 1205 or ENG 2000	
	Technology (3 Hrs)	CAD 1200 or 1201	

Upon completion of this curriculum outline and acceptance to the Applied Manufacturing Technology major at NIU, students can complete the program in 30 additional NIU credit hours (listed below) online (part time only over 2 years) or on-campus, whichever they prefer.

**a. Required NIU Technology Courses (24 semester hours)**

- TECH 391: Industrial Quality Control
- TECH 404: Supervision in Industry
- TECH 406: Facilities Management Technology
- TECH 429: Plant Location, Layout & Materials Management
- TECH 432: Disaster Preparedness
- TECH 434: Human Factors in Industrial Accident Prevention
- TECH 492: Manufacturing Distribution Applications
- TECH 496: Industrial Project Management

**b. NIU Technology Electives (6 semester hours)**

- TECH 305: Green Technologies
- TECH 402: Industrial Training & Evaluation
- TECH 435: Legal Aspects of Safety
- TECH 442: Work Simplification & Measurement
- TECH 444: Manufacturing Control Systems
- TECH 484: Energy Management

**NIU contact for questions:**

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