

BS Mechatronics ET @ Purdue University Northwest	Credits	Automated Packaging Systems Technician Technical Diploma @ Northwood Technical College	Credits
Semester 1	15		12
MA 14700 – Algebra & Trig for Technology I (MA 153)	3	32804325 Applied Technical Math 1 (3 credits)	3
ET 10001 - Intr. To Mechatronics ET	3	32801361 Applied Communications (2 credits) & 32454362 Processes of Manufacturing – Packaging (2 credits)	4
MET 10000 - Prod. Drawing & CAD	3	32454344 Schematics, Prints, and Layouts (2 credits)	2
MET 24200 - Manufacturing Processes	3	32420314 Basic Machine Shop (3 credits)	3
ECET 10900 - Digital Fundamentals	3		
Semester 2	15		12
MA 14800 Algebra & Trig for Technology II	3	32804334 Applied Technical Math 2 (2 Credits)	3
MET 14100 - Materials I	3	32454359 Packaging Materials/Processes (2 credits)	3
ECET 2100 C++ Programming for Electromechanical Systems	3		
Engl 10400 - English Composition	3	10801136 English Composition 1 (3 credits) ^	3 ^
ECET 10201 - DC Circuits and Components	3	32414335 DC Electricity (3 credits)	3
Semester 3	14		3
MA 16019 - Applied Calc. For Tech I	4		
MET 11800 - Applied Mechanics: Statics	3		
PHYS 22000 - General Physics	4		
ECET 15201 - AC Circuits and Analysis	3	32414336 AC Electricity (3 credits)	3
Semester 4	16		6
MET 21300 - Dynamics	3		
ECET 26200 - Programmable Logic Controllers	3	32414380 Advanced PLC (3 credits) & 32454364 Motion Controls (2 credits)	3
ECET 21200 - Electrical Power and Motors	3		
MET 21101 - Applied Strength of Materials	3		
MET 21102 - Applied Strength of Materials Laboratory	1		
COM11400 - Fundamentals of Speech	3	32801362 Advanced Communications Skills (2 credits) & 32801361 Applied Communications (2 credits)	3
Semester 5	15		9
ECET 15401 Electronic Component Circuits	3	32454347 Electromechanical Componentry (4 credits)	3
IET 30800 - Engr. Proj. Management and Economic Analysis	3*		
MET 23000 - Fluid Power	3	32454341 Fluid Power Systems (3 credits)	3
MET 21501 - Applied Machine Elements	3		
MCET 48100 - Programming Industrial Robots	3	32454366 Introduction to Robotics (2 credits)	3
Semester 6	15		0
ET 35200 - Operations Management	3 *		
OLS 30000 - Safety and Health for ET	3 *		
MCET 47200 - PLC for Adv. Mechatronics Appl.	3 *		
MCET 48200 - Robotic System Integration	3 *		
MCET 33000 - Industrial Prog. and Networking	3 *		
Semester 7	15		3

ENGL 22000 - Technical Report Writing	3	10801197 Technical Reporting (3 credits) ^	3 ^
ECET 36200 - Process Control Instrumentation	3 *		
MCET 46200 - Appl. Of Computers in Process Control	3 *		
ET 49500 - Senior Project Survey	3 *		
OLS 47400 - Conference Leadership	3 *		
Semester 8	15		9
MET 4200 - Machine Design	3 *		
ET 49700 - Senior Project Survey	3 *		
Gen. Ed. Social Science	3	Choose One of The Following Courses (all 3 credits): ^ • 10809122 Introduction to American Government, • 10809143 Microeconomics, • 10809144 Macroeconomics, • 10809172 Introduction to Diversity Studies, • 10809195 Economics, • 10809196 Introduction to Sociology, • 10809159 Abnormal Psychology, • 10809188 Developmental Psychology, • 10809198 Introduction to Psychology	3 ^
Concentration Selective	3	32454345 Packaging Systems Equipment Control (3 credits)	3
Gen. Ed. Humanity Course	3	10809166 Introduction to Ethics: Theory and Application (3 credits) ^	3 ^
Total	120		(42+12^) 54 Credits

3* - the course must be at Purdue Northwest to fulfill the BS degree requirement.

^ These Northwood Tech courses are not required in the Automated Packaging Systems Technician program but are additional general education options available at Northwood Tech. They have been reviewed and meet the transfer requirements for the BS degree.

The following Northwood Tech Automated Packaging Systems Technician program courses do not transfer:

- 32454340 Packaging Machine Maintenance (3 credits)
- 32454343 Packaging Machine Rebuilding (5 credits)
- 32454348 Troubleshooting (2 credits)
- 32454349 Installation of Packaging Machines (5 credits)
- 32454357 Power Transmission Componentry (2 credits)
- 32150302 Applied IT Basics (1 credit)
- 32442307 Welding for Mechanics (2 credits)
- 32809380 Applied Interpersonal Skills (2 credits)

The remaining courses include,

ECET 10900 - Digital Fundamentals	3	ET 35200 - Operations Management	3 *
ECET 2100 C++ Programming for Electromechanical Systems	3	OLS 30000 - Safety and Health for ET	3 *
MA 16019 - Applied Calc. For Tech I	4	MCET 47200 - PLC for Adv. Mechatronics Appl.	3 *
MET 11800 - Applied Mechanics: Statics	3	MCET 48200 - Robotic System Integration	3 *
PHYS 22000 - General Physics	4	MCET 33000 - Industrial Prog. and Networking	3 *
MET 21300 - Dynamics	3	ECET 36200 - Process Control Instrumentation	3 *
ECET 21200 - Electrical Power and Motors	3	MCET 46200 - Appl. Of Computers in Process Control	3 *
MET 21101 - Applied Strength of Materials	3	ET 49500 - Senior Project Survey	3 *
MET 21102 - Applied Strength of Materials Laboratory	1	OLS 47400 - Conference Leadership	3 *
IET 30800 - Engr. Proj. Management and Economic Analysis	3 *	MET 4200 - Machine Design	3 *
MET 21501 - Applied Machine Elements	3	ET 49700 - Senior Project Survey	3 *
	33		33