



# Northwestern Mindanao State College of Science and Technology



## SCHOOL OF ENGINEERING AND TECHNOLOGY Bachelor of Science in Industrial Technology Major in Automotive Technology *Ladderized*

BOT Res. no.24-H, s. 2020

Effective First Trimester A.Y. 2020-2021

Name: \_\_\_\_\_

GRADES	SUBJECT CODE	DESCRIPTIVE TITLE	UNITS		HOURS		CREDIT UNITS	PREREQUISITE	CO-REQUISITE
			LEC	LAB	LEC	LAB			
FIRST YEAR			First Trimester						
	NSTP 1	National Service Training Program 1 (ROTC/CWTS/LTS)	3	0	4.5	0	3	None	
	PATH FIT 1	Movement Competency Training	2	0	3	0	2	None	
	AT111	Mechanical Workshop Practice	2	1	3	4.5	3	None	
	AT 112	Basic Electronics	2	1	3	4.5	3	None	
	AT 113	Internal Combustion Engine (Gas & Diesel)	2	1	3	4.5	3	None	
	Drwg 1	Fundamentals of Drawing.	1	1	1.5	4.5	2	None	
			12	4	18	18	16	None	

<b>Second Trimester</b>									
	NSTP 2	National Service Training Program 2 (ROTC/CWTS/LTS)	3	0	4.5	0	3	NSTP 1	
	PATH FIT 2	Fitness Training	2	0	2	0	2	PATH FIT 1	
	SocSci 11	Understanding the self	3	0	4.5	0	3	None	
	COMP1	Computer Fundamentals with Excel and Power point	3	0	4.5	0	3	None	
	AT 121	Machine Shop Technology	2	1	3	4.5	3	AT 111	
	NCE	NMSCST's Culture of Excellence	3	0	4.5	0	3	None	
	Drwg 2	Project design	1	1	1.5	4.5	2	Drwg. 1	
			17	2	24.5	9	19	None	

<b>Third Trimester</b>									
	PATH FIT 3	Dance/Sports/Group Exercises 1	2	0	3	0	2	PATH FIT 2	
	Hist 11	Readings in Philippine history	3	0	4.5	0	3	None	
	AT 211	Power Flow and Chassis Unit	2	1	3	4.5	3	AT 113	
	*MATH 121	Plane Trigonometry	3	0	4.5	0	3	None	
	*CHEM11	General Chemistry	3	1	4.5	4.5	4	None	
	Research 101	Introduction to Research	3	0	4.5	0	3	None	
	Drwg 3	Basic CAD	1	1	1.5	4.5	2	Drwg 2	
			17	3	25.5	13.5	20	None	

<b>SECOND YEAR First Trimester</b>									
	PATH FIT 4	Dance2/ Sports2/ Group Exercises 2	2	0	3	0	2	PATH FIT 3	
	ConWorld	The Contemporary World	3	0	4.5	0	3	None	

	<b>AT 212</b>	Applied Mechanics	2	0	3	0	2	AT 121	
	<b>AT 213</b>	Driving with Traffic Rules and Regulation	1	2	1	9	3	Second year status	
	<b>CHEM12</b>	Inorganic Chemistry	2	1	3	4.5	3	CHEM11	
	<b>COMP2</b>	Programming with Arduino	3	0	4.5	0	3	COMP 1	
	<b>Drwg 4</b>	Advanced CAD	1	1	1.5	4.5	2	Drwg 3	
			<b>14</b>	<b>4</b>	<b>20.5</b>	<b>18</b>	<b>18</b>		

Second Trimester									
	Hum 11	Art Appreciation	3	0	4.5	0	3	None	
	MMW	Mathematics in the Modern World	3	0	4.5	0	3	None	
	Ethics	Ethics	3	0	4.5	0	3	None	
	AT 221	Electropneumatics and Hydraulics	3	1	4.5	4.5	4	AT 212	
	* PHYSICS 1	Mechanics and Heat	2	1	3	4.5	3	CHEM 11&12	
	Rizal	Life and Works of Rizal	3	0	4.5	0	3	None	
			17	2	25.5	9	19		

Third Trimester									
	PurComm	Purposive Communication	3	0	4.5	0	3	None	
	STS	Science, Technology and Society	3	0	4.5	0	3	None	
	AT 222	Digital Electronics	2	1	3	4.5	3	AT 112	
	PHYSICS2	Electricity, Magnetism, Lights and Sounds	2	1	3	4.5	3	Physics 1	
	JEEP 1	Job Enabling English Proficiency-Start	3	0	4.5	0	3	None	
	MATH 211	Analytic Geometry	3	0	4.5	0	3	MATH 121	
			16	2	24	9	18		

Students can receive a Diploma in Automotive Technology and obtain NC I and II (Auto Servicing), NCII Driving, and NC I SMAW after completing all the requirements per subject.

THIRD YEAR First Trimester									
	PICPS	Phil Indigenous Communities & Peace Studies	3	0	4.5	0	3	None	
	AT 311	Automotive Airconditioning Unit	2	1	3	4.5	3	Second year status	
	AT 312	Basic Machine Elements	2	1	3	4.5	3	Third year status	
	AT 313	Programmable Logic Controller	3	1	4.5	4.5	4	AT 221 & 222	
	MATH221	Solid Mensuration	3	0	4.5	0	3	Math 211	
	JEEP 2	Job Enabling English Proficiency-Accelerate	3	0	4.5	0	3	JEEP 1	
	RES 221	Methods of Research	3	0	4.5	0	3	Research 101	
			19	3	28.5	13.5	22		

Second Trimester									
	EnviSci	Environmental Science	3	0	4.5	0	3	None	
	GAS	Gender and Society	3	0	4.5	0	3	None	
	AT 314	Project Development	3	0	4.5	0	3	Third year status	
	GIS	Geographic Information System	1	2	1.5	9	3	Second year status	
	INDTECH 321	Industrial Economics	3	0	4.5	0	3	Third year status	
	TechnPre	Technopreneurship	3	0	4.5	0	3	None	
	IT 3	Seminar and Fieldtrip	1	0	1.5	0	1	Third year status	
			17	2	25.5	9	19		

Third Semester									
	AT 321	Automotive Electrical System Unit	2	1	3	4.5	3	AT 311	
	AT 322	Industrial Controls	2	1	2	4.5	3	Third year status	
	AT 323	Gas Metal Welding (MIG/TIG)	2	1	3	4.5	3	None	
	AT 315	Thesis Writing	3	0	4.5	0	3	Res221	
	INDTECH 322	Industrial Management and Operation	3	0	4.5	0	3	Third year status	
	INDTECH 323	Quality Management System	3	0	4.5	0	3	Third year status	
			15	3	21.5	13.5	18		

FOURTH YEAR First Trimester									
	AT 500	Supervised Industrial Training (500 hrs.)	0	24	0	500	8	Completed all the subjects until 3rd year Level	
			0	24	0	500	8		
FOURTH YEAR Second Trimester									
	AT 500	Supervised Industrial Training (500 hrs.)	0	24	0	500	8	Completed all the subjects until 3rd year Level	
			0	24	0	500	8		
FOURTH YEAR Third Trimester									
	AT 500	Supervised Industrial Training (500 hrs.)	0	24	0	500	8	Completed all the subjects until 3rd year Level	
			0	24	0	500	8		

Students can receive a **Degree in Bachelor of Science in Industrial Technology major Automotive Technology**

**Note :** Subjects with asterisk (\*) are not to be taken by the students graduated from STEM.

### Summary of Units

Technical	Courses	Credit Units
	Mathematics & Physical Science	22
	Allied Courses	36
	Professional Courses	73
Non -	<b>Technical Courses</b>	
	General Education Subjects	27
	GEC Electives	9
	Physical Education	8
	National Service Training Progra	6
<b>Institutional Requirements</b>		
	JEEP 1	3
	JEEP 2	3
	NCE	3
	Research 101	3
		<b>193</b>