

Republic of the Philippines **BATANGAS STATE UNIVERSITY** Pablo Borbon Campus II, Alangilan, Batangas City, Philippines 4200 **COLLEGE OF INDUSTRIAL TECHNOLOGY** www.batstate-u.edu.ph Telefax: (043)425-0143 loc 2103



#### CURRICULUM Bachelor of Industrial Technology MECHATRONICS TECHNOLOGY Academic Year 2018-2019

Reference: CMO No. 20 S. 2013 and Based on PACUIT Proposal

### **Curriculum Description**

The Bachelor of Industrial Technology Major in Mechatronics Technology is a field of technology that includes a combination of mechanical, electronics, automation and computer technology. Mechatronics aim is a design process that unifies these technology fields. Students in mechatronics technology degree program will gain the technical know-how to install, repair and maintain various types of electromechanical equipment and industrial machines and be equipped to work with electromechanical and automated equipment to create industrial and commercial products. On-the-job training and project development study are generally required.

#### **Program Objectives**

1. Successfully practice as engineering technologies for the welfare of the society.

2. Demonstrate a high degree of professionalism at all times.

#### **Program Outcomes**

Graduates will have:

- a. An appropriate mastery of the knowledge, techniques, skills and modern tools of technology
- b. An ability to apply current knowledge and adapt to emerging applications of mathematics, science and technology
- c. An ability to conduct, analyze and interpret experiments and apply experimental results to improve processes
- d. An ability to apply creativity in the design of systems, components or processes appropriate to program objectives
- e. An ability to function effectively on teams
- f. An ability to identify, analyze and solve technical problems
- g. An ability to communicate effectively in writing and in oral presentation
- h. A recognition of the need for, and an ability to engage in lifelong learning
- i. An ability to understand professional, ethical and social responsibilities
- j. The knowledge of and respect for diverse backgrounds, contemporary societal and global issues concerning the profession
- k. A commitment to quality, timeliness and continuous improvement

## **Curriculum Components**

Code	Courses	Units	Total	
	A. General Education Courses (CMO No. 20, series of 2013)		36 units	
	B. Professional and Management Courses		32 units	
PM 101	Occupational Health and Safety Management	2		
PM 102	Industrial Operation & Management Practices	3		
PM 103	Production and Operations Management	3		
PM 104	Technology Research I	3		
PM 105	Materials Technology Management	3		
PM 106	Professional Ethics	3		
PM 107	Technology Research II	3		
PM 108	Manufacturing Technology	3		
PM 109	Total Quality Management	3		
PM 110	Environmental Technology	3		
PM 111	Technopreneurship	3		
	C. Applied Sciences and Tools Courses		28 units	
AST 111	Math for Technology	3		
AST 102	Applied Chemistry	3		
AST 105	Applied Physics	3		
AST 133	Production Drawing	2		
AST 106	Mechanics and Strength of Materials	3		
AST 135	Computer Aided Design	2		
AST 107	Thermodynamics	3		
AST 134	Computer Programming	3		

AST 110	Data Analytics	3	
AST 118	Communication System	3	
	D. Major Specialization Courses		36 units
MXT 111	Mechatronics Technology Workshop I (Benchwork, Pipe Fitting and Bending)	3	
MXT 122	Electrical and Electronic Principles	3	
MXT 211	Electric Motors and Controllers	3	
MXT 212	Digital Electronics and Microprocessor Control	3	
MXT 213	Fluid Power and Control	3	
MXT 221	Electropneumatics and Electrohydraulics	3	
MXT 222	Prorammable Logic Control	3	
MXT 223	Mechatronics Technology Workshop II (Lathe Machining and Shaping)	3	
MXT 311	Machine Elements	3	
MXT 312	Automatic Control System	3	
MXT 313	Mechatronics Technology Workshop III (CNC)	3	
MXT 321	Application of Industrial Robots for Advanced Manufacturing	3	
	E. Mandated Courses		14 units
PE 101	Physical Fitness, Gymnastics and Aerobics	2	
PE 102	Rhythmic Activities	2	
PE 103	Individual and Dual Sports	2	
PE 104	Team Sports	2	
NSTP 111	National Service Training Program 1	3	
NSTP 121	National Service Training Program 2	3	
	F. Supervised Industrial Training/OJT		20 units

SUMMARY				
Courses	Number of Units			
General Education	36			
Applied Sciences and Tool Courses	28			
Professional and Management Courses	32			
Specialization/Major Courses	36			
Supervised Industrial Training/OJT	20			
Mandated Courses (PE & NSTP)	14			
TOTAL	166			

#### Republic of the Philippines BATANGAS STATE UNIVERSITY Batangas City

# COLLEGE OF INDUSTRIAL TECHNOLOGY

Bachelor of Industrial Technology (BIT)

Mechatronics Technology

Effective A.Y. 2018-2019

		IRST YEA				
COUDSE	E C				NO OF	
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
AST 111	Math for Technology	LEC 3	<b>LB/SW</b>	3	<u>нкз.</u> 3	None
AST 102	Applied Chemistry	2	3	3	5	None
		2	3	3	5	None
AST 105 AST 133	Applied Physics Production Drawing		3	2	4	
		1				None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
MXT 111	Mechatronics Technology Workshop I (Benchwork, Pipe Fitting and Bending)	1	6	3	7	None
MXT 122	Electrical and Electronic Principles	2	3	3	5	None
NSTP 1	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
	TOTAL			24	31	
		TIRST YEA	P			
		cond Seme				
COURSE	COURSE TITLE	CR	EDIT	UNITS	NO. OF	PRE-REQUISITE
NO.		LEC	LB/SW	01115	HRS.	
Ged 101	Understanding the Self	3	0	3	3	None
Ged 102	Mathematics in the Modern World	3	0	3	3	None
Ged 106	Purposive Communication	3	0	3	3	None
Ged 109	Science Technology and Society	3	0	3	3	None
AST 106	Mechanics and Strength of Materials	2	3	3	5	AST 105
AST 135	Computer Aided Design	1	3	2	4	AST 133
AST 107	Thermodynamics	3	0	3	3	AST 105
NSTP 2	National Service Training Program 2	3	0	3	3	NSTP1
PE 102	Rhythmic Activities TOTAL	2	0	2 25	2 24	PE101
	•	COND YE	AR	23	27	
COURSE	SE	irst Semest	er			
COURSE NO.	SE	irst Semest CRI	er EDIT	UNITS	NO. OF	PRE-REQUISITE
NO.	SH F COURSE TITLE	irst Semest CRI LEC	er EDIT LB/SW	UNITS	NO. OF HRS.	
<b>NO.</b> Ged 103	SE F COURSE TITLE The Life and Works of Rizal	irst Semest CRI LEC 3	er EDIT LB/SW 0	UNITS 3	NO. OF HRS. 3	None
NO. Ged 103 Ged 104	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World	irst Semest CRI LEC 3 3	er EDIT LB/SW 0 0	<b>UNITS</b> 3 3	NO. OF HRS. 3 3	None None
NO.           Ged 103           Ged 104           FILI 101	SF F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino	irst Semest CRI LEC 3 3 3	er EDIT LB/SW 0 0 0 0	UNITS 3 3 3	NO. OF HRS. 3 3 3	None None None
NO.           Ged 103           Ged 104           FILI 101           PM 102	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices	irst Semest CRI LEC 3 3 3 3 3	er EDIT LB/SW 0 0 0 0 0	UNITS 3 3 3 3	NO. OF HRS. 3 3 3 3	None None None None
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming	irst Semest CRI LEC 3 3 3 3 2	er EDIT LB/SW 0 0 0 0 3	UNITS 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 5	None None None None None
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211	SF F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers	Irst Semest           CRI           LEC           3           3           3           2           2	er EDIT 0 0 0 0 0 3 3 3	UNITS 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 5 5 5	None None None None MXT 123
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212	SF F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control	Irst Semest           CRI           LEC           3           3           3           2           2           2           2           2           2           2           2	er EDIT LB/SW 0 0 0 0 0 0 3 3 3 3	UNITS 3 3 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 5 5 5 5 5	None None None None MXT 123 MXT 122
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213	SF F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control	Irst Semest           CRI           LEC           3           3           2           2           2           2           2           2           2           2           2           2           2           2	er <b>LB/SW</b> 0 0 0 0 0 3 3 3 3 3	UNITS 3 3 3 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 5 5	None None None None MXT 123 MXT 122 AST 107
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports	Irst Semest           CRI           LEC           3           3           3           2           2           2           2           2           2           2           2	er EDIT LB/SW 0 0 0 0 0 0 3 3 3 3	UNITS 3 3 3 3 3 3 3 3 3 3 2	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 2	None None None None MXT 123 MXT 122
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213	SF F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control	Irst Semest           CRI           LEC           3           3           2           2           2           2           2           2           2           2           2           2           2           2	er <b>LB/SW</b> 0 0 0 0 0 3 3 3 3 3	UNITS 3 3 3 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 5 5	None None None MXT 123 MXT 122 AST 107
<b>NO.</b> Ged 103	SF F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SF	irst Semest           CRI           LEC           3           3           2           3           3           3           3           2           2           2           2           2           2           2           2           2           3           3           3           3           3           3           3           3	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 4 R	UNITS 3 3 3 3 3 3 3 3 3 3 2	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 2	None None None None MXT 123 MXT 122 AST 107
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213           PE 103	SF F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SF	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 0 3 3 3 3 0 AR Ster	UNITS 3 3 3 3 3 3 3 3 3 3 2	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 2 34	None None None None MXT 123 MXT 122 AST 107
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213           PE 103           COURSE           NO.	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE Sea COURSE TITLE	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 4 R	UNITS 3 3 3 3 3 3 3 3 3 3 2	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 2	None None None None MXT 123 MXT 122 AST 107
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213           PE 103           COURSE           NO.	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Fluid Power and Control Individual and Dual Sports TOTAL SE Sec	irst Semest CRI LEC 3 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 0 3 3 3 3 0 AR Ster EDIT	UNITS 3 3 3 3 3 3 3 3 2 2 6	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 5 2 34 NO. OF	None None None MXT 123 MXT 122 AST 107 PE102
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213           PE 103           COURSE           NO.           FILI 102	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE Sea COURSE TITLE	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 0 3 3 3 3 0 0 AR Ster EDIT LB/SW	UNITS 3 3 3 3 3 3 3 2 26 UNITS	NO. OF HRS. 3 3 3 3 3 5 5 5 5 5 5 5 5 2 34 NO. OF HRS.	None None None MXT 123 MXT 122 AST 107 PE102 PRE-REQUISITE
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213           PE 103           COURSE           NO.           FILI 102           Ged 107	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE COURSE TITLE Filipino sa iba't ibang Disiplina	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 AR Ster EDIT LB/SW 0	UNITS 3 3 3 3 3 3 3 3 3 2 2 2 6 UNITS 3	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 5 5 2 34 NO. OF HRS. 3	None None None MXT 123 MXT 122 AST 107 PE102 PRE-REQUISITE None
NO. Ged 103 Ged 104 FILI 101 PM 102 AST 134 MXT 211 MXT 212 MXT 213 PE 103 PE 103 COURSE NO. FILI 102 Ged 107 PM 103	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE Sec COURSE TITLE Filipino sa iba't ibang Disiplina Ethics	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 0 AR Ster EDIT LB/SW 0 0 0 0 0 0 0 0 0 0 0 0 0	UNITS 3 3 3 3 3 3 3 3 3 2 26 UNITS 3 3 3 3 3 2 26 UNITS	NO. OF HRS. 3 3 3 3 3 5 5 5 5 5 5 5 5 5 2 34 <b>NO. OF</b> HRS. 3 3	None None None MXT 123 MXT 122 AST 107 PE102 PRE-REQUISITE None None
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213           PE 103           COURSE	SF COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 0 AR Ster EDIT LB/SW 0 0 0 0 0 0 0 0 0 0 0 0 0	UNITS 3 3 3 3 3 3 3 3 2 26 UNITS 3 3 3 3 3 3 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 3 5 5 5 5 5 5 5 5 5 2 34 <b>NO. OF</b> HRS. 3 3 3 3 3	None None None None MXT 123 MXT 122 AST 107 PE102 PRE-REQUISITE None None All Math Subjects
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213           PE 103           COURSE           NO.           FILI 102           Ged 107           PM 103           AST 110           MXT 221	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE Sec COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management Data Analytics Electropneumatics and Electrohydraulics	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 0 4 R Ster EDIT LB/SW 0 0 0 0 0 0 0 0 0 0 0 0 0	UNITS 3 3 3 3 3 3 3 3 2 26 UNITS 3 3 3 3 3 3 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 3 5 5 5 5 5 5 5 5 5 5 2 34 <b>NO. OF</b> HRS. 3 3 3 3 3 3 3	None None None None MXT 123 MXT 122 AST 107 PE102 PE102 PRE-REQUISITE None None None All Math Subjects MXT 212, MXT 21
NO. Ged 103 Ged 104 FILI 101 PM 102 AST 134 MXT 211 MXT 212 MXT 213 PE 103 PE 103 COURSE NO. FILI 102 Ged 107 PM 103 AST 110 MXT 221 MXT 222	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE Sec COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management Data Analytics Electropneumatics and Electrohydraulics Prorammable Logic Control Mechatronics Technology Workshop II	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 0 C AR Ster EDIT LB/SW 0 0 0 0 0 0 0 0 0 0 0 0 0	UNITS 3 3 3 3 3 3 3 2 26 UNITS 3 3 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 2 34 <b>NO. OF</b> HRS. 3 3 3 3 5	None None None MXT 123 MXT 122 AST 107 PE102 PRE-REQUISITE None None None
NO.           Ged 103           Ged 104           FILI 101           PM 102           AST 134           MXT 211           MXT 212           MXT 213           PE 103           PE 103           COURSE           NO.           FILI 102           Ged 107           PM 103           AST 110           MXT 221           MXT 222           MXT 223	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE Sec COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management Data Analytics Electropneumatics and Electrohydraulics Prorammable Logic Control Mechatronics Technology Workshop II (Lathe Machining and Shaping)	irst Semest           CRI           LEC           3           3           2           2           2           2           2           2           2           2           2           2           2           2           2           3           3           3           3           3           3           2           2           1	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 0 0 AR Ster EDIT LB/SW 0 0 0 0 0 3 3 6	UNITS 3 3 3 3 3 3 3 3 2 26 UNITS 3 3 3 3 3 3 3 3 3 3 3 3 3	NO. OF HRS.           3           3           3           3           5           5           5           2           34           NO. OF HRS.           3           3           3           3           3           3           3           3           3           3           3           3           3           5           5           7	None None None None MXT 123 MXT 122 AST 107 PE102 PE102 PRE-REQUISITE None None None All Math Subjects MXT 212, MXT 21 MXT 212, MXT 21 MT 111
NO. Ged 103 Ged 104 FILI 101 PM 102 AST 134 MXT 211 MXT 212 MXT 213 PE 103 PE 103 COURSE NO. FILI 102 Ged 107 PM 103 AST 110	SE F COURSE TITLE The Life and Works of Rizal The Contemporary World Kontekstwalisadong Komunikasyon sa Filipino Industrial Operation & Management Practices Computer Programming Electric Motors and Controllers Digital Electronics and Microprocessor Control Fluid Power and Control Individual and Dual Sports TOTAL SE Sec COURSE TITLE Filipino sa iba't ibang Disiplina Ethics Production and Operations Management Data Analytics Electropneumatics and Electrohydraulics Prorammable Logic Control Mechatronics Technology Workshop II	irst Semest CRI LEC 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	er EDIT LB/SW 0 0 0 0 3 3 3 3 0 0 0 0 C C C C C C C C C C C C C	UNITS 3 3 3 3 3 3 3 3 2 26 UNITS 3 3 3 3 3 3 3 3 3 3 3 3 3	NO. OF HRS. 3 3 3 3 5 5 5 5 5 5 5 2 34 34 NO. OF HRS. 3 3 3 3 5 5 5	None None None None MXT 123 MXT 122 AST 107 PE102 PE102 PRE-REQUISITE None None All Math Subjects MXT 212, MXT 21 MXT 212, MXT 21

	ſ	THIRD YEA	R			
	F	irst Semest	er			
COURSE	COURSE TITLE	CREDIT			NO. OF	
NO.		LEC	LB/SW	UNITS	HRS.	PRE-REQUISITE
LITR 102	Asean Literature	3	0	3	3	None
Ged 105	Readings in Philippines History	3	0	3	3	None
PM 104	Technology Research I	3	0	3	3	All Major Subjects
PM 105	Materials Technology Management	3	0	3	3	All Major Subjects
PM 106	Professional Ethics	3	0	3	3	None
MXT 311	Machine Elements	2	3	3	5	MXT 223
MXT 312	Automatic Control System	2	3	3	5	MXT 222
MXT 313	Mechatronics Technology Workshop III (CNC)	1	6	3	7	MXT 223
	TOTAL			24	32	
		HIRD YEA				
	Se	cond Seme		1	1	
COURSE	COURSE TITLE		EDIT	UNITS	NO. OF	PRE-REQUISITE
NO.		LEC	LB/SW		HRS.	-
Ged 108	Art Appreciation	3	0	3	3	None
PM 107	Technology Research II	3	0	3	3	Regular Standing
PM 108	Manufacturing Technology	3	0	3	3	Regular Standing
PM 109	Total Quality Management	3	0	3	3	Regular Standing
PM 110	Environmental Technology	3	0	3	3	Regular Standing
PM 111	Technopreneurship	3	0	3	3	Regular Standing
AST 118	Communication System	2	3	3	5	None
MXT 321	Application of Industrial Robots for Advanced Manufacturing	2	3	3	5	All Major Sujbject
	TOTAL			24	28	
	F	DURTH YE	AR			
		irst Semest				
COURSE					NO. OF	
NO.	COURSE TITLE	LEC	LB/SW	UNITS	HRS.	PRE-REQUISITE
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	MT 321, 3T 322
	TOTAL			10	540	· · · · · ·
	-					
	FO	DURTH YE	AR			
	Se	cond Seme	ster			
COURSE	COUDSE TITLE	CREDIT		UNITE	NO. OF	
NO.	COURSE TITLE	LEC	LB/SW	UNITS	HRS.	PRE-REQUISITE
OJT 2	Supervised Industrial Training 2 (540hrs)	0	10	10	540	OJT 1
	TOTAL			10	540	

\* Regular Standing: No deficiencies on the previous semester.

TOTAL UNITS: 166