



CURRICULUM

Bachelor of Industrial Technology

AUTOMOTIVE

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 Automotive Technology program is designed to prepare students with the basic knowledge and skills necessary for a modern state of the art automotive workers. The increasing sophistication of Automotive Technology now requires workers who can use computerized shop equipment and work with electronic components while maintaining their skills with traditional hand tools. Automotive service technicians as vehicle components and Systems become increasingly sophisticated. Motorcycle Mechanics repair and overhaul motorcycle. Besides, repairing engines, they may work on clutches transmissions, brakes, drivelines, differential cycles, tires, power Steering system, auto electricity and electronics, ignition system and make minor body repairs.

Program Objectives

1. Successfully practice as engineering technologists 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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	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 123	Sheet Metal/ Plumbing/ Pipe Fitting	3	
AST 135	Computer Aided Design	2	
AST 134	Computer Programming	3	
AST 125	Basic Arc and Gas Welding	3	
AST 110	Data Analytics	3	
AST 108	Automotive Thermodynamics	3	
	D. Major Specialization Courses		35 units
AT 111	Automotive Handtools, Fasteners and Machine Binders	2	
AT 112	Automotive Electrical System Fundamentals	3	
AT 121	Automotive Electrical System Servicing, Troubleshooting, Repairing & Maintenance	2	
AT 122	Gas Engine Overhauling	3	
AT 211	Automobile Underchassis Servicing, Repair and Maintenance	2	
AT 212	Automotive Electronics and Computers	2	
AT 213	Power Trains	2	
AT 221	Engine Performance Test	2	
AT 222	Basic Driving	2	
AT 223	Automobile Body Repair and Painting	2	
AT 311	Diesel Engine Overhauling and Fuel Injection System	2	
AT 312	Electronic Fuel Injection and LPG System	2	
AT 313	Motorcycle Engine	2	
AT 321	Basic Machining	2	
AT 322	Applied Hydraulic and Pneumatics	2	
AT 323	Basic Car Airconditioning System	2	
AT 324	Automotive Shop Service Management	1	
	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	35
Supervised Industrial Training/OJT	20
Mandated Courses (PE & NSTP)	14
TOTAL	165

Republic of the Philippines
BATANGAS STATE UNIVERSITY
 Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY
 Bachelor of Industrial Technology (BIT)
 Automotive Technology
 Effective A.Y. 2018 - 2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
AST 123	Sheet Metal/ Plumbing/ Pipe Fitting	2	3	3	5	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
AT 111	Automotive Handtools, Fasteners and Machine Binders	1	3	2	4	None
AT 112	Automotive Electrical System Fundamentals	1	6	3	7	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				26	35	
FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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 135	Computer Aided Design	1	3	2	4	AST 133
AT 121	Automotive Electrical System Servicing	1	3	2	4	AT 112
AT 122	Gas Engine Overhauling	1	6	3	7	AT 111
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				24	27	
SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
AST 125	Basic Arc and Gas Welding	2	3	3	5	AST 123
AT 211	Automobile Underchassis Servicing, Repair and Maintenance	1	3	2	4	AT 111
AT 212	Automotive Electronics and Computers	1	3	2	4	AT 112
AT 213	Power Trains	1	3	2	4	AT 111
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				26	36	

SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa Iba't Ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	AST 111, GEd 102
AST 108	Automotive Thermodynamics	3	0	3	3	AST 105
AT 221	Engine Performance Test	1	3	2	4	AT 122
AT 222	Basic Driving	1	3	2	4	AT 122/AT 211
AT 223	Automobile Body Repair and Painting	1	3	2	4	AT 211
PE 104	Team Sports	2	0	2	2	PE103
	TOTAL			23	29	
THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	AT 221, 222, 223
PM 105	Materials Technology Management	3	0	3	3	AT 221, 222, 223
PM 106	Professional Ethics	3	0	3	3	None
AT 311	Diesel Engine Overhauling and Fuel Injection System	1	3	2	4	AT 122
AT 312	Electronic Injection and LPG System	1	3	2	4	AT 112/ AT 121/AT 212
AT 313	Motorcycle Engine	1	3	2	4	AT 222
	TOTAL			21	27	
THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
AT 321	Basic Machining	1	3	2	4	AT 122/AT 213/AT 311
AT 322	Applied Hydraulic and Pneumatics	1	3	2	4	AT 211
AT 323	Basic Car Airconditioning System	1	3	2	4	AT 212
AT 324	Automotive Shop Service Management	1	0	1	1	AT 311/AT 312
	TOTAL			25	31	
FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	AT 321, 322, 323, 324
	TOTAL			10	540	
FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 2	Supervised Industrial Training 2 (540hrs)	0	10	10	540	OJT 1
	TOTAL			10	540	

* Regular Standing: No deficiencies on the previous semester.



CURRICULUM
Bachelor of Industrial Technology
COMPUTER 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 Computer Technology develops and prepares graduates who will be an integral part of the pool of technology experts in the specifically in the field of computer technology. The program is a strong combination of theoretical and practical concepts in electrical and electronics technology, computer technology, mathematics, computer science, management and general education that leads to the Bachelor of Industrial Technology degree. The Bachelor's Degree programs intends to prepare graduates to find employment as computer technologists here and abroad. Students will gain knowledge and skills in digital electronics, computer programming, computer networking and system analysis and design.

Program Objectives

1. Successfully practice as engineering technologists 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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	Technopreneurship	3	
	C. Applied Sciences and Tools Courses		27 units
AST 111	Math for Technology	3	
AST 102	Applied Chemistry	3	
AST 105	Applied Physics	3	
AST 133	Production Drawing	2	
AST 129	Electronics Measurements	2	
AST 113	Electrical and Electronics Principles	3	
AST 135	Computer Aided Design	2	

AST 114	Digital Electronics	3	
AST 110	Data Analytics	3	
AST 120	Programmable Logic Control	3	
	D. Major Specialization Courses		36 units
CPT 111	Computer Programming I	3	
CPT 112	Computer Architecture	3	
CPT 121	Computer Programming II	3	
CPT 211	CISCO 1	3	
CPT 212	Computer Hardware Application	3	
CPT 221	Operating Systems	3	
CPT 222	CISCO 2	3	
CPT 311	Signal System Analysis	3	
CPT 312	CISCO 3	3	
CPT 313	Multimedia (Visual Graphics & Web Design)	3	
CPT 321	CISCO 4	3	
CPT 322	System Analysis and Design	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	27
Professional and Management Courses	32
Specialization/Major Courses	36
Supervised Industrial Training/OJT	20
Mandated Courses (PE & NSTP)	14
TOTAL	165

Republic of the Philippines
BATANGAS STATE UNIVERSITY
 Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY

Bachelor of Industrial Technology (BIT)

Computer Technology

Effective A.Y. 2018 - 2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
AST 129	Electronics Measurements	1	3	2	4	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
CPT 111	Computer Programming I	2	3	3	5	None
CPT 112	Computer Architecture	2	3	3	5	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				26	33	
FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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 113	Electrical and Electronics Principles	2	3	3	5	AST 129
AST 135	Computer Aided Design	1	3	2	4	AST 133
CPT 121	Computer Programming II	2	3	3	5	CPT 111
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				25	26	
SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 114	Digital Electronics	2	3	3	5	AST 112
CPT 211	CISCO 1	2	3	3	5	CPT 121
CPT 212	Computer Hardware Application	2	3	3	5	AST 112
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				23	29	
SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa iba't ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	GEd 102, AST 111
AST 120	Programmable Logic Control	2	3	3	5	AST 114
CPT 221	Operating Systems	2	3	3	5	CPT 212, CPT 112
CPT 222	CISCO 2	2	3	3	5	CPT 211
PE 104	Team Sports	2	0	2	2	PE 103
TOTAL				23	29	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	CPT 221, CPT 222
PM 105	Materials Technology Management	3	0	3	3	CPT 221, CPT 222
PM 106	Professional Ethics	3	0	3	3	None
CPT 311	Signal System Analysis	2	3	3	5	CPT 221
CPT 312	CISCO 3	2	3	3	5	CPT 222
CPT 313	Multimedia (Visual Graphics & Web Design)	2	3	3	5	CPT 212
TOTAL				24	30	
THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
CPT 321	CISCO 4	2	3	3	5	CPT 312
CPT 322	Signal System Analysis	2	3	3	5	CPT 311
TOTAL				24	28	
FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	CPT 321, CPT 322
TOTAL				10	540	
FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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: 165



CURRICULUM
Bachelor of Industrial Technology
CIVIL 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 Civil Technology is a dynamic educational opportunity offering skill-based learning through class instructions, extensive laboratory experience and fieldworks. Concentrations are as follows: carpentry, architectural design technology, construction/project management, surveying and mapping, construction estimate, and soil and construction material testing.

Program Objectives

1. Successfully practice as engineering technologists 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
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Curriculum Components

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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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	Technopreneurship	3	
	C. Applied Sciences and Tools Courses		27 units
AST 111	Math for Technology	3	
AST 102	Applied Chemistry	3	
AST 105	Applied Physics	3	
AST 133	Production Drawing	2	
AST 127	Civil Techology Measurements	2	
AST 135	Computer Aided Design	2	
AST 134	Computer Programming	3	
AST 115	Basic Electrical Wiring	3	
AST 110	Data Analytics	3	

AST 136	Civil CAD Applications	3	
	D. Major Specialization Courses		36 units
CVT 111	Introduction to Structures	4	
CVT 112	National Building Code	2	
CVT 121	Introduction to Surveying	3	
CVT 122	Strength of Material	3	
CVT 211	Construction Surveying	3	
CVT 212	Plumbing	3	
CVT 221	Mechanics of Soil	3	
CVT 222	Building Technology	4	
CVT 311	Construction Materials and Testing	3	
CVT 312	Architectural Design Technology	4	
CVT 321	Construction Estimate & Planning Management	4	
	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	27
Professional and Management Courses	32
Specialization/Major Courses	36
Supervised Industrial Training/OJT	20
Mandated Courses (PE & NSTP)	14
TOTAL	165

Republic of the Philippines
BATANGAS STATE UNIVERSITY
 Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY
 Bachelor of Industrial Technology (BIT)
 Civil Technology
 Effective A.Y. 2018 - 2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
AST 127	Civil Techology Measurements	1	3	2	4	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
CVT 111	Introduction to Structures	2	6	4	8	None
CVT 112	National Building Code	2	0	2	2	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				26	33	
FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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 135	Computer Aided Design	1	3	2	4	AST 133
CVT 121	Introduction to Surveying	2	3	3	5	AST 127
CVT 122	Strength of Material	3	0	3	3	AST 105
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				25	24	
SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
AST 115	Basic Electrical Wiring	2	3	3	5	AST 105
CVT 211	Construction Surveying	2	3	3	5	CVT 121
CVT 212	Plumbing	2	3	3	5	CVT 111
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				26	34	

SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa iba't ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	GE 102, AST 111
AST 136	Civil CAD Applications	2	3	3	5	AST 135
CVT 221	Mechanics of Soil	2	3	3	5	CVT 122
CVT 222	Building Technology	2	6	4	8	CVT 111, CVT 212
PE 104	Team Sports	2	0	2	2	PE 103
TOTAL				24	32	
THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	CVT 111, 112, 121, 122, 211, 212, 221, 222
PM 105	Materials Technology Management	3	0	3	3	CVT 111, 112, 121, 122, 211, 212, 221, 222
PM 106	Professional Ethics	3	0	3	3	None
CVT 311	Construction Materials and Testing	2	3	3	5	CVT 221
CVT 312	Architectural Design Technology	2	6	4	8	CVT 222
TOTAL				22	28	
THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
CVT 321	Construction Estimate & Planning Management	2	6	4	8	CVT 311, CVT 312
TOTAL				22	26	
FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	CVT 321
TOTAL				10	540	
FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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: 165



CURRICULUM
Bachelor of Industrial Technology
DRAFTING TECHNOLOGY

Academic Year 2018-2019

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

Curriculum Description

The program in Bachelor of Industrial Technology Major in Drafting Technology provides knowledge in the construction of different working drawings that help improve the skills in drawing. Knowledge in graphic communication is an important factor of the course. This course includes the basic and advanced technical drawings, floor planning, architectural and structural drawings, architectural modeling and estimating. This course also contains computer-aided design concept and applications.

Program Objectives

1. Successfully practice as engineering technologists 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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	Technopreneurship	3	
	C. Applied Sciences and Tools Courses		27 units
AST 111	Math for Technology	3	
AST 102	Applied Chemistry	3	
AST 105	Applied Physics	3	
AST 133	Production Drawing	2	
AST 131	Introduction to Design	3	
AST 134	Computer Programming	3	
AST 126	National Building Code	2	
AST 110	Data Analytics	3	
AST 115	Basic Electrical Wiring	3	

AST 132	Commercial Arts	2	
	D. Major Specialization Courses		38 units
DT 111	Technical Drawing I	4	
DT 121	Technical Drawing 2	4	
DT 122	CAD 1	3	
DT 211	Architectural Drawing 1	4	
DT 213	CAD 2	2	
DT 221	Architectural Drawing 2	4	
DT 222	CAD 3	2	
DT 311	Structural Drawing	3	
DT 312	Construction Estimating & Planning	3	
DT 313	Industrial Design 1	2	
DT 321	Machine Drawing	3	
DT 322	Architectural Modelling	2	
DT 323	Industrial Design 2	2	
	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	27
Professional and Management Courses	32
Specialization/Major Courses	38
Supervised Industrial Training/OJT	20
Mandated Courses (PE & NSTP)	14
TOTAL	167

Republic of the Philippines
BATANGAS STATE UNIVERSITY
 Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY
 Bachelor of Industrial Technology (BIT)
 Drafting Technology
 Effective A.Y. 2018 - 2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 131	Introduction to Design	2	3	3	5	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
DT 111	Technical Drawing I	2	6	4	8	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				23	28	
FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
DT 121	Technical Drawing 2	2	6	4	8	DT 111
DT 122	CAD I	2	3	3	5	DT 111
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				24	25	
SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
AST 126	National Building Code	2	0	2	2	DT 121
DT 211	Architectural Drafting 1	2	6	4	8	DT 121
DT 213	CAD II	1	3	2	4	DT 122
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				25	33	
SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa Iba't Ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	Ged 102, AST 111
AST 115	Basic Electrical Wiring	2	3	3	5	None
AST 132	Commercial Arts	1	3	2	4	AST 131
DT 221	Architectural Drafting 2	2	6	4	8	DT 211
DT 222	CAD III	1	3	2	4	DT 213
PE 104	Team Sports	2	0	2	2	PE103
TOTAL				25	35	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	DT 221, DT 222
PM 105	Materials Technology Management	3	0	3	3	DT 221, DT 222
PM 106	Professional Ethics	3	0	3	3	None
DT 311	Structural Drawing	2	3	3	5	
DT 312	Construction Estimating & Planning	3	0	3	3	DT 221
DT 313	Industrial Design 1	1	3	2	4	DT 213
TOTAL				23	27	
THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 108	Art Appreciation	3	0	3	3	None
PM 107	Technology Research II	3	0	3	3	
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
DT 321	Machine Drafting & Design	2	3	3	5	DT 222
DT 322	Architectural Modelling	1	3	2	4	DT 221, DT 311
DT 323	Industrial Design 2	1	3	2	4	DT 313
TOTAL				25	31	
FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	DT 321, DT 322, DT 323
TOTAL				10	540	
FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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: 165



CURRICULUM

Bachelor of Industrial Technology ELECTRICAL TECHNOLOGY

Academic Year 2018-2019

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

Curriculum Description

The program in Bachelor of Industrial Technology Major in Electrical Technology will prepare graduates with the skills necessary to enter careers in the design, application, installation, manufacturing, operation and/or maintenance of electrical systems. Graduates of this degree program typically have strengths in the building, testing, operation, and maintenance of existing electrical systems and well prepared for development and implementation of electrical systems.

Program Objectives

1. Successfully practice as engineering technologists 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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	Technopreneurship	3	
	C. Applied Sciences and Tools Courses		27 units
AST 111	Math for Technology	3	
AST 102	Applied Chemistry	3	
AST 105	Applied Physics	3	
AST 133	Production Drawing	2	
AST 128	Electrical Measurements	2	
AST 135	Computer Aided Design	2	
AST 134	Computer Programming	3	
AST 110	Data Analytics	3	
AST 117	Industrial Power Electronics	3	

AST 119	Instrumentation and Process Control	3	
	D. Major Specialization Courses		36 units
ELC 111	Circuits I (DC Circuits)	3	
ELC 112	Signal and Communication System	3	
ELC 121	Circuits II (AC Circuits)	3	
ELC 122	Residential and Commercial Power System and Design	3	
ELC 211	Industrial Power System and Design	3	
ELC 212	Electrical Machines (AC and DC)	3	
ELC 221	Motor Control and Sequential Control	3	
ELC 222	Electric Power Production	2	
ELC 223	Estimating and Costing	2	
ELC 311	PLC System and Programming	3	
ELC 312	Electric Power Transmission and Distribution	2	
ELC 321	Automatic Control System	3	
ELC 322	Photovoltaic Technologies	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	27
Professional and Management Courses	32
Specialization/Major Courses	36
Supervised Industrial Training/OJT	20
Mandated Courses (PE & NSTP)	14
TOTAL	165

Republic of the Philippines
BATANGAS STATE UNIVERSITY
 Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY
 Bachelor of Industrial Technology (BIT)
 Electrical Technology
 Effective A. Y. 2018 - 2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
AST 128	Electrical Measurements	1	3	2	4	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
ELC 111	Circuits I (DC Circuits)	2	3	3	5	None
ELC 112	Signal and Communication System	2	3	3	5	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				26	33	
FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
ELC 121	Circuits II (AC Circuits)	2	3	3	5	ELC 111
ELC 122	Residential and Commercial Power System and Design	2	3	3	5	None
AST 135	Computer Aided Design	1	3	2	4	AST 133
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				25	26	
SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
ELC 211	Industrial Power System and Design	2	3	3	5	ELC 122
ELC 212	Electrical Machines (AC and DC)	2	3	3	5	ELC 121
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				23	29	
SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa iba't ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	Ged 102, AST 111
AST 117	Industrial Power Electronics	2	3	3	5	ELC 212
ELC 221	Motor Control and Sequencial Control	2	3	3	5	ELC 212
ELC 222	Electric Power Production	2	0	2	2	ELC 212
ELC 223	Estimating and Costing	2	0	2	2	ELC 211
PE 104	Team Sports	2	0	2	2	PE103
TOTAL				24	28	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	ELC 221, 222, 223
PM 105	Materials Technology Management	3	0	3	3	ELC 221, 222, 223
PM 106	Professional Ethics	3	0	3	3	None
ELC 311	PLC System and Programming	2	3	3	5	ELC 221
ELC 312	Electric Power Transmission and Distribution	2	0	2	2	ELC 222
AST 119	Instrumentation and Process Control	2	3	3	5	ELC 221
TOTAL				23	27	
THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
ELC 321	Automatic Control System	2	3	3	5	ELC 311
ELC 322	Photovoltaic Technologies	2	3	3	5	ELC 222
TOTAL				24	28	
FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	ELC 321, 322
TOTAL				10	540	
FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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: 165



CURRICULUM
Bachelor of Industrial Technology **ELECTRONICS**
TECHNOLOGY

Academic Year 2018-2019

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

Curriculum Description

The Electronics Technology program prepares graduates for employment in a wide variety of industries producing and/or using electrical and electronic equipment. The program provides a thorough understanding of digital electronics, circuit analysis, electronic devices, machine controls, programmable logic controllers and industrial electronics. This course also includes theoretical analysis, software simulation and hands-on applications.

Program Objectives

1. Successfully practice as engineering technologists 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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	Technopreneurship	3	
	C. Applied Sciences and Tools Courses		27 units
AST 111	Math for Technology	3	
AST 102	Applied Chemistry	3	
AST 105	Applied Physics	3	
AST 133	Production Drawing	2	
AST 129	Electronics Measurements	2	
AST 112	Electrical Principles	3	
AST 135	Computer Aided Design	2	
AST 134	Computer Programming	3	
AST 120	Programmable Logic Control	3	

AST 110	Data Analytics	3	
	D. Major Specialization Courses		36 units
ELX 111	Introduction to Semiconductor Devices	3	
ELX 121	Electronic Amplifiers and Integrated Circuits	3	
ELX 122	Digital Logic Circuits and Switching	3	
ELX 211	Electronics Workshop I	3	
ELX 212	Industrial Electronics	3	
ELX 221	Analog Communication Systems	3	
ELX 222	Microcomputer Systems	3	
ELX 223	Automatic Controls	3	
ELX 224	Electronics Workshop II	3	
ELX 311	Wireless and Satellite Communication Systems	3	
ELX 312	Plant Safety Network	3	
ELX 321	Totally Integrated Automatic	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	27
Professional and Management Courses	32
Specialization/Major Courses	36
Supervised Industrial Training/OJT	20
Mandated Courses (PE & NSTP)	14
TOTAL	165

Republic of the Philippines
BATANGAS STATE UNIVERSITY
 Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY

Bachelor of Industrial Technology (BIT)

Electronics Technology

Effective A.Y. 2018 - 2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
AST 129	Electronics Measurements	1	3	2	4	None
AST 112	Electrical Principles	2	3	3	5	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
ELX 111	Introduction to Semiconductor Devices	2	3	3	5	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				26	33	
FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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 135	Computer Aided Design	1	3	2	4	AST 133
ELX 121	Electronic Amplifiers and Integrated Circuits	2	3	3	5	ELX 111
ELX 122	Digital Logic Circuits and Switching	2	3	3	5	ELX 111
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP 111
PE 102	Rhythmic Activities	2	0	2	2	PE 101
TOTAL				25	26	
SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
AST 120	Programmable Logic Control	2	3	3	5	ELX 122
ELX 211	Electronics Workshop I	2	3	3	5	ELX 121, ELX 122
ELX 212	Industrial Electronics	2	3	3	5	ELX 121
PE 103	Individual and Dual Sports	2	0	2	2	PE 102
TOTAL				26	34	
SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa iba't ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	GEd 102, AST 111
ELX 221	Analog Communication Systems	2	3	3	5	ELX 212
ELX 222	Microcomputer Systems	2	3	3	5	ELX 212
ELX 223	Automatic Controls	2	3	3	5	ELX 212
ELX 224	Electronics Workshop II	2	3	3	5	ELX 211
PE 104	Team Sports	2	0	2	2	PE 103
TOTAL				26	34	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	ELX 221, ELX 222, ELX 223, ELX 224
PM 105	Materials Technology Management	3	0	3	3	ELX 221, ELX 222, ELX 223, ELX 224
PM 106	Professional Ethics	3	0	3	3	None
ELX 311	Wireless and Satellite Communication Systems	2	3	3	5	ELX 221
ELX 312	Plant Safety Network	2	3	3	5	ELX 221
TOTAL				21	25	
THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
ELX 321	Totally Integrated Automatic	2	3	3	5	ELX 311, ELX 312
TOTAL				21	23	
FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	ELX 321
TOTAL				10	540	
FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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: 165



CURRICULUM
Bachelor of Industrial Technology
FOOD TECHNOLOGY

Academic Year 2018-2019

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

Curriculum Description

The program in Bachelor of Industrial Technology Major in Food Technology deals with the basics of food science and technology including food chemistry, food microbiology, food nutrition and analysis, food processing and preservation, food product development and testing as well as food packaging and storage technology. This program also introduces fundamental concepts related to food quality management to meet the food standards imposed by the industry and the regulatory agencies of the government. The program also entails to produce future food entrepreneurs since the demand of business food industry is high in the production line.

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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	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 135	Computer Aided Design	2	
AST 103	Basic Organic Chemistry	3	
AST 134	Computer Programming	3	

AST 110	Data Analytics	3	
AST 104	Chemistry Calculation with Organic Chemistry	3	
AST 101	Biotechnology	3	
	D. Major Specialization Courses		36 units
FT 111	Introduction to Food Science and Technology	3	
FT 112	Basic Foods and Nutrition	3	
FT 121	Food Selection and Preparation	3	
FT 211	Food Chemistry	3	
FT 212	Bakery & Confectionary Products	3	
FT 221	Food Process Technology	3	
FT 222	Food Nutrition & Analysis	3	
FT 223	Food Quality Management and Food Regulations	3	
FT 311	Food Microbiology	3	
FT 312	Food Product Development and Sensory Evaluation	3	
FT 321	Catering and Bar Service Management	3	
FT 322	Food Packaging & Storage Technology	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)

Food Technology

Effective A.Y. 2018 - 2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
FT 111	Introduction to Food Science and Technology	3	0	3	3	None
FT 112	Basic Foods and Nutrition	3	0	3	3	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				24	25	
FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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 135	Computer Aided Design	1	3	2	4	AST 133
AST 103	Basic Organic Chemistry	2	3	3	5	AST 102
FT 121	Food Selection and Preparation	1	6	3	7	FT 111, FT 112
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				25	28	
SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management PraFTices	3	0	3	3	None
AST 104	General Biology and Introduction to Microbiology	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
FT 211	Food Chemistry	2	3	3	5	AST 103
FT 212	Bakery & Confectionary Products	1	6	3	8	FT 121
PE 103	Individual and Dual Sports	1	0	2	2	PE102
TOTAL				26	35	
SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa Iba't Ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	GEd 102, AST 111
FT 221	Food Process Technology	2	3	3	5	FT 121, FT 211
FT 222	Food Nutrition & Analysis	2	3	3	5	FT 211
FT 223	Food Microbiology	2	3	3	5	AST 104
PE 104	Team Sports	2	0	2	2	PE103
TOTAL				23	29	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	FT 221,FT 222, FT 223
PM 105	Materials Technology Management	3	0	3	3	FT 221,FT 222, FT 223
PM 106	Professional Ethics	3	0	3	3	None
FT 311	Food Product Development and Sensory Evaluation	2	3	3	5	FT 221,FT 222, FT 223
FT 312	Catering and Bar Service Management	1	6	3	7	FT 212, FT 222
AST 101	Microbial and Foodbiotechnology	3	0	3	3	FT 223
TOTAL				24	30	
THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 108	Art Appreciation	3	0	3	3	None
PM 107	Technology Research II	3	0	3	3	PM 104
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	PM 104
FT 321	Food Packaging and Storage Technology	2	3	3	5	FT 311
FT 322	Food Quality Management and Food Regulations	2	3	3	5	FT 311, FT 312
TOTAL				24	28	
FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	FT 321, FT 322
TOTAL				10	540	
FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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						



CURRICULUM

Bachelor of Industrial Technology

INSTRUMENTATION

AND CONTROL TECHNOLOGY

Academic Year 2018-2019

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

Curriculum Description

The program in Bachelor of Industrial Technology Major in Instrumentation and Control Technology will prepare graduates with the technical and managerial skills necessary to enter careers in design, manufacturing, marketing, operations and maintenance in the field of measurement, control, robotics and automation technology. The program, as a result of extensive laboratory experience in components/device operation, calibration and interconnection, have strenghts in thier knowledge of operations, maintence and manufacturing. Gradutes are qualified to undertake the design and specifacaton of control systems and for the subsequent management of their installation and operation.

Program Objectives

1. Successfully practice as engineering technologists 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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	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 113	Electrical and Electronic Principle	3	
AST 133	Computer Aided Design	2	
AST 132	Computer Programming	3	

AST 121	Hydraulics and Pneumatics Systems	3	
AST 110	Data Analytics	3	
AST 116	Electrical Motors and Control	3	
	D. Major Specialization Courses		36 units
ICT 111	Process Variable Measurement I	3	
ICT 121	Process Variable Measurement II	3	
ICT 211	Instrumentation System Diagram and Process Equipment	3	
ICT 212	Digital Electronics and Microprocessor	3	
ICT 221	Electropneumatics and Electrohydraulics Systems	3	
ICT 222	Workshop Technology	3	
ICT 223	Analytical Instrumentation	3	
ICT 311	Industrial Process Control	3	
ICT 312	Plant Safety Network	3	
ICT 313	Instrumentation PLC I	3	
ICT 321	Instrumentation PLC II	3	
ICT 322	Process Control Applications	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)
 Instrumentation and Control Technology
 Effective A.Y. 2018 - 2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
ICT 111	Process Variable Measurement I	2	3	3	5	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				21	24	

FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
GEEd 101	Understanding the Self	3	0	3	3	None
GEEd 102	Mathematics in the Modern World	3	0	3	3	None
GEEd 106	Purposive Communication	3	0	3	3	None
GEEd 109	Science Technology and Society	3	0	3	3	None
AST 113	Electrical and Electronic Principle	2	3	3	5	AST 105
AST 135	Computer Aided Design	1	3	2	4	AST 133
ICT 121	Process Variable Measurement II	2	3	3	5	ICT 111
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				25	26	

SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
GEEd 103	The Life and Works of Rizal	3	0	3	3	None
GEEd 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 132	Computer Programming	2	3	3	5	None
AST 121	Hydraulics and Pneumatics Systems	2	3	3	5	AST 105
ICT 211	Instrumentation System Diagram and Process Equipment	1	6	3	7	ICT 121
ICT 212	Digital Electronics and Microprocessor	2	3	3	5	AST 113
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				26	36	

SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa iba't ibang Disiplina	3	0	3	3	None
GEEd 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	
AST 110	Data Analytics	3	0	3	3	Ged 102, AST 111
AST 116	Electrical Motors and Control	2	3	3	5	ICT 212
ICT 221	Electropneumatics and Electrohydraulics Systems	2	3	3	5	ICT 212
ICT 222	Workshop Technology	2	3	3	5	ICT 212
ICT 223	Analytical Instrumentation	2	3	3	5	AST 102, ICT 211
PE 104	Team Sports	2	0	2	2	PE103
TOTAL				26	34	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	ICT 221, ICT 222, ICT 223
PM 105	Materials Technology Management	3	0	3	3	ICT 221, ICT 222, ICT 223
PM 106	Professional Ethics	3	0	3	3	GEd 107
ICT 311	Industrial Process Control	2	3	3	5	ICT 221, ICT 222, ICT 223
ICT 312	Plant Safety Network	2	3	3	5	ICT 221, ICT 222, ICT 223
ICT 313	Instrumentation PLC I	2	3	3	5	ICT 221, ICT 222, ICT 223
TOTAL				24	30	

THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
ICT 321	Instrumentation PLC II	2	3	3	5	ICT 313
ICT 322	Process Control Applications	2	3	3	5	ICT 311
TOTAL				24	28	

FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	ICT 321, ICT 322
TOTAL				10	540	

FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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



CURRICULUM

Bachelor of Industrial Technology

MECHANICAL

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 Mechanical Technology provides the knowledge, skills and attitudes in the various machining process that can be applied on their on-the-job training and on their future careers. It encompasses measurements, metallurgy and heat treatment, welding drive components, repair and maintenance, pipelifting, lubrication and principle of tool and die. Likewise, pneumatics and hydraulics, CNC, inspection and quality control are also vital elements of the curriculum.

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		27 units
AST 111	Math for Technology	3	
AST 102	Applied Chemistry	3	
AST 105	Applied Physics	3	
AST 133	Production Drawing	2	
AST 130	Mechanical Measurements	2	
AST 135	Computer Aided Design	2	
AST 122	Drive Components	3	
AST 134	Computer Programming	3	

AST 110	Data Analytics	3	
AST 112	Electrical Principles	3	
	D. Major Specialization Courses		35 units
MT 111	Benchworking, Plumbing and Pipe Bending	4	
MT 121	Machining, Turning and Shaping	4	
MT 211	Machining: Milling and Grinding	4	
MT 212	Mettalurgy and Heat Treatment	2	
MT 213	Pnuematics	2	
MT 221	Basic Arc and Gas Welding	3	
MT 222	Advanced Pipefitting and Pattern Development	2	
MT 223	Basic CNC (Lathe)	2	
MT 224	Hydraulics	2	
MT 311	Repair, Maintenance and Lubrication	2	
MT 312	Principle of Tool and Die	2	
MT 313	Basic CNC (Milling)	2	
MT 321	Advanced CNC	2	
MT 322	Inspection and Quality Control	2	
	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	27
Professional and Management Courses	32
Specialization/Major Courses	35
Supervised Industrial Training/OJT	20
Mandated Courses (PE & NSTP)	14
TOTAL	164

Republic of the Philippines
BATANGAS STATE UNIVERSITY
Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY
Bachelor of Industrial Technology (BIT)
Mechanical Technology
Effective A.Y. 2018-2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
AST 130	Mechanical Measurements	1	3	2	4	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
MT 111	Benchworking, Plumbing and Pipe Bending	1	9	4	10	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				24	38	

FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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 135	Computer Aided Design	1	3	2	4	AST 133
AST 122	Drive Components	3	0	3	3	None
MT 121	Machining, Turning and Shaping	1	9	4	10	AST 130/MT 111
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				26	32	

SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
MT 211	Machining: Milling and Grinding	1	9	4	10	MT 121
MT 212	Mettalurgy and Heat Treatment	2	0	2	2	AST 102/AST 105
MT 213	Pnuematics	1	3	2	4	AST 105
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				25	35	

SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa Iba't Ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	Ged 102, AST 111
AST 112	Electrical Principles	2	3	3	5	AST 105
MT 221	Basic Arc and Gas Welding	1	6	3	7	MT 212
MT 222	Advanced Pipefitting and Pattern Development	1	3	2	4	MT 111
MT 223	Basic CNC (Lathe)	1	3	2	4	MT 121
MT 224	Hydraulics	1	3	2	4	MT 213
PE 104	Team Sports	2	0	2	2	PE103
TOTAL				26	38	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	MT 222, MT 223, MT 224
PM 105	Materials Technology Management	3	0	3	3	MT 222, MT 223, MT 224
PM 106	Professional Ethics	3	0	3	3	None
MT 311	Repair, Maintenance and Lubrication	1	3	2	4	MT 211
MT 312	Principle of Tool and Die	1	3	2	4	AST 133
MT 313	Basic CNC (Milling)	1	3	2	4	MT 223/MT 211
TOTAL				21	27	

THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 108	Art Appreciation	3	0	3	3	None
PM 107	Technology Research II	3	0	3	3	MT 311, MT 313, MT 314
PM 108	Manufacturing Technology	3	0	3	3	MT 311, MT 313, MT 314
PM 109	Total Quality Management	3	0	3	3	MT 311, MT 313, MT 314
PM 110	Environmental Technology	3	0	3	3	MT 311, MT 313, MT 314
PM 111	Technopreneurship	3	0	3	3	MT 311, MT 313, MT 314
MT 321	Advanced CNC	1	3	2	4	MT 314
MT 322	Inspection and Quality Control	2	0	2	2	MT 311, MT 313, MT 314
TOTAL				22	24	

FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	MT 321, 3T 322
TOTAL				10	540	

FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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: 164



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	Prorammmable 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

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	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	
FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	2	0	2	2	PE101
TOTAL				25	24	
SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
MXT 211	Electric Motors and Controllers	2	3	3	5	MXT 123
MXT 212	Digital Electronics and Microprocessor Control	2	3	3	5	MXT 122
MXT 213	Fluid Power and Control	2	3	3	5	AST 107
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				26	34	
SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa iba't ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	All Math Subjects
MXT 221	Electropneumatics and Electrohydraulics	2	3	3	5	MXT 212, MXT 213
MXT 222	Proramable Logic Control	2	3	3	5	MXT 212, MXT 213
MXT 223	Mechatronics Technology Workshop II (Lathe Machining and Shaping)	1	6	3	7	MT 111
PE 104	Team Sports	2	0	2	2	PE103
TOTAL				23	31	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	
THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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 Subject
TOTAL				24	28	
FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	MT 321, 3T 322
TOTAL				10	540	
FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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



CURRICULUM

Bachelor of Industrial Technology

WELDING

AND FABRICATION 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 Welding and Fabrication Technology deals with fundamental principles of welding process in metal working industry. It provides knowledge skills and attitudes in various welding processes that can be used in their on-the-job training and on their future careers. It also includes technical knowledge and techniques of joining various types of metal.

Program Objectives

1. Successfully practice as engineering technologists 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 109	Manufacturing Technology	3	
PM 110	Total Quality Management	3	
PM 111	Environmental Technology	3	
PM 112	Technopreneurship	3	
	C. Applied Sciences and Tools Courses		27 units
AST 111	Math for Technology	3	
AST 102	Applied Chemistry	3	
AST 105	Applied Physics	3	
AST 133	Production Drawing	2	
AST 130	Mechanical Measurements	2	
AST 135	Computer Aided Design	2	
AST 124	Jigs and Fixtures	3	
AST 134	Computer Programming	3	

AST 110	Data Analytics	3	
AST 112	Electrical Principles	3	
	D. Major Specialization Courses		35 units
WFT 111	Benchwork, Plumbing and Pipebending	4	
WFT 121	Shielded Metal Arc Welding (SMAW)	3	
WFT 122	Welding Codes, Symbols and Standards	2	
WFT 211	Gas Welding (OAW)	3	
WFT 212	Machining: Turning and Shaping	4	
WFT 213	Metallurgy and Heat Treatment	2	
WFT 221	Advanced Gas Metal Arc Welding (GMAW)	3	
WFT 222	Basic Gas Tungsten Arc Welding (GTAW)	3	
WFT 311	Flux Cored Arc Welding (FCAW)	3	
WFT 312	Welding Science and Mechanics	2	
WFT 313	Destructive and Non Destructive Testing	2	
WFT 321	Inspection and Quality Control	2	
WFT 322	Advanced Pipefitting and Pattern Development	2	
	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	27
Professional and Management Courses	32
Specialization/Major Courses	35
Supervised Industrial Training/OJT	20
Mandated Courses (PE & NSTP)	14
TOTAL	164

Republic of the Philippines
BATANGAS STATE UNIVERSITY
 Batangas City

COLLEGE OF INDUSTRIAL TECHNOLOGY
 Bachelor of Industrial Technology (BIT)
 Welding and Fabrication Technology
 Effective A.Y. 2018-2019

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	None
AST 102	Applied Chemistry	2	3	3	5	None
AST 105	Applied Physics	2	3	3	5	None
AST 133	Production Drawing	1	3	2	4	None
AST 130	Mechanical Measurements	1	3	2	4	None
PM 101	Occupational Health and Safety Management	2	0	2	2	None
WFT 111	Benchwork, Plumbing and Pipebending	1	9	4	10	None
NSTP 111	National Service Training Program 1	3	0	3	3	None
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	None
TOTAL				24	38	

FIRST YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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 135	Computer Aided Design	1	3	2	4	AST 133
AST 124	Jigs and Fixtures	3	0	3	3	None
WFT 121	Shielded Metal Arc Welding (SMAW)	1	6	3	7	WFT 111
WFT 122	Welding Codes, Symbols and Standards	2	0	2	2	None
NSTP 121	National Service Training Program 2	3	0	3	3	NSTP111
PE 102	Rhythmic Activities	2	0	2	2	PE101
TOTAL				27	33	

SECOND YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Ged 103	The Life and Works of Rizal	3	0	3	3	None
Ged 104	The Contemporary World	3	0	3	3	None
FILI 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	None
PM 102	Industrial Operation & Management Practices	3	0	3	3	None
AST 134	Computer Programming	2	3	3	5	None
WFT 211	Gas Welding (OAW)	1	6	3	7	WFT 121
WFT 212	Machining: Turning and Shaping	1	9	4	10	WFT 111, AST 128
WFT 213	Metallurgy and Heat Treatment	2	0	2	2	AST 102, AST 105
PE 103	Individual and Dual Sports	2	0	2	2	PE102
TOTAL				26	38	

SECOND YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
FILI 102	Filipino sa iba't ibang Disiplina	3	0	3	3	None
Ged 107	Ethics	3	0	3	3	None
PM 103	Production and Operations Management	3	0	3	3	None
AST 110	Data Analytics	3	0	3	3	GEd 102, AST 111
AST 112	Electrical Principles	2	3	3	5	AST 105
WFT 221	Advanced Gas Metal Arc Welding (GMAW)	1	6	3	7	WFT 211
WFT 222	Basic Gas Tungsten Arc Welding (GTAW)	1	6	3	7	WFT 211
PE 104	Team Sports	2	0	2	2	PE103
TOTAL				23	33	

THIRD YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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	WFT 211, 212, 213, 221, 222
PM 105	Materials Technology Management	3	0	3	3	WFT 211, 212, 213, 221, 222
PM 106	Professional Ethics	3	0	3	3	None
WFT 311	Flux Corded Arc Welding (FCAW)	2	3	3	5	WFT 221
WFT 312	Welding Science and Mechanics	2	0	2	2	WFT 211, 212, 213, 221, 222
WFT 313	Destructive and Non Destructive Testing	1	3	2	4	WFT 211, 212, 213, 221, 222
TOTAL				22	26	

THIRD YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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
WFT 321	Inspection and Quality Control	2	0	2	2	WFT 313
WFT 322	Advanced Pipefitting and Pattern Development	1	3	2	4	WFT 311, 312, 313
TOTAL				22	24	

FOURTH YEAR						
First Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 1	Supervised Industrial Training 1 (540hrs)	0	10	10	540	WFT 321, 322
TOTAL				10	540	

FOURTH YEAR						
Second Semester						
COURSE NO.	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
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: 164