



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 108	Manufacturing Technology	3	
PM 109	Total Quality Management	3	
PM 110	Environmental Technology	3	
ENGG 405	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	Plant Safety Network	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

PROGRAM OF STUDY

FIRST YEAR						
First Semester						
COURSE CODE	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
AST 111	Math for Technology	3	0	3	3	
AST 102	Applied Chemistry	2	3	3	5	
AST 105	Applied Physics	2	3	3	5	
AST 133	Production Drawing	1	3	2	4	
AST 129	Electronics Measurements	1	3	2	4	
PM 101	Occupational Health and Safety Management	2	0	2	2	
CPT 111	Computer Programming I	2	3	3	5	
CPT 112	Computer Architecture	2	3	3	5	
NSTP 111	National Service Training Program 1	3	0	3	3	
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	
TOTAL		18	18	26	33	

FIRST YEAR						
Second Semester						
COURSE CODE	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
GEEd 101	Understanding the Self	3	0	3	3	
GEEd 102	Mathematics in the Modern World	3	0	3	3	
GEEd 106	Purposive Communication	3	0	3	3	
GEEd 109	Science, Technology and Society	3	0	3	3	
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	NSTP 111
PE 102	Rhythmic Activities	2	0	2	2	PE 101
TOTAL		20	9	25	26	

SECOND YEAR						
First Semester						
COURSE CODE	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
GEEd 103	Life and Works of Rizal	3	0	3	3	
GEEd 104	The Contemporary World	3	0	3	3	
Fili 101	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3	3	
PM 102	Industrial Operation & Management Practices	3	0	3	3	
AST 114	Digital Electronics	2	3	3	5	
CPT 211	CISCO 1	2	3	3	5	CPT 121
CPT 212	Computer Hardware Application	2	3	3	5	CPT 112
PE 103	Individual and Dual Sports	2	0	2	2	PE 101
TOTAL		20	9	23	29	

SECOND YEAR						
Second Semester						
COURSE CODE	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Fili 102	Filipino sa iba't ibang Disiplina	3	0	3	3	
GEEd 107	Ethics	3	0	3	3	
PM 103	Production and Operations Management	3	0	3	3	
AST 110	Data Analytics	3	0	3	3	GEEd 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 101
TOTAL		20	9	23	29	

THIRD YEAR						
First Semester						
COURSE CODE	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
Litr 102	ASEAN Literature	3	0	3	3	
GEd 105	Readings in Philippine History	3	0	3	3	
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	
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		21	9	24	30	

THIRD YEAR						
Second Semester						
COURSE CODE	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
GEd 108	Art Appreciation	3	0	3	3	
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
ENGG 405	Technopreneurship	3	0	3	3	*Regular Standing
CPT 321	CISCO 4	2	3	3	5	CPT 312
CPT 322	Plant Safety Network	2	3	3	5	CPT 311
TOTAL		22	6	24	28	

FOURTH YEAR						
First Semester						
COURSE CODE	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 105	Supervised Industrial Training 1 (540hrs)	0	10	10	540	CPT 321, CPT 322
TOTAL				10	540	

FOURTH YEAR						
Second Semester						
COURSE CODE	COURSE TITLE	CREDIT		UNITS	NO. OF HRS.	PRE-REQUISITE
		LEC	LB/SW			
OJT 106	Supervised Industrial Training 2 (540hrs)	0	10	10	540	OJT 105
TOTAL				10	540	

* Regular Standing: No deficiencies on the previous semester.

TOTAL UNITS: 165