



**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
	<b>A. General Education Courses (CMO No. 20, series of 2013)</b>		<b>36 units</b>
	<b>B. Professional and Management Courses</b>		<b>32 units</b>
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	
	<b>C. Applied Sciences and Tools Courses</b>		<b>28 units</b>
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 104	General Biology and Introduction to Microbiology	3	
AST 134	Computer Programming	3	
AST 110	Data Analytics	3	
AST 101	Microbial and Food Biotechnology	3	
	<b>D. Major Specialization Courses</b>		<b>36 units</b>
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 and Analysis	3	
FT 223	Food Microbiology	3	
FT 311	Food Product Development and Sensory Evaluation	3	
FT 312	Catering and Bar Service Management	3	
FT 321	Food Packaging & Storage Technology	3	
FT 322	Food Quality Management and Food Regulations	3	
	<b>E. Mandated Courses</b>		<b>14 units</b>
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	
	<b>F. Supervised Industrial Training/OJT</b>		<b>20 units</b>

<b>SUMMARY</b>	
<b>Courses</b>	<b>Number of Units</b>
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
<b>TOTAL</b>	<b>166</b>

**PROGRAM OF STUDY**

<b>FIRST YEAR</b>						
<b>First Semester</b>						
<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDIT</b>		<b>UNITS</b>	<b>NO. OF HRS.</b>	<b>PRE-REQUISITE</b>
		<b>LEC</b>	<b>LB/SW</b>			
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	
PM 101	Occupational Health and Safety Management	2	0	2	2	
FT 111	Introduction to Food Science and Technology	3	0	3	3	
FT 112	Basic Foods and Nutrition	3	0	3	3	
NSTP 111	National Service Training Program 1	3	0	3	3	
PE 101	Physical Fitness, Gymnastics and Aerobics	2	0	2	2	
<b>TOTAL</b>		<b>19</b>	<b>9</b>	<b>24</b>	<b>25</b>	

<b>FIRST YEAR</b>						
<b>Second Semester</b>						
<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDIT</b>		<b>UNITS</b>	<b>NO. OF HRS.</b>	<b>PRE-REQUISITE</b>
		<b>LEC</b>	<b>LB/SW</b>			
GEd 101	Understanding the Self	3	0	3	3	
GEd 102	Mathematics in the Modern World	3	0	3	3	
GEd 106	Purposive Communication	3	0	3	3	
GEd 109	Science, Technology and Society	3	0	3	3	
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	NSTP 111
PE 102	Rhythmic Activities	2	0	2	2	PE 101
<b>TOTAL</b>		<b>19</b>	<b>12</b>	<b>25</b>	<b>28</b>	

<b>SECOND YEAR</b>						
<b>First Semester</b>						
<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDIT</b>		<b>UNITS</b>	<b>NO. OF HRS.</b>	<b>PRE-REQUISITE</b>
		<b>LEC</b>	<b>LB/SW</b>			
GEd 103	Life and Works of Rizal	3	0	3	3	
GEd 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 104	General Biology and Introduction to Microbiology	3	0	3	3	
AST 134	Computer Programming	2	3	3	5	
FT 211	Food Chemistry	2	3	3	5	AST 103
FT 212	Bakery & Confectionary Products	1	6	3	7	FT 121
PE 103	Individual and Dual Sports	2	0	2	2	PE 101
<b>TOTAL</b>		<b>22</b>	<b>12</b>	<b>26</b>	<b>34</b>	

<b>SECOND YEAR</b>						
<b>Second Semester</b>						
<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>CREDIT</b>		<b>UNITS</b>	<b>NO. OF HRS.</b>	<b>PRE-REQUISITE</b>
		<b>LEC</b>	<b>LB/SW</b>			
Fili 102	Filipino sa Iba't Ibang Disiplina	3	0	3	3	
GEd 107	Ethics	3	0	3	3	
PM 103	Production and Operations Management	3	0	3	3	
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	PE 101
<b>TOTAL</b>		<b>20</b>	<b>9</b>	<b>23</b>	<b>29</b>	

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	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	
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 Food Biotechnology	3	0	3	3	FT 223
<b>TOTAL</b>		<b>21</b>	<b>9</b>	<b>24</b>	<b>30</b>	

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	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
ENGG 405	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
<b>TOTAL</b>		<b>22</b>	<b>6</b>	<b>24</b>	<b>28</b>	

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	FT 321, FT 322
<b>TOTAL</b>				<b>10</b>	<b>540</b>	

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
<b>TOTAL</b>				<b>10</b>	<b>540</b>	

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

**TOTAL UNITS: 166**