


**TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES**  
**Quezon City**
**2018 CURRICULUM FOR BACHELOR OF SCIENCE IN ENVIRONMENTAL AND SANITARY ENGINEERING (BSEnSE)**

IMPORTANT: Registration in any course/s without all the pre-requisite/s, correct sequence and authorized load shall not be given any credit regardless of the grade/s obtained.

NAME : \_\_\_\_\_ STUDENT NO : \_\_\_\_\_

COURSE CODE		DESCRIPTIVE TITLE	LEC HOURS	LAB HOURS	CREDIT UNITS	PRE-REQUISITE(S)/CO-REQUISITE(S)
<b>FIRST YEAR, FIRST SEMESTER ( 20 UNITS )</b>						
GEE	001	General Education Elective 1	3	0	3	
ENSE	001	Sanitary Engineering Orientation	1	0	1	
MATH	016	Calculus 1	3	0	3	
CE	005	Engineering Drawings and Plans	0	3	1	
CHEM	001C	Chemistry for Engineers	3	3	4	
GEC	003	Contemporary World	3	0	3	
GEC	004	Mathematics in the Modern World	3	0	3	
PE	001	Physical Education 1	2	0	2	
NSTP	001	National Service Training Program 1	(3)	0	(3)	
<b>TOTAL</b>			<b>18</b>	<b>6</b>	<b>20</b>	
<b>FIRST YEAR, SECOND SEMESTER ( 20 UNITS )</b>						
GEE	002	General Education Elective 2	3	0	3	
CHEM	003A	Environmental and Sanitary Chemistry	2	3	3	CHEM 001C(P)
PHYS	001C	Calculus-Based Physics	3	3	4	MATH 016(P)
ITE	001A	Computer Fundamentals and Programming	0	6	2	
MATH	017	Calculus 2	3	0	3	MATH 016(P)
MATH	019	Engineering Data Analysis	3	0	3	
PE	002	Physical Education 2	2	0	2	PE 001(P)
NSTP	002	National Service Training Program 2	(3)	0	(3)	NSTP 001(P)
<b>TOTAL</b>			<b>16</b>	<b>12</b>	<b>20</b>	
<b>SECOND YEAR, FIRST SEMESTER ( 25 UNITS )</b>						
CE	001	Statics of Rigid Bodies	3	0	3	MATH 017(P) PHYS 001C(P)
GEC	002	Readings in Philippine History	3	0	3	
GEE	003	General Education Elective 3	3	0	3	
SOCSC	005	Life and Works of Rizal	3	0	3	
MATH	010	Differential Equations	3	0	3	MATH 017(P)
CE	010A	Fundamentals of Surveying	3	6	5	ENSE 001(P)
CE	301	Engineering Geology	3	0	3	CHEM 001C(P)
PE	003	Physical Education 3	2	0	2	PE 002(P)
<b>TOTAL</b>			<b>23</b>	<b>6</b>	<b>25</b>	
<b>SECOND YEAR, SECOND SEMESTER ( 24 UNITS )</b>						
CE	002A	Dynamics of Rigid Bodies	2	0	2	CE 001(P)
CE	003	Mechanics of Deformable Bodies	4	0	4	CE 001(P)
CPE	003	Computer-Aided Drafting	0	3	1	ITE 001A(P)
ME	005	Engineering Economy	3	0	3	ENSE 001(P)
GEC	005	Purposive Communication	3	0	3	
GEC	008	Ethics	3	0	3	
GEC	007	Science, Technology and Society	3	0	3	
MATH	020	Numerical Solutions to Engineering Problems	2	3	3	MATH 010(P)
PE	004	Physical Education 4	2	0	2	PE 003(P)
<b>TOTAL</b>			<b>22</b>	<b>6</b>	<b>24</b>	
<b>THIRD YEAR, FIRST SEMESTER ( 24 UNITS )</b>						
ENVI	001	Environmental Science and Engineering	3	0	3	CHEM 003A(P)
EE	001	Basic Electrical Engineering	3	0	3	PHYS 001C(P)
THER	001A	Thermodynamics	3	0	3	PHYS 001C(P)
ENSE	002	Microbiology and Parasitology for Environmental Engineers	2	3	3	CHEM 003A(P)


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ENSE	003	Integration Course for Mathematics	2	0	2	MATH 020(P)
CE	404A	Structural Theory	3	3	4	CE 003(P)
CE	405A	Construction Materials and Testing	2	3	3	CE 002A(P) CE 003(P)
CE	402	Fluid Mechanics	2	3	3	CE 003(P)
<b>TOTAL</b>			<b>20</b>	<b>12</b>	<b>24</b>	
<b>THIRD YEAR, SECOND SEMESTER ( 25 UNITS )</b>						
EMAN	001	Engineering Management	2	0	2	ME 005(P)
ENSE	004	Project Management	3	3	4	CE 405A(P)
ENSE	005	Public Health Engineering	2	0	2	ENSE 002(P) ENVI 001(P)
ENSE	006	Integration Course for Engineering Sciences	2	0	2	ENSE 003(P)
CE	015A	Principles of Reinforced/Prestressed Concrete	3	3	4	CE 404A(P)
CE	016A	Hydraulics	2	3	3	3rd Year Standing
ENSE	406	Occupational Health and Safety	2	0	2	ENSE 002(P) ENVI 001(P)
CE	410A	Hydrology	3	0	3	MATH 010(P)
GEC	006	Art Appreciation	3	0	3	
<b>TOTAL</b>			<b>22</b>	<b>9</b>	<b>25</b>	
<b>THIRD YEAR, SUMMER ( 3 UNITS )</b>						
ENSE	007	Sanitary Engineering OJT/Practicum(240hrs)	2	3	3	3rd Year Standing
<b>TOTAL</b>			<b>2</b>	<b>3</b>	<b>3</b>	
<b>NO STUDENT SHALL BE ALLOWED TO TAKE FOURTH YEAR PROFESSIONAL COURSES UNLESS HE HAS COMPLETED THE BASIC AND THE THIRD YEAR COURSES INCLUDING PE AND NSTP COURSES.</b>						
<b>FOURTH YEAR, FIRST SEMESTER ( 24 UNITS )</b>						
ENSE	008	Water Supply Planning and Development	3	0	3	CE 016A(P) CE 410A(P)
ENSE	009	Sanitary Science, Fire Protection and Plumbing as Applied to Buildings	2	3	3	CE 016A(P)
ENSE	010	SE Project 1	1	3	2	ENSE 004(P) MATH 019(P)
ENSE	011	SE Design Project 1	2	3	3	ENSE 004(P) MATH 019(P)
TECH	101	Introduction to Engineering Entrepreneurship	3	0	3	EMAN 001(P)
CE	401A	Geotechnical Engineering(Soil Mechanics)	3	3	4	CE 002A(P) CE 003(P) CE 301(P)
ENSE	404	Environmental Planning, Laws, and Impact Assessment	3	0	3	CE 410A(P) ENSE 002(P) ENVI 001(P)
ENSE	502	Sewerage and Drainage Engineering	3	0	3	CE 016A(P) CE 410A(P)
<b>TOTAL</b>			<b>20</b>	<b>12</b>	<b>24</b>	
<b>FOURTH YEAR, SECOND SEMESTER ( 22 UNITS )</b>						
GEC	001	Understanding the Self	3	0	3	
ENSE	012	Sanitary Engineering Laws, Contracts and Ethics	3	0	3	ENSE 404(P)
ENSE	013	Water Purification Process Design	3	0	3	ENSE 008(P)
ENSE	014	Sewage and Industrial Wastewater Treatment	3	0	3	ENSE 502(P)
ENSE	015	Solid and Hazardous Waste Engineering	3	0	3	CHEM 003A(P)
ENSE	016	Integration Course for ENSE	2	0	2	Graduating
ENSE	017	SE Project 2	0	3	1	ENSE 010(P)
ENSE	018	SE Design Project 2	1	6	3	ENSE 011(P)
ENSE	504	Environmental Engineering Laboratory	0	3	1	CHEM 003A(P) ENSE 404(P)
<b>TOTAL</b>			<b>18</b>	<b>12</b>	<b>22</b>	

**CREDENTIALS PRESENTED:**

( ) F137A ( ) NSO Birth Certificate  
 ( ) F138 ( ) HD  
 ( ) GMC ( ) TOR

**DEFICIENCY/IES:**

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 \_\_\_\_\_

Evaluated By: \_\_\_\_\_

Date: \_\_\_\_\_

Received By: \_\_\_\_\_

Date: \_\_\_\_\_

**LEGEND**

P = Pre-requisite

C = Co-requisite

NOTE: EVALUATION IS TENTATIVE AND MAY BE REVISED FOR SOME VALID CAUSES OR REASONS OR IF OMISSIONS AND/OR LACK OF UNITS CREDITED BE DISCOVERED LATER.