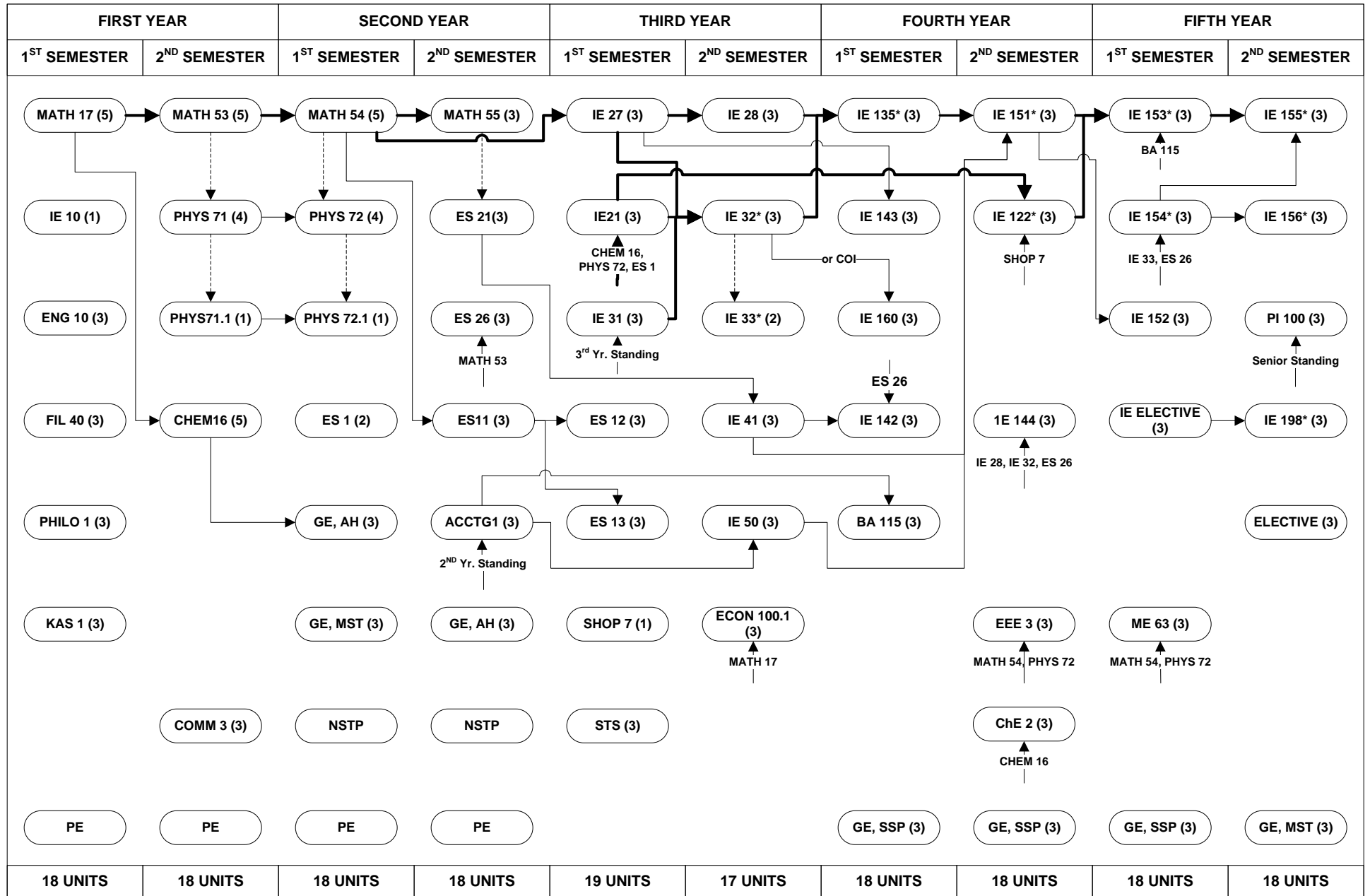


BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING



Total No. of Units = 180

Version 2012

LEGEND: * Project Course

Critical Path

Prerequisite

Co-requisite

**B.S. INDUSTRIAL ENGINEERING
PROGRAM CHECKLIST
Version 2012**

FIRST YEAR									
First Semester					Second Semester				
Course Number	Course Title	Lec	Lab	Units	Course Number	Course Title	Lec	Lab	Units
Math 17	Algebra and Trigonometry	5	0	5	Math 53	Elementary Analysis I	5	0	5
IE 10	Basics of Industrial Engineering	1	0	1	Chem 16	General Chemistry I	3	6	5
Eng 10 (AH)	College English	3	0	3	Physics 71	Elementary Physics I	4	0	4
Fil 40 (AH)	Wika, Kultura at Lipunan	3	0	3	Physics 71.1	Elementary Physics I Laboratory	0	2	1
Philo 1 (SSP)	Philosophical Analysis	3	0	3	Comm 3 (AH)	Practical Speech Fundamentals	3	0	3
Kas 1 (SSP)	Kasaysayan ng Pilipinas	3	0	3	PE		2	0	(2)
PE		2	0	(2)					
		<u>20</u>	<u>0</u>	<u>18</u>			<u>17</u>	<u>8</u>	<u>18</u>

SECOND YEAR									
First Semester					Second Semester				
Course Number	Course Title	Lec	Lab	Units	Course Number	Course Title	Lec	Lab	Units
Math 54	Elementary Analysis II	5	0	5	Math 55	Elementary Analysis III	3	0	3
Physics 72	Elementary Physics II	4	0	4	ES 11	Statics of Rigid Bodies	3	0	3
Physics 72.1	Elementary Physics II Laboratory	0	2	1	ES 21	Mathematical Methods in Engineering	3	0	3
ES 1	Engineering Drawing	0	6	2	ES 26	Introduction to Computer Programming	2	3	3
GE (AH)		3	0	3	Acctg 1	Introduction to Financial Accounting	3	0	3
GE (MST)		3	0	3	GE (AH)		3	0	3
PE		2	0	(2)	PE		2	0	(2)
NSTP		3	0	(3)	NSTP		3	0	(3)
		<u>20</u>	<u>8</u>	<u>18</u>			<u>17</u>	<u>3</u>	<u>18</u>

THIRD YEAR									
First Semester					Second Semester				
Course Number	Course Title	Lec	Lab	Units	Course Number	Course Title	Lec	Lab	Units
IE 21	Industrial Materials & Processes	3	0	3	IE 28	Statistical Analysis for Industrial Engineering	3	0	3
IE 27	Probability & Statistics for Industrial Engineering	3	0	3	IE 32	Methods Engineering	2	3	3
IE 31	Industrial Organization & Management	3	0	3	IE 33	Systems & Procedures	2	0	2
Shop 7	General Shop Practice	0	3	1	IE 41	Operations Research I	3	0	3
ES 12	Dynamics of Rigid Bodies	3	0	3	IE 50	Engineering Economics for Industrial Engineering	3	0	3
ES 13	Mechanics of Deformable Bodies I	3	0	3	Econ 100.1	Introduction to Macroeconomic Theory & Policy	3	0	3
STS (MST)	Science, Technology & Society	3	0	3			<u>16</u>	<u>3</u>	<u>17</u>
		<u>18</u>	<u>3</u>	<u>19</u>					

FOURTH YEAR

First Semester					Second Semester				
Course Number	Course Title	Lec	Lab	Units	Course Number	Course Title	Lec	Lab	Units
IE 135	Industrial Quality Control	3	0	3	IE 122	Product Design & Development	2	3	3
IE 142	Operations Research II	3	0	3	IE 144	Systems Simulation	2	3	3
IE 143	Stochastic Processes in Engineering	3	0	3	IE 151	Production Systems	2	3	3
IE 160	Ergonomics	2	3	3	ChE 2	Elementary Chemical Engineering	3	0	3
BA 115	Management Accounting	3	0	3	EEE 3	Elementary Electrical Engineering	3	0	3
GE (SSP)		3	0	3	GE (SSP)		3	0	3
<hr/>					<hr/>				
<i>17</i>					<i>15</i>				
<i>3</i>					<i>9</i>				
<i>18</i>					<i>18</i>				

FIFTH YEAR

First Semester					Second Semester				
Course Number	Course Title	Lec	Lab	Units	Course Number	Course Title	Lec	Lab	Units
IE 152	Manufacturing Planning & Design	3	0	3	IE 155	Industrial Systems Design	2	3	3
IE 153	Project Development & Management	2	3	3	IE 156	Information Systems II	3	0	3
IE 154	Information Systems I	3	0	3	IE 198	Special Problems	3	0	3
ME 63	Thermodynamics	3	0	3	PI 100	The Life & Works of Jose Rizal	3	0	3
IE Elective		3	0	3	Elective		3	0	3
GE (SSP)		3	0	3	GE (MST)		3	0	3
<hr/>					<hr/>				
<i>17</i>					<i>17</i>				
<i>3</i>					<i>3</i>				
<i>18</i>					<i>18</i>				

GE SUBJECTS

Arts and Humanities (req't: 15u)

- Araling Kapampangan10^a
- Aral Pil 12^a
- Art Stud 1
- Art Stud 2
- BC 10
- Comm 3^b
- CW 10^b
- Eng 1^b
- Eng 10^b
- Eng 11^b
- Eng 12^b
- Eng 30^{b, d3}
- EL 50^{d3}
- FA 28^a
- FA 30
- Fil 25
- Fil 40 (required)
- Film 10
- Film 12^a
- Humad 1^a
- J 18
- Kom 1
- Kom 2

- L Arch^a
- MPs 10^a
- MuD 1
- MuL 9^a
- Mul 13
- Pan Pil 12^a
- Pan Pil 17^a
- Pan Pil 19^{a, d2}
- Pan Pil 40^{a, d2}
- Pan Pil 50^{a, d3}
- SEA 30^c
- Theatre 10
- Theatre 11^a
- Theatre 12

- MS 1
- Nat Sci 2
- STS

Social Science and Philosophy (req't: 15 u)

- Anthro 10
- Archaeo 2
- Arkiyoloji 1^a
- Econ 11
- Econ 31^{d3, 4}
- Geog 1
- Kas 1^a
- Kas 2
- L Arch 1^{a, c}
- Lingg 1
- Philo 1
- Philo 10
- Philo 11
- SEA 30^c
- Soc Sci 1
- Soc Sci 2
- Soc Sci 3
- Socio 10^a

Math, Science, and Technology (req't: 9u)

- Bio 1
- EEE 10
- Env Sci 1
- ES 10
- GE 1
- Geol 1
- L Arch 1^{a, c}
- MBB 1

a – May be taken to satisfy Philippine Studies requirement of six (6) units in any domain

b – Nine (9) units of GE courses in English are required

c – Can be taken to fulfill requirement in one GE domain, either AH or SSP, but can be credited only once

d – Preferably sophomore (2), junior (3), or senior (4) standing

QUALIFIED ELECTIVES

List of Approved IE Electives

- IE 136 Manufacturing Systems
- IE 137 Quality Systems in Manufacturing
- IE 138 Manufacturing Management
- IE 139 Reliability Engineering for Industrial Systems
- IE 157 Software Tools for Industrial Engineering
- IE 158 Supply Chain Management for Industrial and Service Systems
- IE 159 Introduction to Technology Entrepreneurship
- IE 161 Safety & Health Management
- IE 197 Special Topics

List of Approved Non-IE Electives

- BA 151 Human Behavior in Organizations
 - BA 152 Human Resource Management
 - BA 170 Introduction to Marketing Management
 - BA 192 Entrepreneurship
 - Econ 100.2 Introduction to Microeconomic Theory & Policy
 - EgyE 101 Introduction to Energy Engineering
 - EnE 31 Technology & Environment
 - MetE 143 Elements of Materials Science
 - Psych 101 General Psychology
- Other courses acceptable to the degree program sponsor

Notes:

1. Six (6) units of RGEF courses must be in the Philippine Studies domain ; Minimum of nine (9) units of English/Communication courses must be taken; Six (6) units in one of the following components are required: Military Training Service (ROTC), Civic Welfare Training Service (CWTS), Literacy Training Service
2. All students are required to complete any 4 PE courses
3. Electives are to be chosen among IE or Non-IE electives
4. Math 54, Chem 16 and Physics 72 need to be completed within the first two years to achieve regular junior standing.
5. A student who fails to obtain a grade of 3 or better in two takes in Math 17, Math 53, Math 54, or Math 55 will be dismissed from the college
6. IE major courses are offered on a seasonal basis (i.e., courses are normally offered only in the semester where they are listed in the flowchart
7. No waiver of prerequisites is allowed in most IE major courses