Xavier University
BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING
2008-2009 Curriculum, 4th Edition (effectivity: SY 2014-2015)

FIRST YEAR

First Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
CHEM	81	General Chemistry (Lecture)	3	0	3	
CHEM	81L	General Chemistry (Laboratory)	0	1	1	
ENG	014.1	English Plus: Introduction to Study and Thinking Skills	(3)	0	(3)	
ES	01	Engineering Drawing	0	1	1	
FFP	10	Freshmen Formation Program	3	0	3	
FIL	22	Komunikasyon sa Akademikong Filipino	3	0	3	
MA	81	College Algebra	3	0	3	
MA	82	Plane and Spherical Trigonometry	3	0	3	
PE	1	Physical Fitness	2	0	2	
		Total	**(20) 17**	**2**	**(22)19**	

Second Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
ECON	20.1	Principles of Economics with Taxation, Agrarian Reform and Consumer Education	3	0	3	
ENG	16.1	Study, Thinking and Language Skills in English	3	0	3	
ES	02	Computer-Aided Drafting	0	1	1	ES 01
FIL	33	Pagbasa at Pagsulat Tungo sa Pananaliksik	3	0	3	FIL 22
IE	01	Introduction to Industrial Engineering	1	0	1	
MA	83	Advanced Algebra	2	0	2	MA 81
MA	84	Analytic Geometry	2	0	2	MA 81, MA 82
MA	85	Solid Mensuration	2	0	2	MA 81, MA 82
RS	15	The Old Testament	3	0	3	
PE	2	Rhythmic Activities	2	0	2	PE 1
		Total	**21**	**1**	**22**	

SECOND YEAR

First Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
ENG	41	Humanities: Arts, Aesthetics and Society	3	0	3	ENG 16.1
ES	03	Computer Fundamentals and Programming	0	2	2	2nd Year Level
MA	89	Probability and Statistics	3	0	3	MA 81
MA	86	Differential Calculus	4	0	4	MA 83, MA 84, MA 85
PHYS	21	General Physics 1	3	0	3	MA 82, MA 81
PHYS	21L	General Physics 1 Laboratory	0	1	1	MA 82, MA 81
PHILO	01	Logic	3	0	3	
NSTP	1	National Service Training Program 1	3	0	3	
PE	3	Individual/Dual Sports	2	0	2	PE 2
		Total	**21**	**3**	**24**	

Second Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
ENG	34.1	The Literatures of the World	3	0	3	ENG 16.1
ENG	17	Effective Speech Communication	3	0	3	ENG 16.1
MA	87	Integral Calculus	4	0	4	MA 86
PHILO	15.1	Philosophy of Man and the Human Person	3	0	3	PHILO 01
PHYS	22	General Physics 2	3	0	3	PHYS 21, 21L
PHYS	22L	General Physics 2 Laboratory	0	1	1	PHYS 21, 21L
RS	20	Christology	3	0	3	RS 15
NSTP	2	National Service Training Program 2	3	0	3	NSTP 1
PE	4	Team Sports/Games	2	0	2	PE 3
		Total	**24**	**1**	**25**	

THIRD YEAR

First Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
ECON	216	Industrial Economics	3	0	3	ECON 20.1
ES	04	Statics of Rigid Bodies	3	0	3	PHYS 21, 21L, MA 87
ES	08	Engineering Management	3	0	3	3rd Year Level
ES	10.1	Safety Management/Engineering	1	0	1	3rd Year Level
IE	21	Industrial Materials and Processes	2	1	3	CHEM 81, PHYS 21, ES 01
IE	31	Advanced Statistics	3	0	3	MA 89
IE	32	Financial Accounting	3	0	3	3rd Year Level
MA	88	Differential Equations	3	0	3	MA 87
PHILO	30.1	Generic Ethics with PERSON (Philosophical Enrichment and Regeneration for Social Orientation and Networking Program)	3	0	3	PHILO 15.1
		Total	**24**	**1**	**25**	

Note 1: *Students who do not qualify are required by the English Department to take ENG 014.1, a non-credit subject.*
Note 2: *FFP10 must be taken within the first year of entry to the University.*
Note 3: *Subjects taken without completing the required pre-requisite will not be credited.*
Note 4: *Year Level is determined based on completion of at least 75% of the required number of units of the preceding year level prescribed by the curriculum.*
Note 5: *The regular load of a student per semester is as prescribed in this curriculum indicated as TOTAL number of units, which is the MAXIMUM number of units that a student can take in the semester.*

Second Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
ES	05	Dynamics of Rigid Bodies	2	0	2	ES 04
ES	09	Environmental Engineering	2	0	2	CHEM 81, 81L, 3rd Year
ES	07	Engineering Economy and Accounting	3	0	3	3rd Year
IE	34.1	Methods Study	4	1	5	IE 21, MA 89, ES 08
IE	35	Advanced Mathematics for IE	3	0	3	MA 88
IE	36	Management Accounting	3	0	3	IE 32
IETE	11	Technical Elective 1	3	0	3	MA 89
RS	35	Church and Sacraments	3	0	3	RS 20
		Total	**23**	**1**	**24**	

FOURTH YEAR

First Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
ENG	27	Writing Term Paper in the Discipline and Business Correspondence	3	0	3	ENG 16.1
ES	06	Mechanics of Deformable Bodies	3	0	3	ES 04
IE	41	Industrial Quality Control	3	0	3	IE 31, IE 34
IE	42	Operations Research 1	3	0	3	IE 35
IE	43	Ergonomics	2	1	3	IE 34
IETE	12	Technical Elective 2	3	0	3	
PSC	10.1	Politics and Governance with Philippine Constitution	3	0	3	
RS	55	Christian Morality with Social Teachings of the Church	3	0	3	RS 35
		Total	**23**	**1**	**24**	

Second Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
ACE	03	Basic Electrical Engineering	2	1	3	PHYS 22, 22L
ACE	02	Basic Thermodynamics	3	0	3	MA 87, PHYS 22, 22L
HIST	11.1	Rizals Life, Works and Writings	3	0	3	
IE	44.1	Undergraduate Research	1	2	3	
IE	45	Operations Research 2	3	0	3	IE 42
IE	46	Production Systems	3	0	3	IE 42, IE 41
IETE	13	Technical Elective 3	3	0	3	
PHILO	25	Philosophy of Religion	3	0	3	PHILO 30.1
PSYC	1	General Psychology	3	0	3	
		Total	**24**	**3**	**27**	

FIFTH YEAR

First Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
IE	51	Engineering Values and Ethics	3	0	3	5th Year Level
IE	52	Facilities Planning and Design	3	0	3	IE 46
IE	53	Project Feasibility	2	2	4	IE 36, IE 46
IE	54	Information Systems	3	0	3	ES 03, 5th Year Level
IE	55	Systems Engineering	3	0	3	5th Year Level
IETE	14	Technical Elective 4	3	0	3	5th Year Level
SOC	01.1	Principles of Sociology w/ Population, Family Planning and HIV/AIDS Education	3	0	3	
		Total	**20**	**2**	**22**	

Second Semester

Code		Description	Lect.	Lab.	Unit	Pre-Req.
IE	56	Industrial Engineering Internship Program (800 hrs)	0	6	6	

Technical Electives:

Project Management
Job Evaluation and Wage Administration
Product Design and Development
Energy Management