

UNIVERSITY OF MIAMI
DEPARTMENT OF INDUSTRIAL ENGINEERING
BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING
125 Credits
2012-2013

<i>Freshman Year:</i>					
IEN 111	Introduction to Engineering I	3	IEN 112	Introduction to Engineering II	2
ENG 105	English Composition I	3	ENG 107	Writing About Science	3
MTH 151	Calculus I for Engineers	5	MTH 162	Calculus II	4
PHY 205	University Physics I	3	PHY 206	University Physics II	3
			PHY 208	University Physics II Lab	1
			ECO 211	Economic Principles and Problems	3
Total			Total		
14			16		

<i>Sophomore Year:</i>					
ECO 212	Economic Principles and Problems	3	COS 211	Public Speaking	3
IEN 201	Methods Analysis & Work Measurements	3	EEN 205 or CAE 210 or MAE 303	Principles of Electrical Engineering I or Mechanics of Solids I or Thermodynamics I	3
MTH 210	Introduction to Linear Algebra	3	CHM 151	Chemistry for Engineers I	3
PHY 207	University Physics III	3	CHM 153	Chemistry Lab for Engineers	1
PHY 209	University Physics III Lab	1	MTH 311	Ordinary Differential Equations	3
	Humanities and Arts Elective*	3		Advanced PS/HA Elective*	3
Total			Total		
16			16		

<i>Junior Year:</i>					
IEN 310	Introduction to Engineering Probability	3	IEN 312	Applied Statistical Methods	3
IEN 351	Industrial Safety Engineering	3	IEN 361	Industrial Cost Analysis	3
IEN 380	Engineering Economy	5	IEN 363	Project Management for Engineers	3
IEN 441	Deterministic Models in Operations Research	3	IEN 406	Computer - Aided Manufacturing	3
	Advanced PS/HA Elective*	3	IEN 442	Stochastic Models in Operations Research	3
				Technical Elective**	3
Total			Total		
15			18		

<i>Senior Year:</i>					
IEN 465	Production & Inventory Control	3	IEN 494	Senior Project	3
IEN 512	Statistical Quality Control & Quality Management	3	IEN 524	Decision Support Systems in IE	3
IEN 547	Computer Simulation Systems	3	IEN 568	Materials Handling & Facilities Planning	3
IEN 557	Ergonomics & Human Factors Engineering	3		IEN Elective***	3
	IEN Elective***	3		IEN Elective***	3
Total			Total		
15			15		

* **PS/HA Electives** are selected from a list of approved electives maintained in the department at UM.

** The Technical Elective is selected from courses at the 300 level or above, offered by one of the following departments: MTH, BME (except BME 320), CAE, ECO, EEN, IEN, MAE, ACC, FIN, MGT, MAS, MKT.

*** IEN electives are selected from courses at the 300 level or above offered by the Department of Industrial Engineering.