

UNIVERSITY OF MIAMI
BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING
5-Year Engineering Management Concentration
Program Requirements – 155 Credits
2014 – 2015

NAME:

STUDENT #:

COURSE	CR	SEM	GR	QP	SUB	INI	COURSE	CR	SEM	GR	QP	SUB	INI
FRESHMAN YEAR													
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						ECO 211 Economic Principles & Problems	3					
							PHY 206 University Physics II	3					
							PHY 208 University Physics II Lab	1					
SOPHOMORE YEAR													
BSL 212 Introduction to Business Law	3						CAE 210 Mechanics of Solids I, or EEN 205 Principles of Electrical Engineering I, or MAE 303 Thermodynamics I	3					
HA Cognate (HA Elective) ¹	3						CHM 151 Chemistry for Engineers I	3					
IEN 201 Methods Analysis & Work Measurements	3						CHM 153 Chemistry Laboratory for Engineers	1					
MTH 210 Vectors & Matrices	3						HA Cognate (HA Elective) ¹	3					
PHY 207 University Physics III	3						MTH 311 Ordinary Differential Equations	3					
PHY 209 University Physics III Lab	1						PS Cognate (PS Elective) ¹	3					
JUNIOR YEAR													
HA Cognate (HA Elective) ¹	3						IEN 312 Applied Statistical Methods	3					
IEN 310 Introduction to Engineering Probability	3						IEN 361 Industrial Cost Analysis	3					
IEN 351 Industrial Safety Engineering	3						IEN 363 Project Management for Engineers	3					
IEN 380 Engineering Economy	3						IEN 406 Computer-Aided Manufacturing	3					
IEN 441 Deterministic Models in Operations Research	3						IEN 442 Stochastic Models in Operations Research	3					
PS Cognate (PS Elective) ¹	3						PS Cognate (PS Elective) ¹	3					
SENIOR YEAR													
IEN 465 Production & Inventory Control	3						IEN 524 Decision Support Systems in IE	3					
IEN 512 Statistical Quality Control & Quality Management	3						IEN 568 Material Handling & Facilities Planning	3					
IEN 547 Computer Stimulation Systems	3						IEN 570 Engineering Management	3					
IEN 557 Ergonomics & Human Factor Engineering	3						IEN 572 Management of Technological Innovation	3					
IEN 571 Engineering Entrepreneurship	3						IEN Elective ²	3					
IEN Elective ²	3												
FIFTH YEAR													
IEN 694 Master's Capstone Design Project	3						IEN 757 Ergonomics and Occupational Biomechanics	3					
IEN 712 Design of Experiments	3						IEN 764 Supply Chain Management	3					
IEN 742 Linear Programming and Extensions	3						IEN 765 Advanced Production Systems	3					
IEN Elective ²	3						IEN Elective ²	3					

¹Students take a minimum of 3 courses (9 credit hours) in HA cognate and 3 courses in PS Cognate (9 credit hours).

²IEN Electives are selected from courses at the 600- or 700-level, offered by the Department of Industrial Engineering.