



DOCTOR OF PHILOSOPHY IN INDUSTRIAL ENGINEERING (BY RESEARCH)

(Curriculum applicable to students who entered as freshmen beginning school year 2021-2022)

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	1		CORE COURSE 1	4.5	-	3.0				IE-EMG
			CORE COURSE 2	4.5	-	3.0				IE-EMG
			Total	9.0	0.0	6.0				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	2		CORE COURSE 3	4.5	-	3.0				IE-EMG
		IE398	SEMINAR ON RESEARCH AND PUBLICATION	4.5	-	3.0				IE-EMG
			Total	9.0	0.0	6.0				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	3	IE400X	DIE QUALIFYING EXAMINATION	-	-	0.0	Completed Coursework			IE-EMG
			Total	0.0	0.0	0.0				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	4	IE400-1	DISSERTATION 1	4.5	-	3.0	IE400X			IE-EMG
			Total	4.5	0.0	3.0				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
2	2	IE400-2	DISSERTATION 2	13.5	-	9.0	IE400-1			IE-EMG
			Total	13.5	0.0	9.0				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
3	1	IE400-3	DISSERTATION 3	13.5	-	9.0	IE400-2			IE-EMG
			Total	13.5	0.0	9.0				

Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
3	4	IE400-4	DISSERTATION 4	4.5	-	3.0	IE400-3			IE-EMG
			Total	4.5	0.0	3.0				

Total Academic Units : 36.00

CORE COURSES: REQUIRED 9 UNITS										
Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	1 or 2	IE311	PSYCHOLOGICAL FOUNDATIONS AND ADVANCED TOPICS IN HUMAN FACTORS ENGINEERING	4.5	-	3.0	IE205, IE206, IE208			IE-EMG
1	1 or 2	IE318	FINANCIAL ENGINEERING AND OPTIMIZATION	4.5	-	3.0	IE205, IE206, IE208			IE-EMG
1	1 or 2	IE313-1	DATA ANALYTICS AND APPLICATIONS	4.5	-	3.0	IE205, IE206, IE208			IE-EMG
1	1 or 2	IE319	Advanced Supply Chain Modelling	4.5	-	3.0	IE205, IE206, IE208			IE-EMG
1	1 or 2	IE320	Advanced Consumer Behavior Modelling	4.5	-	3.0	IE205, IE206, IE208			IE-EMG

BRIDGING COURSES										
Year	Term	Code	Title	Lec Hrs	Lab Hrs	Credit Units	Prerequisites	Co-requisites	Paired	Care Taker
1	1	IE205	MULTI-CRITERIA OPTIMIZATION	4.5		3.0				IE-EMG
1	2	IE206	MULTIVARIATE STATISTICAL MODELING AND ANALYSIS	4.5		3.0				IE-EMG
1	2	IE208	ANALYSIS AND DESIGN OF WORKPLACE ENVIRONMENTS	4.5		3.0				IE-EMG