

INDUSTRIAL & ENTREPRENEURIAL ENGINEERING									2020-2021						
Cr. Hrs.	SEM 1	Cr. Hrs.	SEM 2	Cr. Hrs.	SEM 3	Cr. Hrs.	SEM 4	Cr. Hrs.	SEM 5	Cr. Hrs.	SEM 6	Cr. Hrs.	SEM 7	Cr. Hrs.	SEM 8
4	<b>MATH 1220 or 1700 Calculus I</b>	4	<b>MATH 1230 or 1710 Calculus II</b>	4	<b>MATH 2720 Multivariate Calculus</b>	4	<b>IEE 2050 Work Design (L) (Sp)</b>	4	<b>MATH 3740 Differential Equations &amp; Linear Algebra</b>	3	<b>IEE 3110 Intro to Operations Research (Sp)</b>	3	<b>IEE 4010 Entrepreneurial Engineering III: Facilities Planning &amp; Logistics (F)</b>	3	<b>IEE 4190 IE Senior Design (F, Sp)</b>
	MATH 1180 ≥ C or placement		MATH 1220 or 1700 ≥ C		MATH 1230 or 1710 ≥ C		IEE 1020		MATH 2720 ≥ C		IEE 2610 ≥ C		IEE 3010 ≥ D		Department Approval
	WES Course Level 1: Quantitative Reasoning						Co-requisite Recommended IME 2610						IEE 3110 ≥ D		WES Course Level 3: Local&Nat'l Perspectives
3+ 1	<b>CHEM 1100+1110 General Chemistry I (L)</b>	4+ 1	<b>PHYS 2050+2060 University Physics I (L)</b>	4+ 1	<b>PHYS 2070+2080 University Physics II (L)</b>	3	<b>IEE 2621 Probability for Engineers (Sp)</b>	3	<b>IEE 3010 Entrepreneurial Engineering II: Product &amp; Service Design (F)</b>	3	<b>IEE 3300 Simulation Modeling Analysis (Sp)</b>	4	<b>IEE 4160 Operations Control In Industry (F)</b>	3	<b>APPROVED TECHNICAL ELECTIVE**</b>
	MATH 1110 ≥ C or placement		MATH 1220 or 1700 ≥ C		MATH 1230 or 1710 ≥ C		Co-requisite MATH 2720 (may be taken concurrently)		Junior or senior standing or instructor approval		IEE 2620 or 2621 ≥ D		IEE 2010 ≥ D		or Internship (IEE 2990) / International Studies
			MATH 1230 or 1710 ≥ C or taken concurrently		PHYS 2050 ≥ C						IEE 2050 ≥ C		IEE 2050 ≥ D		
			WES Course Level 2: Laboratory Science		MATH 2720 or 2300 ≥ C or taken concurrently						(Either may be taken concurrently)		IEE 3110 ≥ D		
3	<b>IEE 1020 Technical Communication (F, Sp)</b>	3	<b>IEE 2010 Entr. Engineering I: Cost &amp; Fin. Analysis (Sp)</b>	3	<b>IEE 2610 Engineering Statistics (L) (F, Sul)</b>	2	<b>IEE 2622 Statistical Quality Control (Sp)</b>	3	<b>IEE 3100 Engineering Economy (F, Sp, Sul)</b>	3	<b>IEE 3420 Ergonomics and Design (Sp)</b>	1	<b>IEE 4190 IE Senior Design (F, Sp)</b>	3	<b>APPROVED TECHNICAL ELECTIVE**</b>
	ENGL 1000 or placement		MATH 1180 ≥ C		MATH 1220 or 1700 ≥ C		IEE 2610 ≥ C		MATH 1230 ≥ C				Department Approval		
	WES Course Level 1: Writing				WES Course Level 1: Communications				Junior Standing		WES Course Level 2: Science and Technology				
3	<b>EDMM 1420 Engineering Graphics (L) (F, Sp, Sul)</b>	3	<b>WES Course Level 2: Personal Wellness</b>	3	<b>ME 2560 Statics (F, Sp, Sul)</b>	3	<b>WES Course Level 2: World Language and Culture</b>	3	<b>IEE 3160 Report Preparation (F, Sp, Sul)</b>	4	<b>ECE 2100 Circuit Analysis (L) (F, Sp, Sul)</b>	3	<b>APPROVED TECHNICAL ELECTIVE**</b>	3	<b>MINOR ELECTIVE**</b>
					MATH 1230 or 1710 ≥ C				IEE 1020 ≥ C		Math 1230 or 1710 ≥ C				
					PHYS 2050/2060 ≥ C				Junior Standing		PHYS 2070 ≥ C or taken concurrently				
3	<b>WES Course Level 1: Inquiry and Engagement</b>					3	<b>MINOR ELECTIVE**</b>	3	<b>MINOR ELECTIVE**</b>	3	<b>MINOR ELECTIVE**</b>	3	<b>MINOR ELECTIVE**</b>	3	<b>WES Course Level 3: Global Perspectives</b>
												3	<b>WES Course Level 2: Artistic Theory &amp; Practice</b>	3	<b>WES Course Level 2: Societies and Culture</b>
	17 hours		15 hours		15 hours		15 hours		16 hours		16 hours		17 hours		18 hours
															129 total hours

NOTES: Prerequisite courses are shown in smaller print.

39 Cr. Pre-Engineering

48 Cr. IEE Req.

15 Cr. WES Req.

27 Cr. IEE Elective Req.

\* See your academic advisor for WES Course Requirements;

A 'C' or better is required for

## INDUSTRIAL & ENTREPRENEURIAL ENGINEERING

### *Approved Technical Electives*

Cr. Hrs.	Elective	Cr. Hrs.	Elective	Cr. Hrs.	Elective	Cr. Hrs.	Elective
3	<b>ECE 2110 Machines &amp; Electronic Circuits</b>	3	<b>ECE 2120 Electronic Circuits &amp; Systems</b>	4	<b>ECE 2210 Electronics I</b>	3	<b>ECE 2500 Digital Logic</b>
	ECE 2100 ≥ C		PHYS 2070 ≥ C or taken concurrently MATH 3740 ≥ C		ECE 2100 ≥ C PHYS 2070 ≥ C		MATH 1110 ≥ C
							MATH 1230 or 1710 ≥ C PHYS 2050/2060 ≥ C
3	<b>ME 2500 Materials Science for Engineers</b>	3	<b>ME 2570 Mechanics of Materials</b>	3	<b>ME 2580 Dynamics</b>	3	<b>CHEG 2611 Environmental Engineering I</b>
	ME 2615 or 2200 or EDMM 1500 ≥ C CHEM 1100/1110 ≥ C MATH 1230 or 1710 ≥ C		ME 2560 ≥ C		ME 2560 or 2530 ≥ C PHYS 2050/2060 ≥ C		CHEM 1100/1110 ≥ C MATH 1230 or 1710 ≥ C
1 - 3	<b>IEE 2990 Cooperative Education</b>	3	<b>IEE 5200 Modern Industrial Practices</b>				
	OR IEE 5200 (not both)		OR IEE 2990 (not both)				