Student:_____ SID#:_____

INDUSTRIAL ENGINEERING

☐ AI _____ ☐ GP _____ ☐ HP _____

Date of first entry:_____ Expected Graduation:_____ Advisor:_____

Effective: Fall 2022
Rev. Date 2/15/2022

Offered Fall Semester Only

Offered Spring Semester Only

Prerequisite

Prerequisite or Concurrent

Course# (Hrs) Course Name Sem_____Grd_____

FRESHMAN

SOPHOMORE

JUNIOR

SENIOR

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR
MATH 220 (4) A.G. & Calc I	MATH 221 (4) A.G. & Calc II	MATH 222 (4) A.G. & Calc III	MATH 551 (3) Matrix Theory
IMSE 201 (3) Intro. to IE	IMSE 250 (2) Intro. Mfg. Proc.	STAT 510 (3) Prob & Stat I	Data Analytics (3) Elective
	IMSE 251 (1) Mfg. Proc. (Lab)	PHYS 213 (5) Engg. Phys. I	PHYS 214 (5) Engg. Phys. II
CHM 210 (4) Chem. I	ME 212 (2) Engg. Graphics	Computer Programming Elective (3)	
	ECON 110 (3) or ECON 120		ACCTG 231 (3) Acctg 4 Bus Opn.
COMM 105 (2) Public Speaking. IA	Hum or Soc Sc (3)		Hum or Soc Sc (3)
ENGL 100* (3) Expos. Writ. I			
IMSE 015 (0) Engg. Assembly Credit (Y/N)_____	IMSE 015 (0) Engg. Assembly Credit (Y/N)_____	IMSE 015 (0) Engg. Assembly Credit (Y/N)_____	IMSE 015 (0) Engg. Assembly Credit (Y/N)_____
(16)	**(15)**	**(15)**	**(17)**

JUNIOR	SENIOR
IMSE 560 (3) Intro. to OR I	IMSE 660 (3) Intro. To OR II
IMSE 541 (3) Stat Quality Ctrl	IMSE 623 (3) Ind. Ergonomics
IMSE 050 (0) Ind. Plant Studies	IMSE 530 (2) Engg. Econ. Anal.
IMSE 555 (3) Ind. Fac. L & D	IMSE 532 (1) Ind. Proj. Eval.
MANGT 420 (3) or LEAD 350	Engineering (3) Elective
ENGL 415[1] (3) Writ Comm. 4 Engrs	Engineering (3) Elective
IMSE 015 (0) Engg. Assembly Credit (Y/N)_____	IMSE 015 (0) Engg. Assembly Credit (Y/N)_____
(15)	**(15)**

SENIOR	SENIOR
IMSE 633 (3) Prod Pln Inv Ctrl	IMSE 685 (3) Mfg. Info. Systems
IMSE 643 (3) Ind. Simulation	IMSE (3) Elective
IMSE 580 (4) Mfg. Systems Design and Analysis	IMSE (3) Elective
Professional (3) Elective	Professional (3) Elective
Engineering (3) Elective	Professional (3) Elective
IMSE 015 (0) Engg. Assembly Credit (Y/N)_____	IMSE 015 (0) Engg. Assembly Credit (Y/N)_____
(16)	**(15)**

IMSE 250

Computer Prog

Stat 510

Math 220

IMSE 251

24 hours of IMSE Courses

IMSE Electives: The IMSE electives must be selected from the IMSE department. Each class must also be at least 3 credit hours.

Substitutions: Econ 120 can substitute for Econ 110. IMSE 501 or LEAD 350 can substitute for MANGT 420; IMSE 591 and IMSE 592 can substitute for IMSE 580. Conc. or prereq. requirement for IMSE 591 or 580 is 24 credit hours of IMSE courses of 500 level or above.

K-State 8: The courses required for a BSIE degree satisfy five of the K-State 8 areas. The student must fulfill the aesthetic interpretation (AI), global issues and perspectives (GP), and historical perspective (HP) tags. Most students will fill these tags with their humanities, social science or professional electives. Students who complete ECON 110 will complete the GP tag as well.

IMSE Assembly Requirement: Each semester a student must enroll in IMSE 015 unless he/she is a concurrent B.S./M.S.I.E. student, in which case he/she must enroll in either IMSE 015 or IMSE 892.

IMSE Graduation Criterion: At most 6 credit hours of IMSE 500+ courses that earned a D may be applied to a student's B.S.I.E graduation requirements.

IMSE Course Retake Criterion: Any IMSE course being taken for the third time in any five-year period may not be used to fulfill a student's B.S.I.E. graduation requirements.

[1]Prerequisite for ENGL 415 is a "B" or better in ENGL 100. ENGL 200 must be taken if ENGL 100's grade ≤ "C".

Total hours required for graduation: 124

Data Analytics Elective: IMSE 441, STAT 511 or STAT 705

Computer Programming Elective: CIS 200, CIS 209, ME 400 or CC 210

Engineering Electives: The 9 hours of basic engineering credit may not include more than 6 hours from a single department and the 9 hours must be selected from the following courses. Note, a student planning to take the FE exam is advised to take their 9 hours from classes with an *.
BAE 345, BAE 346, CE 333, 530* (at most one of 333 and 530) and 533; CHE 354*, 355*, 356*, 520 and 521; ECE 410, 511, 519* and 571; ME 512*, 513, 571; IMSE 562.

Professional Electives: The 9 credit hours of professional electives are designed so that the student may specialize in an area of interest. Any of the following classes may count toward the professional elective requirement. Any IMSE class; DEN 160 and DEN 161; any introduction course in the other COE programs; any engineering class ≥ 300 level; any AG ECON class ≥ 500 level; any BUSINESS class ≥ 400 level; any CIS class ≥ 200 level; any ECON class ≥ 300 level; any LEAD class ≥ 300 level; MATH 240 and any Mathematics class ≥ 500 level except MATH 570 and 591; any Statistics class ≥ 500 level except STAT 702, 703, 706 and 710; ACCTG 241, 331, and 342; BIOL 198; BIOL 201; and CHEM 230.