

# Industrial Operations Engineering Sample Schedule

Total Term:

Credit Hours	1	2	3	4	5	6	7	8
<b>Subjects required by all programs (55 hours)</b>								
Mathematics 115, 116, 215, and 214	16	4	4	4	4	-	-	-
Engr 100, Intro to Engr	4	4	-	-	-	-	-	-
Engr 101, Intro to Computers	4	-	4	-	-	-	-	-
Chemistry 125/126 and 130 or Chemistry 210 and 211 <sup>1</sup>	5	5	-	-	-	-	-	-
Physics 140 with Lab 141; Physics 240 with Lab 241 <sup>2</sup>	10	-	5	5	-	-	-	-
Intellectual Breadth	16	4	4	4	-	-	4	-
<b>Related Engineering Subjects (11-12 hours)</b>								
Non-IOE Engineering Courses (11-12 hours) <sup>3</sup>	12	-	-	-	4	4	-	4
<b>Required Program Subjects (34)</b>								
IOE 201, Economic Decision Making	2	-	-	2	-	-	-	-
IOE 202, Operations Modeling	2	-	-	2	-	-	-	-
IOE 265, Probability and Statistics for Engineers	3	-	-	-	3	-	-	-
IOE 310, Optimization and Computational Methods	3	-	-	-	-	3	-	-
IOE 316, Intro to Markov Processes	3	-	-	-	-	3	-	-
IOE 333, Human Factors and Ergonomics	3	-	-	-	3	-	-	-
IOE 366, Introduction to Engineering Data Analytics	3	-	-	-	-	3	-	-
IOE 373, Data Analytics Tools & Techniques	4	-	-	-	-	-	4	-
IOE 474, Simulation	4	-	-	-	-	-	-	4
IOE Senior Design Course IOE 424, 481, 499 <sup>4</sup>	4	-	-	-	-	-	-	4
TC 380, Technical Communication in IOE	2	-	-	-	-	-	2	-
Technical Electives (19) <sup>5</sup>	19	-	-	-	-	3	6	6
General Electives (9-12 hours)	9-12	-	-	-	2	-	-	4
<b>Total</b>	<b>128</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>15</b>

Revised: January 2022

Candidates for the Bachelor of Science in Engineering in Industrial and Operations Engineering - B.S.E. I.O.E - must complete the program listed above. This sample schedule is an example of one leading to graduation in eight terms.

Notes:

<sup>1</sup>If you have a satisfactory score or grade in Chemistry AP, A-Level, IB Exams or transfer credit from another institution for Chemistry 130/125/126 you will have met the Chemistry Core Requirement for CoE.

<sup>2</sup>If you have a satisfactory score or grade in Physics AP, A-Level, IB Exams or transfer credit from another institution for Physics 140/141 and 240/241 you will have met the Physics Core Requirement for CoE.

<sup>3</sup>Non-IOE Engineering Courses - Select 11-12 hours; one course from any three different groups:

MECHENG 211 or CEE 211 or MECHENG 240

MECHENG 235 or CHE 230

MATSCIE 220 or MECHENG 382

BIOMEDE 458 or EECS 270 or EECS 314

CEE 265 or NERS 211

EECS 280

<sup>4</sup>IOE Senior Design courses are restricted to IOE undergraduate students only.

<sup>5</sup>Technical Electives - Select 12 hours from the following four groups; at least one course each from three of the following four groups: A. IOE 410, 413, 419, 440, 441, 447, 449

B. IOE 416, 460, 461\*, 465\*, 466\*

C. IOE 430, 432, 434, 436, 437, 438, 463

D. IOE 421, 422, 425, 430, 452, 453

The remaining 7 hours may be selected from any 400-level IOE courses (except IOE 490, IOE 499, IOE 424, and IOE 481) and/or from the approved list of non-IOE courses.

\*Maximum of 6 hours allowed from IOE 461, 465, 466.

\*\*Consult IOE academic advisor for requirements based on term of admission.