

**MDS 050 BSIE Industrial Engineering
4 Year 1 Co-op**

Yr 1 FL	A GE U110 Engineering Design	4.0 SH
Yr 1 FL	A GE U100 Intro to the Study of Engr	1.0 SH
Yr 1 FL	C MTH U241 Calculus 1 for Sci/Engr	4.0 SH
Yr 1 FL	C CHM U151 General Chem for Engineers	4.0 SH
	Coreq(s): C CHM U152 C CHM U153	
Yr 1 FL	C CHM U153 Recitation for CHM U151	0.0 SH
	Coreq(s): C CHM U151 C CHM U152	
Yr 1 FL	NU Core course or Elective	4.0 SH
	Semester Subtotal	17.0 SH
Yr 1 SP	A GE U111 Engr Prob Solv and Comp	4.0 SH
Yr 1 SP	C MTH U242 Calculus 2 for Sci/Engr	4.0 SH
Yr 1 SP	C PHY U151 Physics for Engineering 1	4.0 SH
	Coreq(s): C PHY U152 C PHY U153	
Yr 1 SP	C PHY U152 Lab for PHY U151	1.0 SH
	Coreq(s): C PHY U151 C PHY U153	
Yr 1 SP	C PHY U153 Interact Learn for PHY U151	0.0 SH
	Coreq(s): C PHY U151 C PHY U152	
Yr 1 SP	C ENG U111 College Writing	4.0 SH
	Semester Subtotal	17.0 SH
Yr 1 S1	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 1 S2	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 2 FL	C MTH U341 Calculus 3 for Sci/Engr	4.0 SH
	Coreq(s): C MTH U342	
Yr 2 FL	A MIM U310 Intro to Industrl Engineering	4.0 SH
Yr 2 FL	A MIM U412 Engineering Prob and Stats	4.0 SH
Yr 2 FL	C PHY U155 Physics for Engineering 2	4.0 SH
	Coreq(s): C PHY U156 C PHY U157	
Yr 2 FL	C PHY U156 Lab for PHY U155	1.0 SH
	Coreq(s): C PHY U155 C PHY U157	
	Semester Subtotal	17.0 SH
Yr 2 SP	C MTH U343 Diff Eq and Lin Alg for Engr	4.0 SH
	Coreq(s): C MTH U344	
Yr 2 SP	A MIM U420 Computers & Information System	4.0 SH
Yr 2 SP	A MIM U510 Digital Simulation Techniques	4.0 SH
Yr 2 SP	A MIM U530 Manuf Systems & Techniques	4.0 SH
	Coreq(s): A MIM U531	
Yr 2 SP	A MIM U531 Lab for MIM U530	1.0 SH
	Coreq(s): A MIM U530	
Yr 2 SP	A MIM U300 Intro to Engr Coop Education	1.0 SH
	Semester Subtotal	18.0 SH
Yr 2 S1	NU Core Course or Elective	4.0 SH
Yr 2 S1	NU Core Course or Elective	4.0 SH
	Semester Subtotal	8.0 SH
Yr 2 S2	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 3 FL	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 3 SP	C ENG U302 Advanced Writing in Tech Prof	4.0 SH
Yr 3 SP	A MIM U425 Engineering Database Systems	4.0 SH
Yr 3 SP	A MIM U515 Operations Research	4.0 SH
Yr 3 SP	A MIM U500 Prof Issues in Engineering	1.0 SH
Yr 3 SP	Technical Elective	4.0 SH
	Semester Subtotal	17.0 SH

Yr 3 S1	NU Core Course or Elective	4.0 SH
Yr 3 S1	NU Core course or Elective	4.0 SH
	Semester Subtotal	8.0 SH
Yr 3 S2	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 4 FL	A MIM U512 Engineering Economy	4.0 SH
Yr 4 FL	A MIM U525 Logistics & SuppChain Managemt	4.0 SH
Yr 4 FL	A MIM U516 Quality Assurance	4.0 SH
Yr 4 FL	A MIM U701 Capstone Design 1	1.0 SH
Yr 4 FL	Technical Elective	4.0 SH
	Semester Subtotal	17.0 SH
Yr 4 SP	A MIM U702 Capstone Design 2	5.0 SH
Yr 4 SP	A MIM U522 Human Machine Systems	4.0 SH
	Coreq(s): A MIM U523	
Yr 4 SP	A MIM U523 Lab for MIM U522	1.0 SH
	Coreq(s): A MIM U522	
Yr 4 SP	A MIM U520 Stochastic Modeling	4.0 SH
Yr 4 SP	NU Core Course or Elective	4.0 SH
	Semester Subtotal	18.0 SH

MDS 050 BSIE Industrial Engineering Div A

Yr 1 FL	C MTH U241 Calculus 1 for Sci/Engr	4.0 SH
Yr 1 FL	C CHM U151 General Chem for Engineers	4.0 SH
	Coreq(s): C CHM U152 C CHM U153	
Yr 1 FL	C CHM U153 Recitation for CHM U151	0.0 SH
	Coreq(s): C CHM U151 C CHM U152	
Yr 1 FL	A GE U110 Engineering Design	4.0 SH
Yr 1 FL	A GE U100 Intro to the Study of Engr	1.0 SH
Yr 1 FL	NU Core course or Elective	4.0 SH
	Semester Subtotal	17.0 SH
Yr 1 SP	A GE U111 Engr Prob Solv and Comp	4.0 SH
Yr 1 SP	C MTH U242 Calculus 2 for Sci/Engr	4.0 SH
Yr 1 SP	C PHY U151 Physics for Engineering 1	4.0 SH
	Coreq(s): C PHY U152 C PHY U153	
Yr 1 SP	C PHY U152 Lab for PHY U151	1.0 SH
	Coreq(s): C PHY U151 C PHY U153	
Yr 1 SP	C PHY U153 Interact Learn for PHY U151	0.0 SH
	Coreq(s): C PHY U151 C PHY U152	
Yr 1 SP	C ENG U111 College Writing	4.0 SH
	Semester Subtotal	17.0 SH
Yr 1 S1	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 1 S2	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 2 FL	C MTH U341 Calculus 3 for Sci/Engr	4.0 SH
	Coreq(s): C MTH U342	
Yr 2 FL	A MIM U310 Intro to Industrl Engineering	4.0 SH
Yr 2 FL	A MIM U412 Engineering Prob and Stats	4.0 SH
Yr 2 FL	C PHY U155 Physics for Engineering 2	4.0 SH
	Coreq(s): C PHY U156 C PHY U157	
Yr 2 FL	C PHY U156 Lab for PHY U155	1.0 SH
	Coreq(s): C PHY U155 C PHY U157	
Yr 2 FL	C PHY U157 Interact Learn for PHY U155	0.0 SH
	Coreq(s): C PHY U155 C PHY U156	
	Semester Subtotal	17.0 SH

Yr 2 SP	C MTH U343 Diff Eq and Lin Alg for Engr Coreq(s): C MTH U344	4.0 SH
Yr 2 SP	A MIM U420 Computers & Information System	4.0 SH
Yr 2 SP	A MIM U510 Digital Simulation Techniques	4.0 SH
Yr 2 SP	A MIM U516 Quality Assurance	4.0 SH
Yr 2 SP	A MIM U300 Intro to Engr Coop Education	1.0 SH
	Semester Subtotal	17.0 SH
Yr 2 S1	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 2 S2	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 3 FL	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 3 SP	A MIM U425 Engineering Database Systems	4.0 SH
Yr 3 SP	C ENG U302 Advanced Writing in Tech Prof	4.0 SH
Yr 3 SP	A MIM U515 Operations Research	4.0 SH
Yr 3 SP	NU Core Course or Elective	4.0 SH
	Semester Subtotal	16.0 SH
Yr 3 S1	NU Core Course or Elective	4.0 SH
Yr 3 S1	NU Core course or Elective	4.0 SH
	Semester Subtotal	8.0 SH
Yr 3 S2	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 4 FL	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 4 SP	A MIM U512 Engineering Economy	4.0 SH
Yr 4 SP	A MIM U500 Prof Issues in Engineering	1.0 SH
Yr 4 SP	A MIM U525 Logistics & SuppChain Managemt	4.0 SH
Yr 4 SP	A MIM U530 Manuf Systems & Techniques Coreq(s): A MIM U531	4.0 SH
Yr 4 SP	A MIM U531 Lab for MIM U530 Coreq(s): A MIM U530	1.0 SH
Yr 4 SP	Technical Elective	4.0 SH
	Semester Subtotal	18.0 SH
Yr 4 S1	A MIM U701 Capstone Design 1	1.0 SH
Yr 4 S1	NU Core Course or Elective	4.0 SH
Yr 4 S1	NU Core Course or Elective	4.0 SH
	Semester Subtotal	9.0 SH
Yr 4 S2	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 5 FL	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 5 SP	A MIM U702 Capstone Design 2	5.0 SH
Yr 5 SP	A MIM U522 Human Machine Systems Coreq(s): A MIM U523	4.0 SH
Yr 5 SP	A MIM U523 Lab for MIM U522 Coreq(s): A MIM U522	1.0 SH
Yr 5 SP	A MIM U520 Stochastic Modeling	4.0 SH
Yr 5 SP	Technical Elective	4.0 SH
	Semester Subtotal	18.0 SH

MDS 050 BSIE Industrial Engineering Div B

Yr 1 FL	C MTH U241 Calculus 1 for Sci/Engr	4.0 SH
Yr 1 FL	C CHM U151 General Chem for Engineers Coreq(s): C CHM U152 C CHM U153	4.0 SH
Yr 1 FL	C CHM U153 Recitation for CHM U151 Coreq(s): C CHM U151 C CHM U152	0.0 SH
Yr 1 FL	A GE U110 Engineering Design	4.0 SH
Yr 1 FL	A GE U100 Intro to the Study of Engr	1.0 SH
Yr 1 FL	NU Core course or Elective	4.0 SH
	Semester Subtotal	17.0 SH
Yr 1 SP	A GE U111 Engr Prob Solv and Comp	4.0 SH
Yr 1 SP	C MTH U242 Calculus 2 for Sci/Engr	4.0 SH
Yr 1 SP	C PHY U151 Physics for Engineering 1 Coreq(s): C PHY U152 C PHY U153	4.0 SH
Yr 1 SP	C PHY U152 Lab for PHY U151 Coreq(s): C PHY U151 C PHY U153	1.0 SH
Yr 1 SP	C PHY U153 Interact Learn for PHY U151 Coreq(s): C PHY U151 C PHY U152	0.0 SH
Yr 1 SP	C ENG U111 College Writing	4.0 SH
	Semester Subtotal	17.0 SH
Yr 1 S1	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 1 S2	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 2 FL	C MTH U341 Calculus 3 for Sci/Engr Coreq(s): C MTH U342	4.0 SH
Yr 2 FL	A MIM U310 Intro to Industrl Engineering	4.0 SH
Yr 2 FL	A MIM U412 Engineering Prob and Stats	4.0 SH
Yr 2 FL	C PHY U155 Physics for Engineering 2 Coreq(s): C PHY U156 C PHY U157	4.0 SH
Yr 2 FL	C PHY U156 Lab for PHY U155 Coreq(s): C PHY U155 C PHY U157	1.0 SH
Yr 2 FL	C PHY U157 Interact Learn for PHY U155 Coreq(s): C PHY U155 C PHY U156	0.0 SH
Yr 2 FL	A MIM U300 Intro to Engr Coop Education	1.0 SH
	Semester Subtotal	18.0 SH
Yr 2 SP	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 2 S1	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 2 S2	NU Core course or Elective	4.0 SH
Yr 2 S2	NU Core Course or Elective	4.0 SH
	Semester Subtotal	8.0 SH
Yr 3 FL	A MIM U510 Digital Simulation Techniques	4.0 SH
Yr 3 FL	A MIM U516 Quality Assurance	4.0 SH
Yr 3 FL	A MIM U420 Computers & Information System	4.0 SH
Yr 3 FL	C MTH U343 Diff Eq and Lin Alg for Engr Coreq(s): C MTH U344	4.0 SH
	Semester Subtotal	16.0 SH
Yr 3 SP	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 3 S1	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH

Yr 3 S2	C ENG U302 Advanced Writing in Tech Prof	4.0 SH
Yr 3 S2	NU Core Course or Elective	4.0 SH
	Semester Subtotal	8.0 SH
Yr 4 FL	A MIM U425 Engineering Database Systems	4.0 SH
Yr 4 FL	A MIM U500 Prof Issues in Engineering	1.0 SH
Yr 4 FL	A MIM U515 Operations Research	4.0 SH
Yr 4 FL	A MIM U530 Manuf Systems & Techniques	4.0 SH
	Coreq(s): A MIM U531	
Yr 4 FL	A MIM U531 Lab for MIM U530	1.0 SH
	Coreq(s): A MIM U530	
Yr 4 FL	Technical Elective	4.0 SH
	Semester Subtotal	18.0 SH
Yr 4 SP	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 4 S1	CO-OP	0.0 SH
	Semester Subtotal	0.0 SH
Yr 4 S2	VACATION	0.0 SH
	Semester Subtotal	0.0 SH
Yr 5 FL	A MIM U512 Engineering Economy	4.0 SH
Yr 5 FL	A MIM U520 Stochastic Modeling	4.0 SH
Yr 5 FL	A MIM U525 Logistics & SuppChain Managemt	4.0 SH
Yr 5 FL	A MIM U701 Capstone Design 1	1.0 SH
Yr 5 FL	Technical Elective	4.0 SH
	Semester Subtotal	17.0 SH
Yr 5 SP	A MIM U702 Capstone Design 2	5.0 SH
Yr 5 SP	A MIM U522 Human Machine Systems	4.0 SH
	Coreq(s): A MIM U523	
Yr 5 SP	A MIM U523 Lab for MIM U522	1.0 SH
	Coreq(s): A MIM U522	
Yr 5 SP	NU Core Course or Elective	4.0 SH
Yr 5 SP	NU Core Course or Elective	4.0 SH
	Semester Subtotal	18.0 SH