

North Carolina State University

Industrial Engineering Curriculum (Effective 07-01-2021)

1+3 Program with UNC Asheville

FALL SEMESTER

SPRING SEMESTER

Freshman Year (UNC Asheville)

MATH 191	Calculus I	4	MATH 192	Calculus II	4
LANG 120	Acad. Writing & Crit Inquiry	4	PHYS 221	Physics I	4
CHEM 132	General Chemistry	3	ECON 104	Microecon. Princip. for Engineer.	3
CHEM 111	General Chemistry Lab	1	***	GEP Course	3
E 101	Intro to Engr & Prob Solv	1	***	GEP Course	3
JEM 123	Intro to CAD for Mechat. Eng.	1			<u>17</u>
FYS 178	First Year Seminar	<u>3</u>			
		<u>17</u>			

Sophomore Year (NC State)

E 115	Intro to Computing Env	1	E 102	(or GEP substitute)	2
ISE 135	Computer Modeling for Engr	3	ECE 331	Principles of Electrical Engr	3
MA 242	Calculus III	4	ISE 215	Intro to Computer Aided Design	1
MSE 200	Mech. Prop. of Structural Matls	3	ISE 216	Prod. Develop. & Rapid Prototyp.	3
PY 208	Physics for Engr & Sci	3	MAE 303	Linear Analysis	3
PY 209	Physics for Engr & Sci Lab	1	ST 372	Intro to Stat Interference & Regr	3
ST 371	Intro to Probabil & Distrib Theory	<u>3</u>	HES ***	Health & Exercise Studies Course	<u>1</u>
		<u>18</u>			<u>16</u>

Junior Year (NC State)

CE 214	Engr Mechanics - Statics	3	***	***	Engineering Science Elective	3
***	Ethics	3	ISE 352		Fund. of Human-Machine Sys Des	3
ISE 311	Engineering Economic Analysis	3	ISE 362		Stochastic Models in IE	3
ISE 315	Computer-Aided Manufacturing	1	ISE 443		Quality Control	3
ISE 316	Manuf. Engr I: Processes	3	***	***	Technical Elective	3
ISE 361	Deterministic Models in ISE	<u>3</u>	HES ***		Health & Exercise Studies Course	<u>1</u>
		<u>16</u>				<u>16</u>

Senior Year (NC State)

ENG 331	Technical Writing	3	***	***	GEP Course	3
ISE 398	Lean Six Sigma for ISE	1	***	***	GEP Course	3
ISE 408	Cont of Prod & Serv Systems	3	***	***	GEP Course	3
ISE 441	Introduction to Simulation	3	ISE 498		Senior Design Project (b)	3
ISE 453	Model. & Analy. of Supply Chains	3	***	***	Technical Elective	<u>3</u>
***	***	<u>3</u>				<u>15</u>
		<u>16</u>				

(a) or ISE 520 (3)

(b) or ISE 521 (3)