

**Northwest Nazarene University**  
**Bachelor of Science in Engineering – Mechanical Engineering Concentration**  
**2020 Plan of Study (126 credits)**

**Fall**

**First year**

**Spring**

Course #	Cr	Course Title		Course #	Cr	Course Title	
ENGR 1010	3	Intro to Engineering		ENGR 1050	3	Engineering CAD, Prototype	
MATH 2510	4	Calculus I		MATH 2520	4	Calculus II	
ENGR 1100	3	Engineering Software Skills		PHYS 2110	4	Physics I + Lab	
HUMN1010	1	Cornerstone		KINE	2	Wellness & Activity	
ENGL 1030	3	University Writing		BIBL 1100	3	Biblical Studies	
<b>14</b>				<b>16</b>			

**Fall**

**Second year**

**Spring**

Course #	Cr	Course Title		Course #	Cr	Course Title	
ENGR 2100	3	Statics		ENGR 2120	3	Dynamics	
ENGR 2200	4	Digital Systems + Lab		ENGR 2210	4	Electrical Circuits + Lab	
MATH 3540	4	Differential Equations		MATH 3530	4	Calculus III	
PHYS 2120	4	Physics II + Lab		ENGR 2310	1	Instrumentation & Msmt Lab	
THEO 2100	3	Christian Theology		ENGL 3015	3	Technical Writing	
<b>18</b>				<b>15</b>			

**Fall**

**Third year**

**Spring**

Course #	Cr	Course Title		Course #	Cr	Course Title	
ENGR 3400	4	Control Systems + Lab		ENGR 3410	3	Engineering Econ & Ethics	
PHYS 3500	3	Statistical Analysis for P&E		ENGR3110L	1	Materials & Thermo Lab	
ENGR 3100	3	Mechanics of Materials		ENGR 3110	3	Thermodynamics	
COMM3211	3	Technical Communication		ENGL	3	Literature Elective	
CHEM 2230	4	Chemistry for Engineer+Lab		ENGR 4140	3	Vibrations	
				ENGR 4110	3	Machine Design	
<b>17</b>				<b>16</b>			

**Fall**

**Fourth year**

**Spring**

Course #	Cr	Course Title		Course #	Cr	Course Title	
ENGR 4971	2	Senior Design Project I		ENGR 4972	2	Senior Design Project II	
	3	Art/Music Elective			3	Philosophy Elective	
	3	US History Elective			3	Non US History Elective	
ENGR 4130	4	Mechatronics & Lab			3	Bible/Theology Elective	
ENGR 4100	3	Fluid Mechanics		ENGR 4120	1	Fluids & Thermal Lab	
				ENGR 4150	3	Heat Transfer	
<b>15</b>				<b>15</b>			