

**Northwest Nazarene University**  
**Bachelor of Science in Engineering – Semiconductor Engineering**  
**2022 Plan of Study (126 credits)**

**Fall**

**Freshman year**

**Spring**

Course #	Cr	Course Title	Days/Time/Instr	Course #	Cr	Course Title	Days/Time/Instr
ENGR 1010	3	Intro to Engineering	MWF 12:05 Parke	ENGR 1050	3	Engr CAD & Prototyping	MWF12:05 Bulanon
MATH 2510	4	Calculus I	MWF2:15 Korntved	MATH 2520	4	Calculus II	MWF2:15 Burton
ENGR 1100	3	Engineering Software Skills	MWF 9:05 Griffin	PHYS 2110	3	Physics I	MWF9:05 Lawrence
				PHYS2110L	1	Physics I Lab	T 12 & 3 Allen
HUMN1020	1	Cornerstone			3	US History Elective	
ENGL 1030	3	University Writing		BIBL 1100	3	Biblical Studies	
<b>14</b>				<b>17</b>			

**Fall**

**Sophomore year**

**Spring**

Course #	Cr	Course Title	Days/Time/Instr	Course #	Cr	Course Title	Days/Time/Instr
ENGR 2100	3	Statics	MWF 1:10 Pratt	ENGR 3120	3	Dynamics	MWF2:15 Lawrence
ENGR 2200	3	Digital Systems	T 8:00-11 Griffin	ENGR 2210	3	Electrical Circuits	MWF 1:10 Griffin
ENGR2200L	1	Digital Systems Lab	R 8:00-11 Griffin	ENGR2210L	1	Electrical Circuits Lab	T 8 Griffin
MATH 3540	4	Differential Equations	MWF 9:05 Colwell	MATH 3530	4	Calculus III	MWF 9:05 Colwell
PHYS 2120	3	Physics II	MWF 8:00 Pearson	ENGR 2310	1	Instrumentation & Msmt Lab	R 12 Parke
PHYS2120L	1	Physics II Lab	T 12 & 3 Allen				
	2	Wellness + Activity		THEO 2100	3	Christian Theology	
<b>17</b>				<b>15</b>			

**Fall**

**Junior year**

**Spring**

Course #	Cr	Course Title	Days/Time/Instr	Course #	Cr	Course Title	Days/Time/Instr
ENGR 3400	3	Control Systems	MWF11:00 Bulanon	ENGR 3410	3	Engineering Econ & Ethics	MWF11:00 Parke/C
ENGR3400L	1	Control Systems Lab	T 8 Bulanon	ENGR3110L	1	Materials & Thermo Lab	T 12 Pratt
PHYS 3500	3	Statistical Analysis for P&E	MWF12:05 Pearson	ENGR 3110	3	Thermodynamics	MWF12:05 Pratt
ENGR 3100	3	Mechanics of Materials	MWF 8:00 Pratt		3	Literature Elective	
CHEM 2230	3	Chemistry for Engineers	MWF 9:05 Harris	ENGL 3015	3	Technical Writing	
CHEM2230L	1	Chemistry for Engineer Lab	R 12 Harris				
ENGR4300	3	Semiconductor Devices		ENGR4210	3	Microelectronic Circuits	
ENGR4300L	1	DeviceCharacterization Lab		ENGR4210L	1	Microelectronic Circuits Lab	
<b>18</b>				<b>17</b>			

**Fall**

**Senior year**

**Spring**

Course #	Cr	Course Title	Days/Time/Instr	Course #	Cr	Course Title	Days/Time/Instr
ENGR 4971	2	Senior Design Project I	TR 1:40 Parke/Bul	ENGR 4972	2	Senior Design Project II	TF 1:40 Parke/Bul
COMM3211	3	Technical Communication	MWF 9:05 Allen		3	Philosophy Elective	
	3	Art/Music Elective			3	Non US History Elective	
ENGR4320	3	IC Design, Package & Test			3	Bible/Theology Elective	
ENGR4310	3	Semiconductor Fabrication	@ BSU IML	PHYS4720	3	Solid-State	
<b>14</b>				<b>14</b>			