

## Materials Science and Engineering

### Year One - North Central Texas College

FALL		SPRING		
MATH 1314, College Algebra	3	MATH 2412, Pre-Calculus Math	4	
ENGL 1310, Composition I	3	ENGL 2311, Technical & Business Writing	3	
Government / Political Science Core Course	3	Creative Arts Core Course	3	
Language Philosophy Culture Core Course	3	History Core Course	3	
<b>Total Hours</b>		<b>12</b>	<b>Total Hours</b>	
			<b>13</b>	

### Year Two - North Central Texas College

FALL		SPRING		
MATH 2413, Calculus I	4	MATH 2414, Calculus II	4	
CHEM 1411, General Chemistry I	4	CHEM 1412, General Chemistry II	4	
Government / Political Science Core Course	3	PHYS 2425, University Physics I	4	
History Core Course	3			
<b>Total Hours</b>		<b>14</b>	<b>Total Hours</b>	
			<b>12</b>	



**Meet with the UNT CENG recruiter at the start of Spring semester and apply to UNT.**

### Year Three - Concurrent Enrollment

FALL		SPRING		
MATH 2415, Calculus III	4	MTSE 1100, Discover How and Why Materials Matter	3	
PHYS 2426, University Physics II	4	MTSE 3000, Fundamentals I	3	
Social Behavioral Science Core Course	3	MTSE 3001, Fundamentals II	3	
ENGR 2301, Engineering Mechanics I	3	MATH 3410, Differential Equations	3	
<b>Total Hours</b>		<b>14</b>	<b>Total Hours</b>	
			<b>3</b>	<b>15</b>

### Year Four - UNT

FALL		SPRING		
MTSE 3010, Bonding and Structure	3	MTSE 3050, Mechanical Properties	3	
MTSE 3020, Micro and Characterization	3	MTSE 3060, Phase Transformations	3	
MTSE 3030, Thermo & Phase Diagrams	3	MTSE 3070, Electrical, Optical, & Magnetic Props.	3	
MTSE 3040, Transparent Phenomena	3	MTSE 3080, Materials Processing	3	
MTSE 3090, Laboratory I	1	MTSE 3100, Laboratory II	1	
<b>Total Hours</b>		<b>13</b>	<b>Total Hours</b>	
			<b>13</b>	

### Year Five - UNT

FALL		SPRING		
MTSE 4010, Physical Metallurgy Principles	3	MTSE Advanced Level Elective	3	
MTSE 4030, Ceramic Science & Engineering	3	MTSE Advanced Level Elective	3	
MTSE 4060, Materials Selection and Performance	3	MTSE 4050, Polymer Science & Engineering	3	
MTSE 4090, Senior Design I	3	MTSE 4100, Senior Design II	3	
<b>Total Hours</b>		<b>12</b>	<b>Total Hours</b>	
			<b>12</b>	

Black = North Central Texas College

Green = UNT

Total Degree Hours      **130**