

# STRUCTURAL ENGINEERING - UNDERGRADUATE MINOR

This minor builds upon existing B.S. degree programs at NMSU in analysis, construction, and design of civil, mechanical, and aerospace structures. It includes 3 required courses (10 credits) from civil engineering and 3 elective courses (9-10 credits) from civil engineering, aerospace/mechanical engineering, and/or engineering technology.

Prefix	Title	Credits
<b>Required courses (3 courses)</b>		<b>10</b>
C E 301	Mechanics of Materials	
or E T 310	Applied Strength of Materials	
C E 315	Structural Analysis	
C E 444	Elements of Steel Design	
<b>Elective courses (3 courses) <sup>1</sup></b>		<b>9-10</b>
To be selected from the following list of courses (numbered 300-499) <sup>2</sup>		
<i>Upper level courses in Civil Engineering</i>		
C E 445	Reinforced Concrete Design	
C E 469	Structural Systems	
C E 498	Special Topics <sup>3</sup>	
<i>Upper level courses in Aerospace/Mechanical Engineering</i>		
A E 363	Aerospace Structures	
A E 451	Aircraft Design	
M E 331	Intermediate Strength of Materials	
M E 332	Vibrations	
M E 425	Design of Machine Elements	
M E 456	Experimental Modal Analysis	
M E 460	Applied Finite Elements	
<i>Upper level courses in Engineering Technology</i>		
E T 332	Applied Design of Structures I	
E T 432	Applied Design of Structures II	
<b>Total Credits</b>		<b>19-20</b>

<sup>1</sup> elective courses may be taken in same department or different departments

<sup>2</sup> courses numbered 450 and above may be used to satisfy course requirements for the accelerated master's degree program (requires department head approval)

<sup>3</sup> special topics in Civil Engineering include advanced mechanics of materials, advanced mechanics of steel structures, advanced mechanics of concrete, finite element methods, non-destructive testing, and bridge engineering (requires department head approval and may be repeated for maximum of 6 credits)