

# STEM 101 - Engineering 101

## Content Standards Address in this STEM 101 Edition

### NGSS/NM STEM Ready

Domain	Disciplinary Core Ideas	Performance Expectation
Physics	Motion and Stability: Forces and Interactions	3-PS2-2
	Waves and their Applications in Technologies for Information Transfer	4-PS4-3
Engineering, Technology, and Application of Science	Engineering Design	3-5-ETS1-1,3-5-ETS1-2,3-5-ETS1-3, MS-ETS1-3, MS-ETS1-4

### NGSS Crosscutting Concepts

Patterns of change can be used to make predictions.	3-PS2-2
Influence of Science, Engineering and Technology on Society and the Natural World-Engineers improve existing technologies or develop new ones.	4-PS3-4
Science is a Human Endeavor -Most scientists and engineers work in teams.	4-PS3-4
Science affects everyday life.	4-PS3-4
Influence of Engineering,Technology, and Science on Society and the Natural World-People’s needs and wants change over time, as do their demands for new and improved technologies.	3-5-ETS1-1
Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.	3-5-ETS1-2

### Common Core Math

Domain	Standard
Operations and Algebraic Thinking	CCSS.Math.Content.3.OA.A.2,CCSS.Math.Content.3.OA.A.3,CCSS.Math.Content.4.OA.A.2
Numbers and Operations in Base Ten	CCSS.Math.Content.3.NBT.A.2,CCSS.Math.Content.3.NBT.A.3,CCSS.Math.Content.4.NBT.B.4,CCSS.Math.Content.4.NBT.B.5,CCSS.Math.Content.4.NBT.B.6,CCSS.Math.Content.5.NBT.B.6
Numbers and Operations- Fraction	CCSS.Math.Content.3.NF.A.1,CCSS.Math.Content.4.NF.C.6,CCSS.Math.Content.5.NF.B.3,CCSS.Math.Content.5.NF.B.4,CCSS.Math.Content.5.NF.B.6
Measurement and Data	CCSS.Math.Content.3.MD.B.4,CCSS.Math.Content.4.MD.A.1
Ratios and Porportional Relationships	CCSS.Math.Content.6.RP.A.3.c

The Number System	CCSS.Math.Content.6.NS.B.2,CCSS.Math.Content.7.NS.A.2
Expressions and Equations	CCSS.Math.Content.7.EE.B.3,CCSS.Math.Content.7.EE.B.4
Statistics and Probability	CCSS.Math.Content.6.SP.B.5
<b>Common Core English Language Arts</b>	
<b>Strand</b>	<b>Standard</b>
Writing	CCSS.ELA-Literacy.W.3.2,CCSS.ELA-Literacy.W.3.6,CCSS.ELA-Literacy.W.3.7,CCSS.ELA-Literacy.W.4.2,CCSS.ELA-Literacy.W.4.6,CCSS.ELA-Literacy.W.4.7,CCSS.ELA-Literacy.W.5.6,CCSS.ELA-Literacy.W.5.7, CCSS.ELA-Literacy.W.6.1,CCSS.ELA-Literacy.W.6.6,CCSS.ELA-Literacy.W.6.7,CCSS.ELA-Literacy.W.7.1,CCSS.ELA-Literacy.W.7.6,CCSS.ELA-Literacy.W.7.7,CCSS.ELA-Literacy.W.8.1,CCSS.ELA-Literacy.W.8.6,CCSS.ELA-Literacy.W.8.7
History/Social Studies Science in Technical Subjects	CCSS.ELA-Literacy.RST.6-8.3