

# Project Lead the Way Crosswalk to Michigan State Standards Grades 9-12 Science, Math and Technology

## *Introduction to Engineering*

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### Crosswalk Summary - Introduction to Engineering to Math Standards

Math Standards in Michigan include 4 strands, 16 standards and 202 standard indicators. Project Lead the Way Introduction to Engineering consists of 12 units of study with 130 performance objectives. The chart below outlines some of the crosswalk details as follows:

- Units of the course
- Number of performance standards within each unit
- The number of strands linked/standards linked/indicators linked
- The ratio of performance objectives linked within each unit
- 4/4 Math Strands are linked to objectives in the Introduction to Engineering.
- 10/16 Math Standards are linked to objectives in the Introduction to Engineering course.
- 36/130 Introduction to Engineering performance objectives link to Michigan 9-12 grade Math Standards
- This course links to 51/202 standard indicators.

Detailed matrices are attached showing (a) how performance objectives link to all standards in the Introduction to Engineering course, and (b) how performance objectives link to all components of the Michigan Math standards.

Unit	Performance Standards	Strand/Standard/Indicators Linked to Performance Objectives	Performance Objectives Linked to Math Standards
1	9	0/0/0	0/9
2	8	0/0/0	0/8
3	4	0/0/0	0/4
4	11	3/3/7	7/11
5	13	3/3/7	12/13
6	20	4/5/9	7/20
7	17	1/1/2	1/17
8	7	7/22/8	3/7
9	19	1/1/3	2/19
10	5	0/0/0	0/5
11	13	2/4/4	2/11
12	4	1/2/2	1/4

### **Crosswalk Summary – Introduction to Engineering to Science Standards**

Science Standards in Michigan include five (5) standards and 182 standard indicators. Project Lead the Way Introduction to Engineering consists of 12 units of study with 130 performance objectives. The chart below outlines some of the crosswalk details as follows:

- Units of the course
- Number of performance standards within each unit
- The number of standards and indicators linked to performance objectives
- The ratio of performance objectives linked within each unit
- 1/5 Standards are linked to objectives in the Introduction to Engineering course.
- 19/130 Introduction to Engineering performance objectives link to Michigan 9-12 grade Science Standards
- This course links to 13/182 standard indicators.

A detailed matrix is attached showing exactly how performance objectives link to Michigan Science 9-12 grade standards and indicators in the Introduction to Engineering course.

Unit	Performance Standards	Standard/Indicators Linked to Performance Objectives	Performance Objectives Linked to Science Standards
1	9	1/4	2/9
2	8	1/5	5/8
3	4	0/0	0/4
4	11	1/4	2/11
5	13	0/0	0/13
6	20	1/2	1/20
7	17	1/4	1/17
8	7	1/5	3/7
9	19	0/0	0/19
10	5	0/0	0/5
11	13	1/3	2/13
12	4	1/4	3/4

## Crosswalk Summary - Introduction to Engineering to Technology Standards

Technology Standards in Michigan include 6 standards and 44 standard indicators. Project Lead the Way Introduction to Engineering consists of 12 units of study with 130 performance objectives. The chart below outlines some of the crosswalk details as follows:

- Units of the course
- Number of performance standards within each unit
- The number of standards and standard indicators linked to performance objectives
- The ratio of performance objectives linked within each unit
- 6/6 Standards are linked to objectives in the Introduction to Engineering course.
- 47/130 Introduction to Engineering performance objectives link to Michigan 9-12 grade Science Standards
- This course links to 12/44 standard indicators.

Detailed matrices are attached showing (a) how performance objectives link to all standards in the Introduction to Engineering course, and (b) how performance objectives link to all components of the Michigan Technology standards.

Unit	Performance Standards	Standard/Indicators Linked to Performance objectives	Performance Objectives Linked to Tech Standards
1	9	4/4	5/9
2	8	2/4	4/8
3	4	0/0	0/4
4	11	2/3	5/11
5	13	0/0	0/13
6	20	4/5	7/20
7	17	2/2	16/17
8	7	1/1	1/7
9	19	2/3	4/9
10	5	1/2	3/5
11	13	2/2	2/13
12	4	0	0/4