

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

Principles of Engineering

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Crosswalk Summary - Principles of Engineering to Math Standards

Math Standards in Michigan include 4 strands, 16 standards and 202 standard indicators. Project Lead the Way Principles of Engineering consists of eight (8) units of study with 79 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 Principles of Engineering.
- 16/16 Math Standards are linked to objectives in the Principles of Engineering course.
- 28/79 Performance Objectives are linked to Math Standards

Detailed matrices are attached showing (a) how performance objectives link to all standards in the Principles of 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	13 performance standards	4/1/1	1/13
2	9 performance standards	3/3/12	5/9
3	3 performance standards	2/2/3	1/3
4	20 performance standards	3/4/15	7/20
5	7 performance standards	2/2/6	3/7
6	22 performance standards	3/5/10	5/22
7	7 performance standards	2/2/2	2/7
8	6 performance standards	2/2/6	4/6

Crosswalk Summary – Principles of Engineering to Science Standards

Science Standards in Michigan include five (5) standards and 182 standard indicators. Project Lead the Way Principles of Engineering consists of eight (8) units of study with 79 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
- 3/5 Standards are linked to objectives in the Principles of Engineering course
- 20/79 Principles of Engineering performance objectives link to Science Standards
- This course links to 29/182 standard indicators.

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

Unit	Performance Standards	Standard/Indicators Linked to Performance Objectives	Performance Objectives Linked to Science Standards
1	13 performance standards	3/3	3/13
2	9 performance standards	3/3	3/9
3	3 performance standards	1/3	1/3
4	20 performance standards	2/11	4/20
5	7 performance standards	1/2	1/7
6	22 performance standards	2/9	5/22
7	7 performance standards	1/5	3/7
8	6 performance standards	0/0	0/6

Crosswalk Summary – Principles of Engineering to Technology Standards

Technology Standards in Michigan include 6 standards and 44 standard indicators. Project Lead the Way Principles of Engineering consists of eight (8) units of study with 79 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 Technology Standards are addressed in the Principles of Engineering Course
- 28/79 Principles of Engineering Performance Objectives are linked to standards
- 18/44 Standard Indicators are linked to performance objectives in this course

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

Unit	Performance Standards	Strand/Standard/Indicators Linked to Performance Objectives	Performance Objectives Linked to Tech Ed Standards
1	13 performance standards	4/1/1	1/13
2	9 performance standards	3/3/12	5/9
3	3 performance standards	2/2/3	1/3
4	20 performance standards	3/4/15	7/20
5	7 performance standards	2/2/6	3/7
6	22 performance standards	3/5/10	5/22
7	7 performance standards	2/2/2	2/7
8	6 performance standards	2/2/6	4/6