

TRAC Modules alignment to Michigan Educational Standards- Math

| | | Traf | fic Te | echnol | logy | | | | | | |
|---|------|---------------------------------------|---|--|--|--|--|--|--|--|--|
| | Code | Activity 1: Calculating reaction time | Activity 2: Calculating braking distance. | Activity 3: Setting yellow light time. | Activity 4: Programming logic for traffic systems. | Activity 5: Reactive Traffic technology. | | | | | |
| Quantitative Literacy and Logic (L) | L | | | | | | | | | | |
| Reasoning About Numbers, Systems, and Quantitative Situations | L1 | | | | | | | | | | |
| Number Systems and Number Sense | L1.1 | | | | | | | | | | |
| Representations and Relationships | L1.2 | | | | | | | | | | |
| Counting and Probabilistic Reasoning | L1.3 | | | | | | | | | | |
| Calculation, Algorithms, and Estimation | L2 | | | | | | | | | | |
| Calculation Using Real and Complex Numbers | L2.1 | | | | | | | | | | |
| Sequences and Iteration | L2.2 | | | | | | | | | | |
| Measurement and Precision | L3 | | | | | | | | | | |
| Measurement Units, Calculations, and Scales | L3.1 | | | | | | | | | | |
| Understanding Error | L3.2 | | | | | | | | | | |
| Mathematical Reasoning, Logic and Proof | L4 | | | | | | | | | | |
| Mathematical Reasoning | L4.1 | | | | | | | | | | |
| Language and Laws of Logic | L4.2 | | | | | | | | | | |
| Proof | L4.3 | | | | | | | | | | |



| | | Traffic Technology | | | | | | | | |
|---|-------|---------------------------------------|---|--|--|---|--|--|------|--|
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| Algebra and Functions | A | | | | | | | | | |
| Expressions, Equations, and Inequalities | A1 | | | | | | | | | |
| Construction, Interpretation, and Manipulation of Expressions | A1.1 | | | | | | | | | |
| Solutions of Equations and Inequalities | A1.2 | | | | | | | | | |
| Functions | A2 | | | | | | | | | |
| Definitions, Representations, and Attributes of Function | A2.1 | | | | | | | | | |
| Operations and Transformations | A2.2 | | | | | | | | | |
| Families of Functions | A2.3 | | | | | | | | | |
| Lines and Linear Functions | A2.4 | | | | | | | | | |
| Exponential and Logarithmic Functions | A2.5 | | | | | | | | | |
| Quadratic Functions | A2.6 | | | | | | | | | |
| Power Functions | A2.7 | | | | | | | | | |
| Polynomial Functions | A2.8 | | | | | | | | | |
| Rational Functions | A2.9 | | | | | | | | | |
| Trigonometric Functions | A2.10 | | | | | | | | | |
| Mathematical Modeling | A3 | | | | | | | | | |
| Models of the Real-World Situations Using Families of Functions | A3.1 | | | | | | | | | |



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| Geometry and Trigonometry | G | | | | | | | | |
| Figures and their Properties | G1 | | | | | | | | |
| Lines and Angles; Basic Euclidean and Coordinate Geometry | G1.1 | | | | | | | | |
| Triangles and Their Properties | G1.2 | | | | | | | | |
| Triangles and Trigonometry | G1.3 | | | | | | | | |
| Quadrilaterals and Their Properties | G1.4 | | | | | | | | |
| Other Polygons and Their Properties | G1.5 | | | | | | | | |
| Circles and Their Properties | G1.6 | | | | | | | | |
| Conic Sections and Their Properties | G1.7 | | | | | | | | |
| Three-Dimensional Figures | G1.8 | | | | | | | | |
| Relations Between Figures | G2 | | | | | | | | |
| Relations Between Area and Volume Formulas | G2.1 | | | | | | | | |
| Relations Between Two- Dimensional and Three- Dimensional Representations | G2.2 | | | | | | | | |
| Congruence and Similarity | G2.3 | | | | | | | | |
| Coordinate Representations | G2.4 | | | | | | | | |
| Transformations of Figures in the Plane | G3 | | | | | | | | |
| Distance-preserving Transformations: Isometries | G3.1 | | | | | | | | |
| Shape-preserving Transformation: Dilations and Isometries | G3.2 | | | | | | | | |



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| Statistics and Probability | S | | | | | | | | |
| Univariate Data – Examining Distributions | S1 | | | | | , | | | |
| Producing and Interpreting Plots | S1.1 | | | | | | | | |
| Measures of Center and Variations | S1.2 | | | | | | | | |
| The Normal Distribution | S1.3 | | | | | | | | |
| Bivariate Data – Examining Relationships | S2 | | | | | | | | |
| Scatter Plots and Correlation | S2.1 | | | | | | | | |
| Linear Regression | S2.2 | | | | | | | | |
| Samples, Surveys, and Experiments | S3 | | | | | | | | |
| Data Collection and Analysis | S3.1 | | | | | | | | |
| Statistical Process Control * | S3.2* | | | | | | | | |
| Probability Models and Probability Calculations | S4 | | | | | | | | |
| Probability | S4.1 | | | | | | | | |
| Application and Representations | S4.2 | | | | | | | | |