

MATHEMATICS CAREER & TECHNICAL (MCTE)

MCTE-101 Technical Mathematics

3 Credits

Lecture: 3 hours per week

Offering: Fall and Spring Only, All Years

This course is designed as a basic math course for students in technical programs. Students will be able to apply principles of fractions, decimals, percents, ratio and proportion, calculator usage, integers, formula evaluation, equation solving, geometry, trigonometry and the metric system. MCTE-101 is intended for students in technical fields.

Prerequisites: MATH-015 or an appropriate score on a placement test.

MCTE-102 Computational Skills for Allied Health

3 Credits

Lecture: 3 hours per week

Offering: Fall, Spring, and Summer, All Years

This course provides instruction in systems of metric and apothecary measurement. Students will be able to apply principles of measurement conversion, reduction, dimensional analysis, drug orders and labels interpretation, oral parenteral and pediatric dosage calculation, intravenous (IV) calculations, ratio and proportion, linear equations, formulas, solutions, and mixture problems.

Prerequisites: MATH-025, MATH-090 or an appropriate score on a placement test.

MCTE-103 Technical Mathematics for Aerospace Technology

3 Credits

Lecture: 3 hours per week

Offering: Fall Only, All Years

This course provides students with an overview of the mathematical concepts needed in the Aerospace Advanced Manufacturing certificated programs. Students will be able to apply principles of basic arithmetic, plane and angular geometry, area and volume of two- and three-dimensional solids, right-triangle trigonometry, and trigonometric functions. MCTE-103 does NOT satisfy the core math requirement for the A.A., A.S., or A.A.S. degrees.

Prerequisites: MATH-015 or an appropriate score on a placement test.

MCTE-104 Technical Mathematics for Automotive Technology and Diesel

3 Credits

Lecture: 3 hours per week

Offering: Fall Only, All Years

This course covers mathematical applications for specific technical programs. Students will be able to apply principles of fractions, decimals, percents, ratio and proportion, calculator usage, integers, formula evaluation, equation solving, geometry, the metric system, and measurement.

Prerequisites: MATH-015 or an appropriate score on a placement test.

MCTE-105 Technical Mathematics for Machining and Computer Aided Design Technologies

3 Credits

Lecture: 3 hours per week

Offering: Fall Only, All Years

This course covers mathematical applications of specific technical programs. Students will be able to apply principles of plane and angular geometry, congruent and similar figures, circles, right-triangle trigonometry, trigonometric functions, and vectors.

Prerequisites: MATH-015 or an appropriate score on a placement test.

MCTE-106 Technical Mathematics for Industrial Mechanic/ Millwright; HVAC; Welding

3 Credits

Lecture: 3 hours per week

Offering: Fall Only, All Years

This course covers mathematical applications of specific technical programs. Students will be able to apply principles of fractions, decimals, percents, integers, ratio and proportion, the metric system, geometry, and right-triangle trigonometry.

Prerequisites: MATH-015 or an appropriate score on a placement test.