Technology Education (TECH)

TECH 075  INTRODUCTION TO TECHNICAL READING/WRITING  5 credits
Offers basic writing/reading skills for technical students. Skills include writing complete sentences, improving spelling, and using writing as a form of communication. Additionally, students will learn how to read technical materials effectively, expand vocabulary, and improve comprehension.
Prerequisite: None

TECH 078  PRE-COLLEGE MATH I  3 credits
Covers operations on and applications of integers, fractions, and decimals. This is the first in a three quarter pre-college mathematics sequence which contains pre-college math modules 01 - 03. Credit cannot be earned for both MATH 078 and TECH 078.
Prerequisite: Placement exam or instructor permission.

TECH 079  PRE-COLLEGE MATH II  2 credits
Covers operations on and applications of ratios, proportions, and percents. Also includes topics in measurement and geometry. This is the continuation of the first in a three quarter pre-college mathematics sequence which contains pre-college math modules 04 - 05. Credit cannot be earned for both MATH 079 and TECH 079.
Prerequisite: MATH 078 with a C or better, placement exam, or instructor permission.

TECH 088  PRE-COLLEGE MATH III  3 credits
Covers solving linear equations and inequalities and an introduction to functions and graphing. Techniques and strategies for problem solving are emphasized. This is the second in a three quarter pre-college mathematics sequence which contains pre-college math modules 06-08. Credit cannot be earned for both MATH 088 and TECH 088.
Prerequisite: MATH 079 or TECH 079 with a C or better, placement exam or instructor permission.

TECH 089  PRE-COLLEGE MATH III  2 credits
Covers solving systems of linear equations and operations on polynomials. This is the continuation of the second in a three quarter pre-college mathematics sequence which contains pre-college math modules 09-10. Credit cannot be earned for both MATH 089 and TECH 089.
Prerequisites: C or better in MATH 087 or MATH 089 or TECH 088, Placement Exam, or instructor permission.

TECH 090  PRINCIPLES OF TECHNOLOGY  5 credits
Explores the mechanical, fluid, electrical, and thermal systems on which modern technology operates. Hands-on, real-world lab activities are integrated with mathematics and physics instruction to provide an understanding of the units of force, work, rate, resistance, and energy associated with each system.
Prerequisite: None

TECH 098  PRE-COLLEGE MATH III  3 credits
Covers factoring polynomials and operations on rational and radical expressions. This is the third in a three quarter pre-college mathematics sequence which contains pre-college math modules 11-13. Credit cannot be earned for both MATH 098 and TECH 098.
Prerequisites: C or better in MATH 089 or TECH 089 or MATH 097, Placement Exam, or instructor permission.

TECH 099  PRE-COLLEGE MATH III  5 credits
Covers solving systems of equations, operations on rational and radical expressions, solving and graphing quadratic equations, and an introduction to exponential and logarithmic functions. This is the third in a three course pre-college mathematics sequence which contains pre-college math modules 11 - 15. Credit cannot be earned for both MATH 099 and TECH 099.
Prerequisite: C or better in TECH 098 or MATH 098, placement exam, or instructor permission.

TECH 100  ADVANCED PRINCIPLES OF TECHNOLOGY  5 credits
Provides hands-on study of energy, power, and force transformers in mechanical, fluid, electrical and thermal energy systems. Includes a review of force, work, rate, and resistance. Students will learn through a combination of lab experiments and discussion of the physics and math related to each energy system. The application in industry of various concepts is also explored.
Prerequisite: One year of high school principles of technology (certificate from instructor required), or TECH 090, or MATH 106 or higher.

TECH 170  STATISTICAL PROCESS CONTROL  4 credits
Explores the use of statistical process control as a means of improving a process. Problem-solving techniques including brainstorming, Pareto diagrams, and cause and effect diagrams are also examined.
Prerequisite: Recommended: MATH 106 or higher.