TECHNOLOGY EDUCATION

Advanced Applications in Technology

Q* Advanced Applications in Technology I

Course # 86019001,2
Grade Level 9-12
Length 1-3 years
Prerequisite Completed three credits of a Technology Education Program.
Credit

This Advanced Applications in Technology course may be taken by a student for one or more semesters. A student may earn multiple credits in this course. The purpose of this course is to provide students with the opportunity to develop a project from a vision to reality. Working in teams to design, engineer, manufacture, construct, test, redesign, test again, and then produce a finished project. This would involve using ALL of the knowledge previously learned, not only in technology education but across the curriculum.
(4X4 High Schools only)

Drafting / Illustrative Design Technology

*Drafting/Illustrative Design Technology I

Course # 86008101,2
Grade Level 9-12
Length 1 year
Prerequisite None
Credit 1

Basic Drafting provides the opportunity for students to become proficient in the broad fields of engineering drafting and architectural drawing and design. The purpose is to develop skills, knowledge, and positive attitudes concerning drafting.

*Drafting / Illustrative Design Technology II

Course # 86008201,2
Grade Level 10-12
Length 1 year
Prerequisite Drafting & Design Technology I
Credit 1

This level course will continue and develop a more advanced scope of drafting.

Q*Drafting / Illustrative Design Technology III

Course # 86008301,2
Grade Level 11-12
Length 1 year
Prerequisite Drafting & Design Technology II
Credit 1

This level course will continue and develop a more advanced scope of drafting. At this level, computer assisted drafting (CAD) will be explored.

Communications Technology

*Communications Technology I

Course # 86010101,2
Grade Level 9-12
Length 1 year
Prerequisite None
Credit 1

The purpose of Graphic Communication I is to provide students with the opportunity to gain practical skills, knowledge, and positive attitudes concerning graphics media and visual communications. Students will learn by designing, composing, printing and evaluating a variety of projects using the tools, materials, and techniques of the printing industry.

*Communications Technology II

Course # 86010201,2
Grade Level 10-12
Length 1 year
Prerequisite Communication Technology I
Credit 1

This course is a continuation of Communication Technology I with expanding experiences in Graphic and communication Technology Systems.

Q*Communications Technology III

Course # 86010301,2
Grade Level 11-12
Length 1 year
Prerequisite Communication Technology II
Credit 1

This course is a continuation of Intermediate Communication Technology II with expanding experiences in Graphic Technology systems.

Material and Processes Technology

*Material and Processes Technology I

Course # 86011101,2
Grade Level 9-12
Length 1 year
Prerequisite None
Credit 1

This course provides the opportunity for students to become skilled in the design, construction, and finishing of projects in woods, plastics, and metals. Machine safety and proper tool usage is stressed.

*Material and Processes Technology II

Course # 86011201,2
Grade Level 10-12
Length 1 year
Prerequisite Materials & Processes Technology I
Credit 1

Each student will have an opportunity to continue and expand on the intermediate level of materials and processes.

Q*Material & Processes Technology III

Course # 86011301,2
Grade Level 11-12
Length 1 year
Prerequisite Materials and Processes Tech. II
Credit 1

Each student will have an opportunity to continue and expand on the Advanced level of materials and processes.

Technology Studies

*Technology Studies I

Course # 86005101,2
Grade Level 9-12
Length 1 year
Prerequisite None
Credit 1

The purpose of this course is to introduce students to technology, elements of technology, technological systems, physical technologies, information/ communication technologies, bio-technologies and issues and outlooks in technology. Laboratory experiences revolve around the physical technologies of construction, energy and power, manufacturing, material processing and transportation; information communication technologies of information processing, graphic communication and electronic communication; and bio-technologies in agriculture, health care and medicine. The content includes, but is not limited to, the study of design & problem solving processes, systems of technology, computer applications, careers, special skills, safety, human relationships, leadership, free enterprise system, entrepreneurship and evolving technologies.

*Technology Studies II

Course # 86006101,2
Grade Level 10-12
Length 1 year
Prerequisite Technology Studies I
Credit 1

This course is a continuation and expansion of the topics introduced in Technology Studies I. The content includes, but is not limited to, the study of Robotics, Audio Visual Technology, Production Technology, CADD, Laser & Fiber Optics, Engineering Modeling, Electricity, Electronics and Networking.

Q*Technology Studies III

Course # 86017101,2
Grade Level 11-12
Length 1 year
Prerequisite Technology Studies II
Credit 1

This course is a continuation and expansion of the topics introduced in Technology Studies II. At this level, students work independently or in teams to research, plan and develop a project.

Aerospace Technology

Aerospace Technology

The purpose of this program is to provide students with a foundation of knowledge and technically oriented experiences in the study of aerospace technology, its effect upon our lives, and the choosing of an occupation. The content and activities will also include the study of safety and leadership skills. This program focuses on transferable skills and stresses understanding and demonstration of the technological tools, machines, instruments, materials, processes and systems in business and industry.

* Aerospace Technology I

Course # 86005801,2
Grade Level 9-12
Length 1 yr.
Prerequisite None
Credit 1

This course provides students with an introduction to the knowledge, human relations, and technological skills found today in aerospace technology.

*Aerospace Technology II

Course # 86006801,2
Grade Level 10-12
Length 1 yr.
Prerequisite Aerospace Technology I
Credit 1

This program provides students with an intermediate understanding of the knowledge, human relations, and technological skills found today in aerospace technology.

Q* Aerospace Technology III

Course # 86017801,2
Grade Level 11-12
Length 1 yr.
Prerequisite Aerospace Technology II
Credit 1

This program provides students with an advanced understanding of the knowledge, human relations, and technological skills found today in aerospace technology.

*Engineering Technology

The purpose of this program is to provide students with a foundation of knowledge and technically oriented experiences in the study of the applications of engineering and its effect upon our lives and the choosing of an occupation. The content and activities will also include the study of entrepreneurship. Safety, and leadership skills.

*Engineering Technology I

Course # 86005700
Grade Level 9-12
Length 1 year
Credit 1

*Engineering Technology II

Course # 86006700
Grade Level 9-12
Length 1 year
Credit 1

Q*Engineering Technology III

Course # 86017700
Grade Level 9-12
Length 1 year
Credit 1

This program focuses on transferable skills and stresses understanding and demonstration of the technological tools, machines, instruments, materials, processes and systems in business and industry.

***Course meets Practical Arts graduation requirement for students entering high school prior to 2007-2008.**