

INDUSTRIAL TECHNOLOGY DEPARTMENT

Class Number: 109
Class Name: **Construction Trades-Carpentry Level I**
Length of Class: Year
Prerequisite: Application to Teacher and Principal
Grade Level: 11 ≠ 12

This course contains core curricula for basic construction skills. The class encompasses level one and level two carpentry courses in Wheels of Learning Curriculum. Enrolled students can continue towards an Associate degree program at Des Moines Area Community College and /or to a four-year degree program. This course may lead to journeyman and /or masters (license) in the Building Trades Industry. Paid summer apprenticeships will be available upon completion. The class is taught by a DMACC instructor and 7 credits toward a DMACC degree can be earned. Two high school credits per semester can be earned with opportunities for additional co-op credits. This is a cooperative venture of the 7 Story County high schools and it will be taught at Ames High in a morning block and an afternoon block (each 2 periods daily ≠ 10 per week).

Class Number: 143
Class Name: **Const. Trades≠Trade and Industrial Carpentry Level II**
Length of Class: Year
Prerequisite: Construction Trades- Carpentry Level I
Grade Level: 12

This course is designed for seniors who have taken construction trades ≠ carpentry as a junior and wish to continue in the carpentry area.

Class Number: 144
Class Name: **Constr. Trades≠Elect., Plumbing, Heating, and A/C**
Length of Class: 1 semester
Prerequisite: None
Grade Level: 11-12

This course contains the core curriculum for basic construction skills in the areas of electricity, plumbing, heating, and air conditioning. Enrolled students can continue towards as associate degree at DMACC and/or to a four-year degree program. Paid summer jobs will be available upon completion. The course is taught by a DMACC instructor and credit towards a DMACC degree can be earned. This is a cooperative venture of the seven Story County high schools and it will be taught at Ames High as well as at construction sites.

Class Number: 112
Class Name: **Introduction to Woods** (Elective)
Length of Class: Fall Semester
Prerequisite: None
Grade Level: 9 - 12 Limit (16)

This is a basic woodworking class. It will be a hands on course-demonstrations on hand tools and machine safety and rules in all areas. Projects will be selected by student with instructions approval.

Class Number: 120
Class Name: **Adv. Woods** (Elective)
Length of Class: Semester
Prerequisite: Woods I
Grade Level: 10 - 12

Advanced Woods builds upon the skills and abilities learned in Introduction to Technology. Emphasis will be placed in the areas of woodworking involving more complex procedures, in addition machines will be used to create intricate joints. Projects will be selected by the student with instructor approval.

Class Number: 113
Class Name: **Drafting I (Engineering Strand)** (Elective)
Length of Class: Semester
Prerequisite: None
Grade Level: 9 - 12 Limit (10)

In Drafting I, students will learn how to manipulate the tools needed to draft. Any mechanical drawing, sketching, lettering, size and shape, orthographic, working, and pictorial drawings will be covered. Some CAD programs will be used in Drafting I. Students of both genders would benefit from this course. This is the first course in the Engineering Strand offered by the Industrial Technology Department. This course allows you to pass out of a general drafting course at DMACC.

Class Number: 114
Class Name: **Drafting II (Engineering Strand)** (Elective)
Length: Semester

Prerequisite: Drafting I
Grade Level: 9 - 12 Limit (10)

In Drafting II, the students will advance to more technical drafting skills. After a brief review of areas previously learned, students will draft in areas such as auxiliary view, pattern development, and machine working drawings. CAD will be used. This is the second class in the Engineering Strand offered by the Industrial Technology Department.

Class Number: 115
Class Name: **Architectural Drafting (Engineering Strand)**
(Elective)
Length of Class: Fall Semester
Prerequisite: None
Grade Level: 9 - 12 Limit (10)

This course is designed to give the student the opportunity to work with drafting skills in the area of Architecture. The student will develop floor plans, elevation plans, plot plans, and foundation plans. Great course for both girls and boys to learn the fundamentals of Architectural Drafting. This is a course offered in the Engineering Strand by the Industrial Technology Department.

Class Number: 118
Class Name: **CAD (Engineering Strand) (Elective)**
Length of Class: Spring Semester
Prerequisite: None
Grade Level: 9 - 12 Limit (10)

The student will learn the process of using the computer and related hardware/software to perform drafting functions with skills gained from this instruction. A student will rapidly produce drawings that are extremely accurate, consistent, and easily revised. Great course for both girls and boys to stay up with industry technology. This is also a course offered in the Engineering Strand by the Industrial Technology Department.

Class Number: 117
Class Name: **Advanced Drafting (Elective)**
Length of Class: Spring Semester
Prerequisite: Drafting I and II

Grade Level: 11 - 12

This course is a one semester course for students who have shown a good aptitude in drafting and would like to do additional types of mechanical drawings and more advanced work in CAD. Additional concepts studied include welding drawings, perspective views, structural drawing, and tolerance dimensioning.

Class Number: 155
Class Name: **Automotive Technology**
Length of Class: 1 year
Prerequisite: None

The automotive technology program will be the entry level course for the DMACC auto mechanics and technology program. The course will be taught at the DMACC Ankeny campus everyday from 12:30 ≠ 2:30. You will receive 13 DMACC credits for this course. Students would be expected to be enrolled blocks one and two at Colo-NESCO High School and then go to Ankeny for their third class. Transportation will be the responsibility of the student and her/his parents. The students will receive opportunities to learn about the basic brakes, suspension and alignment auto measurements and tools and automotive engine fundamentals.