

COURSE DESCRIPTIONS:

- **BASIC WOODWORKING CAP-16 STUDENTS:** STUDENTS WILL EXPLORE DIFFERENT WOOD WORKING TECHNIQUES AND PRACTICE SHOP SAFETY. EXPECT TO LEARN THE FOLLOWING: PROJECT PLANNING, SHOP SAFETY, HOW TO USE THE SHOP TOOLS, JOINTERY. STUDENTS WILL BE PROVIDED WITH 2 PROJECTS OVER THE COURSE OF THE SEMESTER THAT WILL DISPLAY COMMON WOOD WORKING PRACTICES. (1 SEMESTER)
- **PRODUCT DEVELOPMENT CAP-16 STUDENTS:** STUDENTS WILL BE SPLIT UP INTO GROUPS TO DEVELOP DIFFERENT PROJECTS THAT THEY WILL MANUFACTURE AND SELL TO THE COMMUNITY. STUDENTS WILL WORK THROUGH THE PLANNING PROCESS AND DEVELOPE A MANUFACTURING PLAN AS WELL AS A SALE PLAN. (1 SEMESTER)
- **GEOMETRY IN CONSTRUCTION (GIC):** THIS IS AN ALTERNATIVE HANDS ON MATH CLASS. THIS IS A GREAT CLASS FOR STUDENTS TO SEE HOW GEOMETRY AND CONSTRUCTION WORK HAND-IN-HAND. THIS IS A YEAR LONG CLASS THAT WILL TAKE UP TWO CLASS PERIODS EACH DAY. STUDENTS WILL RECEIVE CREDIT FOR BOTH MATH AND CONSTRUCTION. (2 SEM.)
- **CONSTRUCTION TRADES CAP-16 STUDENTS:** STUDENTS WILL LEARN ABOUT DIFFERENT TRADES AND DO SMALL PROJECTS THAT CORRELATE TO THE TRADES THEY ARE LEARNING ABOUT. TRADES THAT WILL BE COVERED, BUT AREN'T LIMITED TO, FRAMING, DRYWALL, ROOFING, ELECTRICAL, AND CONCRETE. (1 SEMESTER)
- **ADVANCED WOODWORKING CAP-16 STUDENTS:** THIS COURSE IS THE ADVANCED VERSION OF BASIC WOODWORKING. STUDENTS WILL TAKE WHAT THEY LEARNED AND APPLY THE CONCEPTS AND TECHNIQUES TO A PROJECT OF THEIR CHOICE. STUDENTS WILL BE WORKING ON RELATIVELY COMPLEX PROJECTS OVER THE DURATION OF THIS COURSE. (1 SEMESTER)
- **CIVIL ENGINEERING & ARCHITECTURE CAP-16 STUDENTS:** STUDENTS WILL LEARN ABOUT RESIDENTIAL AND COMMERCIAL CONSTRUCTION. THEY WILL BE LEARNING HOW TO DESIGN STRUCTURES USING AUTODESK REVIT. IN THIS PROGRAM THEY WILL LEARN HOW TO PROVIDE CLIENTS WITH DESIGN RENDERINGS, THE DESIGNING PROCESS, AND THE REAL LIFE APPLICATIONS PROVIDED. WE WILL LOOK AT SITE PLANNING, BUILDING CODES, ARCHITECTURAL TECHNIQUES, AND ARCHITECTURAL HISTORY. WE WILL BE DESIGNING A PROJECT ON REVIT, AND TAKING THE PLANS INTO THE WORKSHOP TO BUILD WHAT THE STUDENTS HAVE DESIGNED. (2 SEMESTERS)
- **ADVANCED CONSTRUCTION TRADES CAP-16 STUDENTS:** STUDENTS WILL TAKE A DEEPER DIVE INTO THE TRADES AND TAKE ON LARGER PROJECTS. PROJECT IDEAS WOULD BE: SHEDS, PLAYHOUSES, SMALL REMODELS, CHICKEN COOPS, ETC. THE PROJECTS WILL CHANGE FROM YEAR TO YEAR DEPENDING ON WHAT WE CAN PICK UP AROUND THE COMMUNITY OR THROUGH THE SCHOOL. (2 SEMESTERS)

Prerequisites

BASIC WOODWORKING

- NO PRIOR CLASSES NEEDED

PRODUCT DEVELOPMENT

- NO PRIOR CLASSES NEEDED

GIC

- ALGEBRA 1

CONSTRUCTION TRADES

- BASIC WOODWORKING
- OR GIC

ADVANCED WOODWORKING

- BASIC WOODWORKING
- &
- PRODUCT DEVELOPMENT

ADVANCED CONSTRUCTION TRADES

- CONSTRUCTION TRADES

CIVIL ENGINEERING & ARCHITECTURE

- CONSTRUCTION TRADES
- OR
- ADVANCED CONSTRUCTION TRADES

INDUSTRIAL TECH COURSE RECOMMENDED FLOW CHART

MIDDLE SCHOOL COURSES

- 7TH GRADE EXPLORATORY
- 8TH GRADE EXPLORATORY

9TH GRADE

- BASIC WOODWORKING
- PRODUCT DEVELOPMENT

10TH GRADE

- GEOMETRY IN CONSTRUCTION
- CONSTRUCTION TRADES
- ADVANCED WOODWORKING

11TH GRADE

- CONSTRUCTION TRADES
- ADVANCED WOODWORKING
- CIVIL ENGINEERING & ARCHITECTURE
- ADVANCED CONSTRUCTION TRADES

12TH GRADE

- CIVIL ENGINEERING & ARCHITECTURE
- ADVANCED CONSTRUCTION TRADES
- ANY OTHER COURSES THEY HAVEN'T ALREADY TAKEN