

ARCHITECHTURE & STRUCTURAL DESIGN (CP1) TE431

Mr. Kolkmeyer



TE431 ARCHITECHTURE & STRUCTUAL DESIGN (CP1) Course Information:

- 1. Technology/Business
- 2. Semester ½ credit
- 3. **HON Grades 11,12**
- 4. Pre-requisite: Technical Computer Design (TE221) or CADD 1 (from 2014-15 school year)
- 5. Prerequisite: Student has passed TE221 75-80%
- ✓ For more information about the course stop by ITC 1 before or after school.

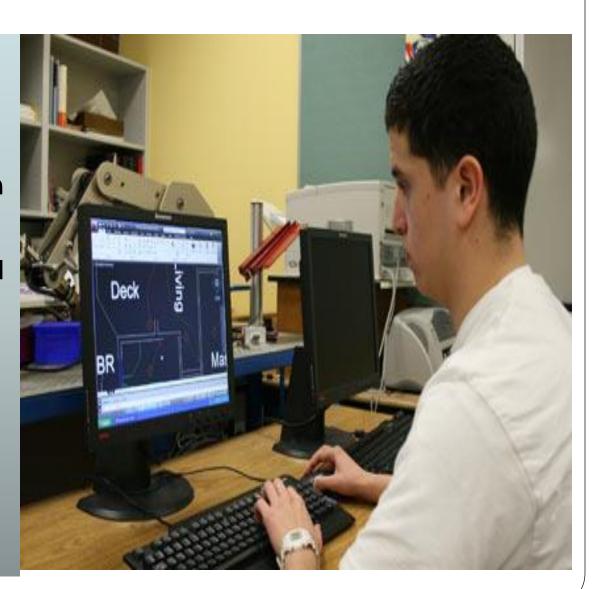


TE431 ARCHITECHTURE & STRUCTUAL DESIGN (CP1)

- FOR THOSE STUDENTS WHO ARE INTERESTED IN ARCHITECHTURE AND CONSTRUCTION DESIGN, THIS IS A GREAT OPTION FOR SENIORS.
- SENIORS IN THIS COURSE WILL ASSEMBLE A MODEL HOUSE USING FOAM BOARD AND BALSA WOOD AND USE CAD SOFTWARE FOR THE DESIGN.
- STUDENTS ARE RECOMMENDED TO HAVE CADD 1 TO TAKE THIS COURSE BUT NOT REQUIRED. MY APPROVAL IS NEEDED TO TAKE THIS COURSE.
- IF YOU HAVE QUESTIONS ON THIS COURSE OR ANYTHING THAT I HAVE PRESENTED, PLEASE CONTACT ME VIA EMAIL (<u>BKOLKMEYER@MOELLER.ORG</u>) OR STOP AND SEE ME IN THE TECHNOLOGY CENTER.

TE431 ARCHITECHTURE & STRUCTUAL DESIGN (CP1)

- Prerequisite: Technical Computer Design (TE221) completed.
- Course will focus on residential architecture and construction design
- Student project will be to assemble a model house using foam board and Balsa wood.
- Course will use CAD software for design.
- Need approval from Mr. Kolkmeyer to take course.



TE431 ARCHITECHTURE & STRUCTUAL DESIGN (CP1) Course Information:

- 1. Technology/Business
- 2. Semester ½ credit
- 3. **HON Grades 11,12**
- 4. Pre-requisite: Technical Computer Design (TE221) or CADD 1 (from 2014-15 school year)
- 5. Prerequisite: Student has passed TE221 75-80%
- ✓ For more information about the course stop by ITC 1 before or after school.



TE431 ARCHITECHTURE & STRUCTUAL DESIGN (CP1) Course Information:

- FOR THOSE STUDENTS WHO ARE INTERESTED IN ARCHITECHTURE AND CONSTRUCTION DESIGN, THIS IS A GREAT OPTION FOR SENIORS.
- SENIORS IN THIS COURSE WILL ASSEMBLE A MODEL HOUSE USING FOAM BOARD AND BALSA WOOD AND USE CAD SOFTWARE FOR THE DESIGN.
- STUDENTS ARE RECOMMENDED TO HAVE CADD 1 TO TAKE THIS COURSE BUT NOT REQUIRED. MY APPROVAL IS NEEDED TO TAKE THIS COURSE.



TE431 ARCHITECHTURE & STRUCTUAL DESIGN (CP1)

Model House Building

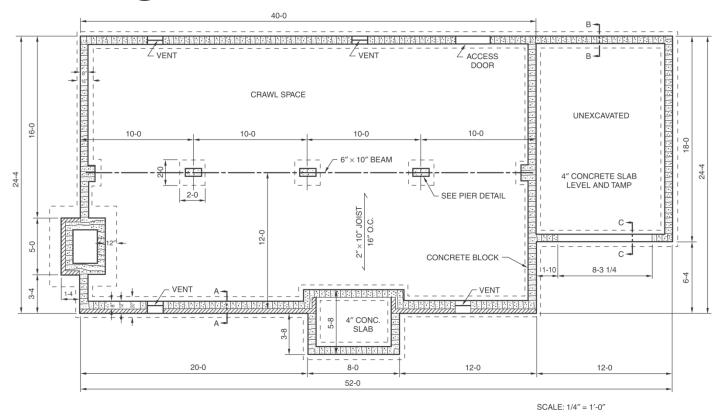




Project: build your dream house



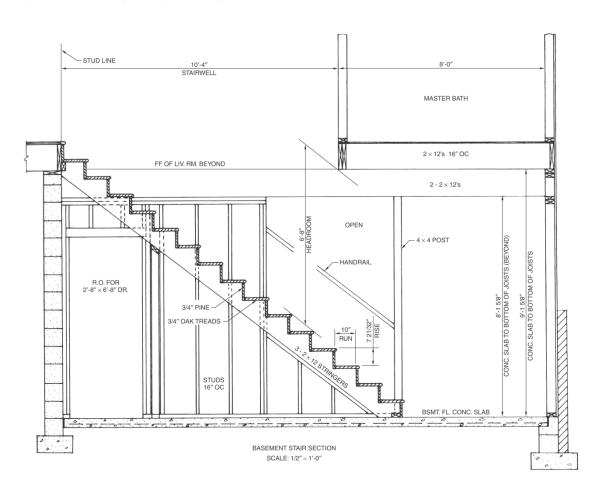
Drawing a Foundation Plan



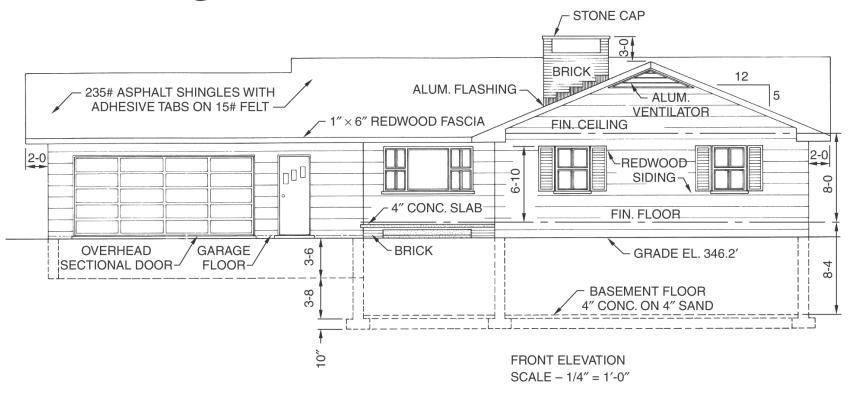
Completed foundation plan.

Structural Details

 Typical stair detail.

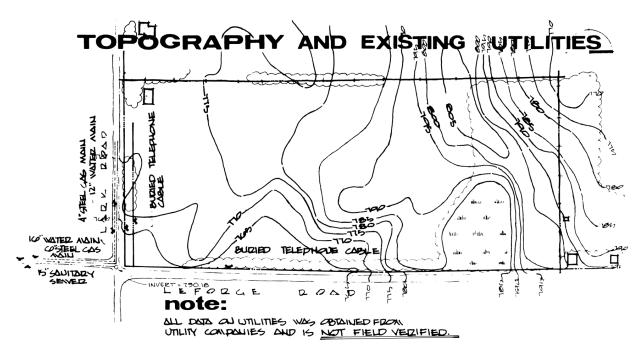


Drawing an Elevation—Manual



Steps 7, 8, and 9.

Site Topography



 This site plan shows the topographical features of the site.

ARCHITECHTURE & STRUCTUAL DESIGN

My father is an architect and my brother wishes to become one as well. According to my father, you need to take basic mathematics courses as well as tech courses. You do not need to take calculus in high school, but it is a good idea to take it simply to get into a college easier and it can give you an extra edge. If your high school offers CAD (Computer Aided Drafting) or any sort of classes that involve something in the technological department, take them. If your school does not offer engineering and design classes, perhaps you can take a summer course at another school or if you really must, transfer. Physics is a good course to take for architecture, but it isn't really required as well. A good idea is to take a drawing course whether that be art class or engineering. Being able to draw well helps an architect making corrections on prints.



ARCHITECHTURE & STRUCTUAL DESIGN

*CAD isn't required as a course in high school; instead, it is strongly recommended since you will use a form of CAD when you are an architect. Architects use computer technology today (such as CAD) unlike the old days where more mathematics was involved. A newer program is Revit. Today you need to know more about how to work the computer than the actual math itself. As far as classes go in high school, a general spectrum of courses are acceptable. You can attend the smallest technical college yet still become a well-balanced architect. "Choose classes that you will enjoy and will relate somewhat to architecture; most likely technological courses like CAD to even small engines or home maintenance" ~spoken from my father

