
SECTION HEADING

CRPT 2271: Construction Drafting, Design, and Blueprint Reading

Description

Construction Drafting, Design and Blueprint Reading introduces the students to the basic principles of mechanical drafting, architectural drafting and the design of floor plans. Auxiliary views, cross sections and elevation views will also be studied and drawn. Students will have the opportunity to learn both hand drafting methods and computer aid drafting. The student will be taught the skills needed to accurately read and interpret a complete set of working drawings for residential and light commercial construction projects.

Credits

3

Prerequisite

None

Corequisite

None

Topics to be Covered

1. Reading a scale
2. Drawing layout styles
3. Standard dimensioning requirements
4. Drafting symbols
5. Drafting tools and drawing aids
6. Drawing plot plans, foundation plans, floor plans, elevations, sections and detail plans
7. Styles of residential houses
8. Kitchen and bath designs
9. Computer aided drafting software (CAD)
10. Working drawings done with CAD
11. Reading and interpreting blueprints or working drawings

Learning Outcomes

1. Identify and demonstrate proper use of scales used in architectural drafting.
2. Demonstrate use of drafting board and drafting tools to draw plot plans, foundation plans, floor plans, elevations and section drawing.
3. Identify symbols used in architectural drafting.
4. Identify building code requirements for residential construction projects.
5. Identify and discuss different styles of residential houses.
6. Identify various kitchen and bath designs and draw cabinet details of each
7. Demonstrate the use of CAD to draw plot plans, foundation plans, floor plans, elevations, section drawings and detail plans.
8. Produce blue prints using an Architectural plotter.

Credit Details

Lecture: 3

Lab: 0

OJT: 0

MnTC Goal Area(s): None