



**Catholic
Memorial**
HIGH SCHOOL

Year Long Course Plan

Department: Technical Education

Course: Residential Design 872

Essential Learning Outcomes: After successfully completing this course, students will be able to:

1. Explain and demonstrate the building design process.
2. Describe and apply reasonable space requirements, code restrictions, site and building orientation constraints, and room proximity standards to development of a residential design.
3. Use AutoCAD® to develop and finalize an architectural design.
4. Clearly and adequately explain a design in presentation of it to a group or students or others, and fairly and objectively critique designs and presentations of others.
5. Report to a workplace regularly and punctually, engage effectively and congenially with peers and supervisors, work from written as well as oral instructions, use assigned time efficiently for productive work, and meet production deadlines.
6. Demonstrate oral and written communication, computation, and problem-solving skills appropriate to the level of the coursework.

<i>Quarter 1</i>	<i>Quarter 2</i>
Unit 1 Theory: CAD Versus Building Information Modeling Revit Architecture: Introduction, Interface, and Sketching Unit 2 Theory: Objects Revit Architecture: Walls, Floors, and Ceilings Unit 3 Theory: Families and Nested Families Revit Architecture: Editing Types Unit 4 Theory: Parameters Revit Architecture: Dimensions, Doors, and Windows Unit 5 Theory: Representations Revit Architecture: Views, Visibility, and Sheets Unit 6 Theory: Design Constraints Revit Architecture: Levels, Reference Planes, and Grids Unit 7 Theory: Design Information Organization Revit Architecture: Components,	Unit 14 Theory: Detail Revit Architecture: Drafting and Linework Unit 15 Theory: Sequence Revit Architecture: Design as You Would Build Unit 16 Theory: Is Architecture Engineering? Revit Architecture: Formulas Unit 17 Theory: Databases Revit Architecture: Worksets Unit 18 Theory: Nongraphic Data—Schedules, Tags, and Legends Revit Architecture: Tags, Schedules, and Legends Unit 19 Theory: Time Revit Architecture: Phasing Unit 20 Theory: Variation Revit Architecture: Options Projects:

<p>Categories, Subcategories</p> <p>Unit 8 Theory: Domain-Specific Knowledge Revit Architecture: Roofs</p> <p>Unit 9 Theory: Delaying Specificity Revit Architecture: Massing</p> <p>Unit 10 Theory: Component Design Revit Architecture: Family Editor</p> <p>Unit 11 Theory: Propagation of Constraints Revit Architecture: Alignment, Locking, and Constraints</p> <p>Unit 12 Theory: Interdependencies Revit Architecture: Site</p> <p>Unit 13 Theory: Unique Form Revit Architecture: In-Place Families</p>	<ol style="list-style-type: none"> 1) Office building/ Multiuse concept 2) Bungalo style residential house design 3) Modern House 4) Cultural influence / Nature influence building.
--	--

Center for Catholic School Effectiveness template 2006