

Utility Design

Credits:	3 (2/1/0)
Description:	The student will learn principles of sanitary, storm and water system layouts, design and construction. Design criteria and standards, plan and profile principles, cost estimating, construction staking and inspection of the different systems will be emphasized.
Prerequisites:	CIVL1119 CIVL1138
Corequisites:	None
Competencies:	<ol style="list-style-type: none"> 1. Create a project using an existing topographic map as a starting template. 2. Draw underground utility alignments. 3. Create ground profiles. 4. Design grade vertical alignments. 5. Create ground cross-sections. 6. Incorporate local and industry regulations into the design process. 7. Create a set of design drawings. 8. Compose a plan view for storm water collection system. 9. Complete the water, storm sewer and sanitary sewer layout for a street project.
MnTC goal areas:	None