Minnesota State
Community and Technical College

CIVL2210 - Road Design

Credits:	3 (2/1/0)
Description:	The student will complete drawings and computations typical of those used in the design of roadways. These may include control line location maps, topographic drawings, cross sections, plan and profile earthwork computations.
Prerequisites:	• CIVL1119 • CIVL1138
Corequisites:	
Pre/Corequisites[*]:	
Competencies:	1. Utilize industry terminology. 2. Demonstrate an understanding of road design criteria. 3. Design with adherence to corresponding specifications. 4. Demonstrate an understanding of the application of jurisdiction requirements in design projects. 5. Demonstrate an ability to create and design a set of drawings. 6. Demonstrate an ability to create and design a set with corresponding documentation. 7. Design typical road templates and sections for application into design. 8. Create horizontal and vertical alignment appropriate for terrain. 9. Create cross-sections for design processes and verification. 10. Create and calculate volume quantities for design. 11. Create horizontal and vertical alignment into the design project, and reflect it into the construction set. 12. Calculate cut and fill volume calculations from road design. 13. Demonstrate an ability to submit a set of road design drawings. 14. Demonstrate an ability to incorporate road design project into a real world experience of a road design project.
MnTC goal areas:	None

[*]*Can be taking as a Prerequisite or Corequisite.*