CADD2120 - Visual Communication for Engineers

Credits:	3 (3/0/0)
Description:	This course covers the basic visualization, design and detailing concepts needed for engineers in modern industry. The course will teach students basic sketching, part modeling and assembly modeling techniques, as well as standard view layouts, auxiliary and section views, and standard dimensioning and tolerancing practices using an industry-recognized 3D solid modeling program.
Prerequisites:	• ENGR2210
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Create parametric sketches of parts using sketch creation, dimensioning and constraining tools. 2. Create parametric solid models using extrude, revolve, sweep and loft tools. 3. Create and add placed feature geometry to parametric solid models. 4. Apply geometric dimensions and constraints to create a fully assembled and constrained assembly. 5. Utilize part tweaking and exploding tools to generate exploded models of sub-assemblies and assemblies. 6. Create drawing layouts showing all the necessary views required to fully document parts and assemblies. 7. Generate a bill of materials and identifiers for annotating assembly models. 8. Demonstrate appropriate application of dimensioning and tolerancing principles to fully define part and assembly models. 9. Demonstrate proper file management and maintenance required to support bi-directional file associativity and ensure continuity of assembled models.
MnTC goal areas:	None

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