DET1210 - Introduction to Parametric Modeling

Credits:	4 (2/2/0)
Description:	This course introduces students to part modeling and drawing layout tools in various parametric design software. Students learn concepts of parametric sketching and modeling, sketched feature creation and editing, placed feature creation and editing, and model-derived drawing layouts.
Prerequisites:	• DET1106
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Demonstrate proper file management for part and drawing files, project folders, and bidirectional file associativity. 2. Utilize parametric sketching tools to create and analyze the functionality of open feature profiles. 3. Utilize sketched feature creation tools to generate parametric solid models. 4. Utilize placed feature creation tools to generate parametric solid models. 5. Utilize parametric sketching tools to create and analyze the functionality of closed feature profiles. 6. Apply sketch constraint relationships and dimensions to fully constrain and define sketched features. 7. Manage browser panel views, feature display, model shading and lighting controls, and object transparency settings. 8. Demonstrate proper use of naming conventions for work features, sketched features and placed features in the part model browser. 9. Create drawing layouts based on parametric model geometry showing appropriate views, shading, alignment and notations. 10. Apply appropriate dimensions, annotations and tables to drawing layouts. 11. Create title blocks, tolerance blocks and revision blocks to current ASME (American Society of Mechanical Engineers) standards.
MnTC goal areas:	None

Can be taking as a Prerequisite or Corequisite.

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