CATIA V5 Knowledge-Based Engineering

Course Code | EDU-CAT-en-KWA, EDU-CAT-en-PKT
Brand & Release | CATIA V5R25 (V5-6R2015)
Duration | 2 days
Level | Fundamentals
Prerequisites | CATIA V5 Fundamentals

Objectives:
Learn to automate modifications by embedding knowledge into your designs with CATIA’s Knowledgeware working environment. Topics include how to:

- Define and use parameters, formulas, checks, rules, reactions, and macros to control your designs
- Create and reuse Power Copies with Knowledge rules embedded inside of them
- Create and reuse knowledge-driven design templates
- Manage Design Tables and part family catalogs
- Create and reuse advanced instantiation features like Knowledge Pattern
- Use the Knowledge Advisor tools.

Class Structure:
- Introduction to KBE including real world examples
- Knowledge Advisor Workbench Presentation
- Creating Parameters, Formulas and Lists
- Creating Adaptive Behaviors
- Creating Design Tables and Part Families
- Using Knowledge Advisor Tools
- Creating and Using Powercopies
- Adding Knowledgeware objects to Powercopies
- Creating and Using Part and Assembly Templates
- Managing Standard Components
- Creating and Using Knowledge Patterns
- Defining Checks, Rules, Reactions, Lists, Laws, Loops and macros with arguments
- Associating URLs to parameters or relations
- Running macros from Rules or Reactions
- Using the Knowledge Inspector tool
- Managing Design Tables and part family catalogs

Class Exercises:
Ex. 1: Stringer
Ex. 2: Knowledge Advisor
Ex. 3: Keyway
Ex. 4: User-defined Features
Ex. 5: Document Templates
Ex. 6: Jigs and Fixtures
Ex. 7: Wheel Rim (from KWA)
Ex. 8: Light Bulb (from KWA)
Ex. 9: Sheet Metal Part (from KWA)