

COURSE OUTLINE

Automation using Macros & Scripting in MagicDraw

Module 01

Course Introduction

- Introduction
- Module Structure
- Course Outline
- Additional Resources
- Class Introductions

Module 02

Overarching Concepts

- NoMagic vs. CATIA Magic Branding
- Plugin vs. Macro vs. Script
- Supported Languages
- Using an IDE for Development
- Opaque Actions & Behaviors
- Structured Expressions

Module 03

Introduction to the API

- What's an API?
- Understand the JavaDocs
- Version Changes
- Imports

Module 04

Common and Useful Classes

- Overview
- Element and NamedElement
- Application and Project
- Helpers
- Session Management
- Logging
- Selected Element

Module
05

Where Does Code Go?

- Overview
- Saving Macros
 - Locally
 - In a Macro Element
 - In an Opaque Behavior
- Executing Macros
 - Create Macro Dialog
 - Expression Evaluation Dialog
 - Body and Language Dialog
 - Simulation Opaque Behaviors
 - Simulation Activity Diagrams
- Using Scripts

Module
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Examples and Hands-On Exercises

- Macro and Script Examples
- Hands-On Lab
 - Scripts Lab
 - Hello World
 - Custom Column
 - Dynamic Legends
 - Smart Packages
 - Macro Labs
 - Hello World+
 - Find and Print All Blocks
 - Rename Interface Blocks
 - Creating Elements