

HIL Power User Training

June 24th, 2025 | Novi Sad, Serbia



08:30 - 09:00 **Welcome**

General Introduction

09:00 - 09:30 **Introduction to Typhoon HIL** | Company presentation, technology introduction, motivation, setup and devices, licensing

09:30 - 09:45 **Support** | Typhoon HIL Support Center, documentation, forum, Relphie, HIL Academy

Getting Started

09:45 - 10:00 **Toolchain Overview** | Typhoon HIL Control Center, Examples Library, TyphoonSim

10:00 - 10:45 **Running Your First Model [Hands-On]** | Schematic Editor - model design, TyphoonSim - offline simulation, HIL SCADA - panel design

10:45 - 11:00 **Coffee Break**

Fundamentals of Real-Time Modeling and Simulation

11:00 - 11:15 **Modeling and Real-Time Simulation** | Challenges of real-time simulation

11:15 - 12:45 **Typhoon HIL Solution and Modeling Principles** | System architecture, converter modeling approach, control options, additional features, model partitioning

12:45 - 13:45 **Lunch Break**

HIL for Power Electronics

13:45 - 14:30 **Example Model** | Hands-on example C-HIL example, TI C2000 Toolbox

HIL for Grid Modernization

14:30 - 15:15 **Introduction** | Microgrid library, interface and scaling (HIL Connect & HIL Compatible), communication protocols

15:15 - 15:45 **Example Model** | Generic microgrid with multi-protocol gateway

15:45 - 16:00 **Coffee Break**

Test Automation

16:00 - 16:30 **Introduction to TyphoonTest IDE** | Typhoon HIL API, TyphoonTest IDE

16:00 - 17:00 **Test Automation Example** | Hands-on example



HIL Test Automation Training

June 24th, 2025 | Novi Sad, Serbia



08:30 - 09:00 **Welcome**

General Introduction

09:00 - 09:30 **Introduction to Typhoon HIL** | Company presentation, technology introduction, motivation, setup and devices, licensing

09:30 - 09:45 **Support** | Typhoon HIL Support Center, documentation, forum, Relphie, HIL Academy

Getting Started

09:45 - 10:00 **Toolchain Overview** | Typhoon HIL Control Center, Examples Library, TyphoonSim

10:00 - 10:45 **Running Your First Model [Hands-On]** | Schematic Editor - model design, TyphoonSim - offline simulation, HIL SCADA - panel design

10:45 - 11:00 **Coffee Break**

Fundamentals of Real-Time Modeling and Simulation

11:00 - 11:15 **Modeling and Real-Time Simulation** | Challenges of real-time simulation

11:15 - 12:45 **Typhoon HIL Solution and Modeling Principles** | System architecture, converter modeling approach, control options, additional features, model partitioning

12:45 - 13:45 **Lunch Break**

Test Automation Part 1

13:45 - 14:30 **Introduction** | General Introduction, overview of TyphoonTest Automation

14:30 - 14:45 **Pytest Basics** | Pytest library

14:45 - 15:00 **TyphoonTest Introduction** | TyphoonTest IDE

15:00 - 15:45 **Complete Automated Test Workflow** | Getting familiar with the environment

15:45 - 16:00 **Coffee Break**

Test Automation Part 2

16:00 - 16:30 **Complete Automated Test Workflow** | Hands-on example

16:30 - 16:45 **Additional Signal Analysis** | Finding events, asserting conditions

16:45 - 17:00 **Report Enhancement and Customization** | Customizing Allure reports

