

2017-2018 Synchro Training Courses

Course Pre-requisites: The Synchro Fundamentals training course does NOT require any Synchro experience but expect the attendees understanding basic construction, scheduling and / or modeling.

Minimum PC Requirements:

Processor:	2.8 GHz (x64)	32-bit (x86) processors are not supported due to memory limitations.
Memory (RAM):	16 GB (x64)	
Hard Disk Space:	1.3 GB for installation files 1 GB for each project file (typical)	Solid State Drive recommended providing enough storage space (500 GB+)
Graphics Card:	1 GB (DirectX Compatible)	Additional information about graphics card compatibility can be found at: http://developer.techsoft3d.com/hoops/hoops-visualize/graphics-cards/
Display:	1280 x 1024 Screen Resolution Multiple Monitors	
Operating System:	Microsoft Windows 7 (x64) Microsoft Windows 8 (x64) Microsoft Windows 10 (x64)	32-bit (x86) processors are not supported due to memory limitations.
Others:	Network Connectivity Mouse with scroll wheel	Network connectivity required for License activation and Workgroup operation (With Synchro Workgroup Project).

Exit Exam and Certification

All courses will include exit exams required to obtain certification of completion which is available on Synchro Academy. Direct link to get certified as Synchro Certified User can be found [here](#).

Training pace

The pace of learning varies for different people. The Synchro instructor will adjust the training pace and topics based on the acceptance of the majority of training attendees.

Questions?

Should you have any questions regarding Synchro training and Synchro Academy, please do not hesitate to reach out to Jacqueline Chen (Jacqueline.chen@synchroltd.com).

Synchro Fundamentals

Day 1 and 2

Synchro Fundamentals provides a two-day full experience covering the basic topics of Synchro PRO. By the end of the training, the attendees will understand the basic functions of Synchro and will be able to create their 4D models and export the sequenced images or animations for presentation. It is focused on teaching the essential skills in using the Synchro platform productively at an introductory level for project implementation. The attendees will all be awarded a Synchro Fundamentals Certificate.

The Synchro Fundamentals course will use a building model to demonstrate and practice Synchro PRO features. The Synchro Fundamentals training program is designed for new users or experienced users who need a refresh course to warm up the Synchro knowledge. A series of topics will be covered:

Synchro Fundamentals Day 1 Schedule

- Session 1: Synchro Overview and Introduction of UI
- Session 2: Navigation and Selection in Gantt and 3D View
- Session 3: Import 3D Design Models and 3D Interoperability
- Session 4: Import Schedule and Schedule Interoperability
- Session 5: Introduce Resources and Create Resources
- Session 6: Create Resource Appearance Profiles
- Session 7: Assign Resources to Tasks with Resource Appearance Profiles

Lunch Break

- Session 8: Automatching
- Session 9: Import Equipment Model and Assign to Tasks
- Session 10: Animate Equipment method 1 - Edit as assigned
- Session 11: Animate Equipment method 2 - 3D Path (Optional)
- Session 12: Import Site Model and Assign to Tasks (Optional)
- Session 13: Create Workspace and Assign to Tasks (Optional)
- Session 14: Create Baseline Schedule
- Session 15: Synchronise from Updated Schedule

Synchro Fundamentals Day 2 Schedule

- Session 1: Build Detailed Work Plan: Model-based Scheduling
- Session 2: Viewpoints, Cutting Plane and Layouts
- Session 3: Create Animation in Animation Editor
- Session 4: Create Output: Generate Animation
- Session 5: Create Output: Export 4D Snapshots

Synchro PRO Certified User Exam and Certification (when time permits)

If there is no enough time during the training, user can take the certification exam on Synchro Academy. Please contact Jacqueline Chen (jacqueline.chen@synchro ltd.com) for more information.

Synchro Advanced

Day 3 and Day 4 Optional

Synchro Advanced Training requires the attendees being familiar with basic Synchro features and can quickly navigate through the program to find the features and functions being taught in this course. One of the following **pre-requisites** needs to be met before the attendees can sign up for the Synchro Advanced Course:

- Has completed the Synchro Fundamentals training course and passed the Synchro Fundamentals Exam, or
- Has previous hands-on experience using Synchro PRO for at least one month, or
- Has used most Synchro Fundamental features (see Synchro Knowledge Assessment form for self-evaluation) on project(s)

Synchro Advanced training course will be fast track and include advanced training exercises. It will utilize realistic project model(s) and scenarios, which will help the attendees better understand the sophistication and lifecycle project implementation of the program by learning and practicing a combination of features.

Synchro Advanced Training Topics

Session 1: Set up Synchro Project Template File

- Resource Appearance Profiles for reuse
- Resource Status Colors for reuse
- Resource and Resource Cost

Session 2: Automatching crash course – how other people set things up

Session 3: Calculated User Fields and Synchro Script – several examples

- Example 1: Create Calculated UF for Automatching
- Example 2: Quantify earthwork from 3D to Tasks

Session 4: BIM-based Planning

- Create schedule fragnet from BIM Models
- Assign Physical Quantity to Tasks
- Set up Rules (production rates) for quantity-driven task durations

Session 5: Resource Management, Cost and Earned Value

- Assign Resource Units and review Resource Usage graph
- Cost loading Resources and Tasks
- Earned Value Management

Session 6: 4D Reviews

- Advanced Filtering for Tasks and 3D
- Understand Critical Path Filter and Analysis
- Adjust 4D Model by using 3D/Resource and Task selection mode
- Schedule Health Check and Alerts

Session 7: Collaborative Planning on SWP

Session 8: Field Tracking and Progress Monitoring (SITE/SWP)

Session 9: Implement 4D for Logistics, Spatial Coordination, and Safety Planning (optional)

- Advanced 3D Path:
 - Crane picks
 - Mobile crane transports
- Workspaces (for contractor coordination)
- Spatial Coordination (for safety planning)

Synchro PRO Advanced User Exam and Certification (when time permits)

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