

# Example Training Course Syllabus

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<b>Introduction</b> Introduction & Course Overview Daily Logs & Housekeeping Project Planning	<b>Dimensional Control</b> Offsets & Lever Arms Angular Errors C-O Determination Measurement Techniques	<b>QINSy Online</b> Controller Overview Configuring the Displays Managing Display Sets Echo Sounder Settings	<b>Processing Manager</b> Structure and Philosophy User Interface Data Management File Handling	<b>Classroom Session-1</b> Review of the MBES Data Cleaning the MBES Data Creating Bathymetry Charts Creating Profiles
<b>Survey Vessel Overview</b> Vessel Selection Survey Sensors Selection Equipment Layout Power & Data Connections	<b>Systems Integration</b> Interfacing Requirements RS232 Serial Data TCP/IP & UDP Data Packets Time Synchronization	<b>QINSy Session Setup</b> Database Sounding Grid DTM File Formats File Splitting & Management	<b>Processing Tools</b> Data Editing Data Interpolation Chart Production Contours & Profiles Volumes Exporting your Data	<b>Classroom Session-2</b> Review of the LiDAR Data Cleaning the LiDAR Data Creating a Combine Data Set Data Exporting Data Transformations
<b>Precise Positioning</b> Positioning Systems GPS & GNSS / RTK / Overview Motion Sensors Heading sensors Systems Integration Planning Installation Considerations	<b>Systems Testing</b> Interface Testing Interface Troubleshooting Data Validation Timing & Synchronization	<b>QINSy Advanced Options</b> Correction sources Geo-referenced Graphics Online Quality Control Online Data Filtering Line Planning	<b>Practical Session - 1</b> Project Planning Vessel Mobilisation Positioning System Testing Survey Systems Testing SVP Profile Recording System Calibration	<b>Classroom Session-3</b> Producing a Survey Report Review of Key Points General Q & A Session Travel Arrangements Wrap - Up
<b>Multibeam System Overview</b> Principals of Operation MBES Models & Selection Installation Options Operational Considerations Avoiding Potential Hazards	<b>Systems Calibration</b> Water Column Effects Speed of Sound Profiling Vertical Control & Tides MBES Calibration Methods LiDAR Calibration Methods Positioning Verification	<b>QINSy Calibration Routines</b> Importing the SVP Profile Data Collection Methodology File Conventions QINSy Validator Data Replay Functions 3D Visualization	<b>Practical Session - 2</b> Survey Plan Wide Area MBES Sweep Detailed MBES Survey LiDAR Survey MBES & LiDAR Survey Data Verification SVP Profile Recording	<b>Spare Session for unforeseen circumstances</b>
<b>LiDAR System Overview</b> Principals of Operation LiDAR Models & Selection Operational Considerations Installation Options	<b>Data Acquisition System</b> QINSy Console Project Management Support Folder Creating a Project Template Database Setup	<b>Data Processing</b> Viewing the Data in Qcloud Standard Cleaning Tools Customized Cleaning Tools Data Export Options	<b>Practical Session - 3</b> Backing Up your Data Vessel Demobilization Equipment Checklist Positioning System De-Mob Safety Checks	<b>Spare Session for unforeseen circumstances</b>