

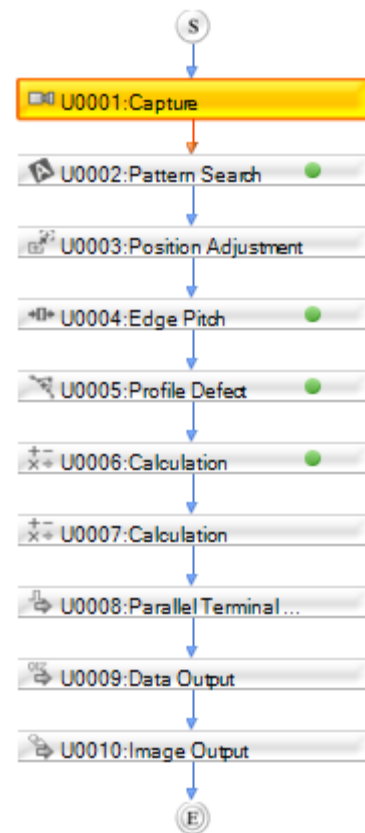


XG-X Customer Training

The following is a general overview of the topics that will be covered in the XGX Training Class. Some vision programming experience is helpful as the class is heavily focused on programming the XG-X (not obtaining a good image). If you need help getting started with obtaining an image with the XGX, please visit the XGX support website and view the videos under Getting Started: <https://www.keyence.com/support/user/xg-x/index.jsp>

General Overview of Training Topics:

- XG-X Hardware Overview
- Navigating/Editing flowchart on controller
- Vision Tool Part List Overview
 - Hands on with many key vision tools
- Using XG-X Vision Terminal
 - Getting Connected /Remote Desktop
 - Gathering images/data to PC
- Using the XG-X Simulator+ software
 - Getting simulation images
- Outputting Images & Data
- Image Archive & Statistics
- LumiTrax Processing
- Color Processing / MultiSpectrum Processing
- Using XG-X Vision Editor Software
 - Program development, testing & debugging
- Calculations & Variables
- Branching & Execute conditions
- Looping
- Image Operation / Image Enhancements
- Screen Editor & Custom Menus
- Scaling/Calibration
- Using Commands/Custom Instructions
- User Account Settings
- Multiple Camera setup
- Linescan inspection overview
 - Standard mode and LumiTrax Specular Reflection mode
- 3D Vision Inspection
 - 3D Image technology overview
 - Pattern Projection hands-on
 - Height extraction (2D tools using height image)
 - Height processing tools



*The topics covered in the course are subject to change.