

Certificate of participation

Core Training

Certificate number: E202503032919520

Duration in hours: 16

Robot type: e-Series

Leonard Sheehy

27. February 2025

John Capps

John Capps
Automation Distribution, Inc.



Curriculum

Leonard Sheehy 27. February 2025

Module 1: Pick-and-place application

- Moving the robot by using the "Move" tab
- Knowledge about the I/O Connections and how-to setup
- How to configure the TCP
- How to setup a Home Position
- Basic knowledge about URCaps
- Apply skills acquired in the online training to an actual robot
 - Programming a Pick-and-place application

Module 2: Safety settings

- Configuration and use the available safety settings
 - Robot limits
 - Joint limits
 - Safety planes
 - Tool position
 - Direction
 - Configurable Inputs/Outputs
 - Safe Home

Module 3: Optimize a pick-and-place application

- Basic knowledge about singularities
- The different movement types and how to use them
 - MoveJ
 - MoveL
 - MoveP
 - MoveC
- How to configure a blend radius
- Configuration of speed and acceleration of movements and individual waypoints
- How to use the Time to investigate the cycle time
- Creation of a clear program structure

Module 4: Easy startup

- Configuration of a default program that starts automatically when the robot powers up
 - Programming a BeforeStart-Sequence
 - How to program relative Waypoints
 - How to setup the remote control
 - Setup a default program

Module 5: Program flow

- Configuration and use if-else commands
- Basic knowledge about variables
- How to program a subprogram

Module 6: Palletizing

- Configuration and usage of the palletizing template

Module 7: Force control (simple)

- Knowledge about the Force control (simple)
- Knowledge about and how to program Threads
- Configuration of the Force control (simple)
- Using the data of the integrated force and torque sensor in a program

Module 8: Process application with operator selection

- Configuration of the TCP, orientation and payload using the available wizards
- Programming loop statements
- Prompt operator for variable input
- Configuration and usage of switch-case commands
- Catching and handling an invalid entry

Module 9: Flexible redeployment

- How to create a coordinate system (Plane)
- How to program relative to a coordinate system

Module 10: Implementation plan

- A structured method (ten steps) to identify and evaluate the complexity of the automation capabilities in your cobot

Module 11: Online resources

- Free software updates
- User, service and script manuals
- CAD data of the robot, Teach Pendant and controller
- Offline simulator



UNIVERSAL ROBOTS

A Teradyne Robotics Company

Certificate of participation

Teacher Certification Training

Certificate number: E202504182919520

Duration in hours: 16

Robot type: e-Series

Leonard Sheehy

18. April 2025



Dylan Shanahan
Universal Robots Academy NA



Curriculum

Leonard Sheehy 18. April 2025



UNIVERSAL ROBOTS

A Teradyne Robotics Company



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SYSTEMES | The 3DEXPERIENCE® Company

CERTIFICATE

CERTIFICATE OF ACHIEVEMENT

In keeping with our commitment to excellence, this certifies that

LEONARD SHEEHY

Has successfully completed the course for

SOLIDWORKS ESSENTIALS

Instructor: Brandon Abercrombie

Date: July 08, 2022



Gian Paolo Bassi
CEO

Dassault Systèmes SolidWorks Corp.



SMART AUTOMATION CERTIFICATION ALLIANCE
INDUSTRY 4.0 CERTIFICATION

Dr. Leonard Sheehy

*has successfully completed all requirements for SACA's Silver Certification**

**Certified Industry 4.0 Associate -
Advanced Operations**



SACA's Executive Director:

Certification No. P5S9DG

A handwritten signature in black ink, reading 'James A. Wall', written over a horizontal line.

Jun 17, 2025

*Silver Certification Denotes Technical Knowledge Mastery



SMART AUTOMATION CERTIFICATION ALLIANCE

INDUSTRY 4.0 CERTIFICATION

Dr. Leonard Sheehy

*has successfully completed all requirements for SACA's Silver Certification**

**Certified Industry 4.0 Associate - Robot
System Operations**



SACA's Executive Director:

Certification No. HMDRWF

A handwritten signature in black ink, reading 'James A. Wall', written over a horizontal line.

Jun 12, 2025

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SMART AUTOMATION CERTIFICATION ALLIANCE

INDUSTRY 4.0 CERTIFICATION

Dr. Leonard Sheehy

*has successfully completed all requirements for SACA's Silver Certification**

**Certified Industry 4.0 Associate - Basic
Operations**



SACA's Executive Director:

Certification No. P794Q5

A handwritten signature in black ink, appearing to read 'James A. Wall', written over a horizontal line.

Mar 21, 2025

*Silver Certification Denotes Technical Knowledge Mastery