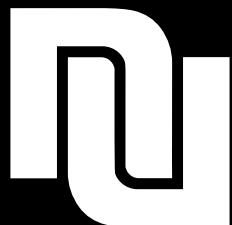


NU-LAISTUNG INDUSTRY 4.0 EXPERIENCE CENTRE

LAISTUNG
EFFICIENCY REDEFINED



الجامعة الوطنية
National University

للعلوم والتكنولوجيا

(In collaboration with National University of Science and Technology & Laistung -
A Siemens Integration Partner)

LAISTUNG

Industry 4.0 Automation

Training Programs



Industry 4.0 Awareness & Industrial Visit Program (3 Days)

Introductory, awareness program with live industry 4.0 demo kits.



Basic Industry 4.0 Training (2 Weeks)

Foundational course covering PLC programming, HMI and drive basics with hands-on practice with real world automation sessions.



Advanced Industry 4.0 Training (4 Weeks)

In-depth program covering advanced PLC programming, VFD, HMI, SCADA, networked integration and pilot system projects.

Who can enroll: Final-year students, Fresh graduates, Early-career engineers, and Working Professionals seeking career growth in Industrial Automation and Industry 4.0 technologies.

Industry 4.0 Awareness & Industrial Visit Program (3 Days)

⌚ 3 days (4 hours/day)



Course Objective

Quick, immersive exposure to **Industry 4.0 concepts** and **practical PLC, HMI & Drives automation fundamentals** for students and orientation groups.

Training Kits & Platforms

- **Hardware:** Siemens S7-1200 PLC, KTP700 HMI, SINAMICS V20 Drive and pilot demo units.
- **Software:** TIA Portal V20 (licensed), SINAMICS integration, Win CC and simulation tools.

Hands-On Modules

- **Basic PLC operation** and ladder logic.
- **HMI screen monitoring** and simple control.
- **Drive control setup** and basic motor operations.
- **SCADA (WinCC) demonstration** and overview.
- **Live demo** of an integrated automation process.
- **Overview of digital manufacturing** and Industry 4.0 concepts.

Practical Integration

- Hands-on familiarization with **live kits and pilot unit demonstrations**.

Deliverables

- **Certificate of Participation (Industry 4.0)**
- Training material and digital handouts

Outcome

Gain an overall understanding of **basic automation workflows** and hands-on exposure to real-world industrial systems - applicable across **Manufacturing, Water & Wastewater, Educational Training Centers, and Entry-level Automation**.



Basic Industry 4.0 Training

⌚ 2 weeks (4 hours/day)



Course Objective

Build foundational skills in Siemens automation - PLC, HMI and VFD drive systems using TIA Portal V20 and SINAMICS V20 drives. Emphasis on hands-on familiarity and real-kit simulation.

Training Kits & Platforms

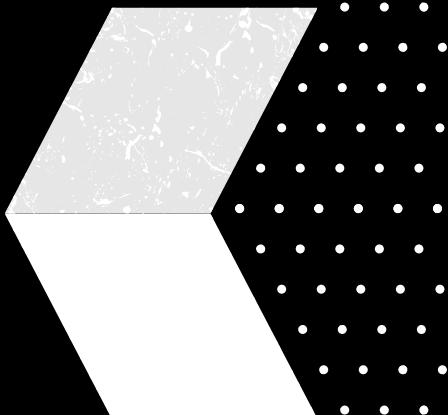
- **Hardware:** Siemens S7-1200 PLC, KTP700 HMI & SINAMICS V20 drives
- **Software:** TIA Portal V20 (*licensed - includes PLC, HMI & V20 Drive configuration*), SINAMICS tools & basic simulation utilities.

Hands-On Modules

- **PLC Basics & Ladder Logic:** *I/O mapping, timers/counters, basic control sequences.*
- **Digital & Analog I/O Programming:** *Read/write sensors/actuators, scaling, signal conditioning.*
- **HMI Screen Design & Tag Linking:** *Build operator screens, alarms, and basic HMI interactions.*
- **V20 Motor Control & Speed Regulation:** *Configure drives for start/stop, speed profiles and safety interlocks.*
- **Basic Wiring & Simulation:** *Panel wiring, device interconnection, and virtual run-throughs.*

Practical Integration

Virtual simulation and hands-on exercises on compact kits.



Deliverables

- **Certificate of Completion (Basic Industry 4.0)**
- Hands-on training sessions and course material
- Lab reports and demonstration log

Outcome

Comprehensive understanding of automation workflows with hands-on experience in **PLC-HMI-VFD integration using Siemens TIA Portal V20** preparing participants for manufacturing, educational, and entry-level industrial automation projects.



Advanced Industry 4.0 Training

⌚ 4 weeks (4 hours/day)



Course Objective

Develop complete automation expertise combining **PLC**, **HMI**, **SCADA** and drive integration using TIA Portal V20, WinCC and SINAMICS V20 drives. Focus on **pilot project-based learning** and networked systems.

Training Kits & Platforms

- **Hardware:** Siemens S7-1200 PLC, S7-1500 PLC, KTP900 Comfort HMI, SINAMICS V20 Drive, RTU Module, SCADA System (WinCC Professional / Unified)
- **Pilot Unit:** Conveyor & Process Tank Automation.
- **Software:** TIA Portal V20, WinCC (SCADA), OPC UA / PROFINET configuration tools & SINAMICS utilities.

Hands-On Modules

- **Advanced PLC Programming:** Function blocks (FBs), structured programming, modular code design etc
- **SCADA Configuration (WinCC):** HMI/SCADA screens, trending, alarms, centralized control.
- **HMI Screen Design & Tag Management:** Complex screens, user roles, recipe management.
- **Drive Integration & Motion Control:** Vector control, VFD tuning, coordinated motion basics.
- **Intercontroller Communication:** S7-1200, S7-1500 setups, PROFINET, OPC UA basics.
- **RTU & Network Communication:** Fieldbus fundamentals, remote telemetry and data exchange.
- **Pilot System Integration:** Integrate conveyor + process tank with PLC, HMI and SCADA for end-to-end automation.
- **Data Logging & Alarms:** Implement trending, data historian basics and alarm management.
- **Smart Interface Integration:** Intro to industrial IoT endpoints and data visualization.

Practical Integration

- Live Industrial Pilot System (Conveyor + Process Tank) with real-time control and monitoring

Deliverables

- **Certificate of Completion (Advanced Industry 4.0)**
- Project based training, reporting and demonstration
- Practical skill assessment results

Outcome

Develop **job-ready automation engineering skills** to design, program, and commission integrated **PLC**, **HMI**, and **SCADA systems** - including complete system-level automation expertise, real-time process experience, and Smart Interface applications across **Oil & Gas**, **Water & Wastewater**, **Process & Utility Systems**, and **Smart Manufacturing**.

Certifications, Recognition & Benefits

Certifications

- **3-Day program:** Certificate of Participation (Industry 4.0)
- **Basic course (2 Weeks):** Certificate of Completion (Basic Industry 4.0)
- **Advanced course (4 Weeks):** Certificate of Completion (Advanced Industry 4.0)

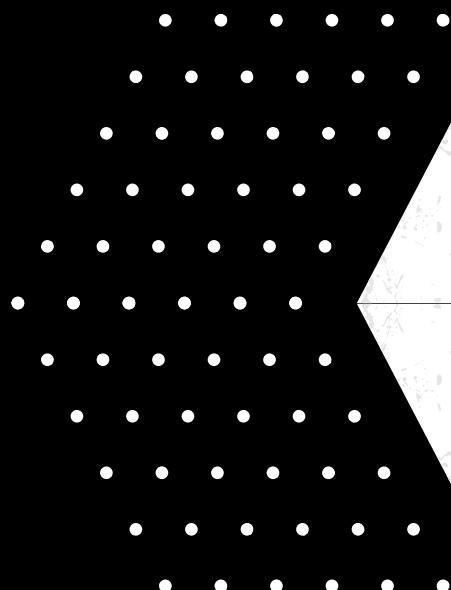


Institutional Credibility

Backed by **NU-LAISTUNG Industry 4.0 Experience Centre**, in collaboration with **National University of Science and Technology (Oman)** and **Laistung's** expertise as a Siemens integration partner.

Key Benefits For Participants

- Industry-relevant skills aligned to **Siemens OEM standards**.
- **Real pilot-project experience** for resumes and interviews.
- **Short, focused programs** ideal for students and working professionals.
- **Flexible batches** - suitable for academic schedules and working hours.



Pricing Options & Registration

3 Day Industry 4.0 Awareness & Industry Visit



OMR 150

- ✓ Quick introduction to Industry 4.0 and automation basics.
- ✓ Hands-on sessions with Siemens PLC, HMI, and drives.
- ✓ Live demonstration of integrated automation systems.
- ✓ Factory visit and real-world automation exposure.

Basic Industry 4.0 Training

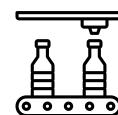
OMR 350



- ✓ Hands-on PLC, HMI, and VFD integration.
- ✓ Basic Siemens hardware and software experience.
- ✓ Builds strong automation fundamentals.
- ✓ Virtual simulation using compact kit

Advanced Industry 4.0 Training

OMR 550



- ✓ Advanced PLC, HMI, VFD & SCADA with structured and modular design.
- ✓ Real Siemens hardware and software experience
- ✓ Pilot system integration for end-to-end automation.
- ✓ Real-time debugging, networking and factory-grade testing practice.

How to enroll?

- ✓ Please fill up the [Google form](#) by scanning this QR code or by visiting [this link](#).
- ✓ The schedule, batch allocation and exact training dates will be communicated after registration.



For More Information

Call: [+968 98893272](tel:+96898893272) / [+968 96762744](tel:+96896762744) / [+968 99438098](tel:+96899438098)

Email: amuthakkannan@nu.edu.om / savijesh.pozath@laistung.com / mohammedalabri@nu.edu.om / sales@laistung.com

Special Offers



For National University Registered Students or Alumni



3 Day Industry 4.0 Awareness / Industry Visit

OMR ~~150~~

OMR 100



Basic Industry 4.0 Training

OMR ~~350~~

OMR 300



Advanced Industry 4.0 Training

OMR ~~550~~

OMR 480

For Corporates



Minimum 5 candidates required



3 Day Industry 4.0 Awareness / Industry Visit

OMR ~~150~~

OMR 135



Basic Industry 4.0 Training

OMR ~~350~~

OMR 315



Advanced Industry 4.0 Training

OMR ~~550~~

OMR 495

