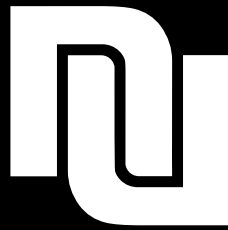


NU-LAISTUNG INDUSTRY 4.0 EXPERIENCE CENTRE

LAISTUNG
EFFICIENCY REDEFINED



الجامعة الوطنية
National University

Science & Technology 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.

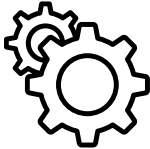
Key Benefits For Participants

- 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

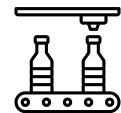
OMR 350



- ✓ 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

10%
OFF



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