

SITRAIN Digital Industry Academy

South Africa

SITRAIN Digital Industry offers you learning paths, courses and certified degrees on the following topics:



1 Industrial Automation
Systems SIMATIC

2 Industrial
Communications

3 Operator Control and Monitoring
Systems SIMATIC HMI

4 Digital Enterprise

5 Drive Technology
SINAMICS

6 Motion Control

7 Process Instrumentation

8 Process Control Systems SIMATIC
PCS 7 and SIMATIC PCS neo

1

Industrial Automation Systems **SIMATIC**

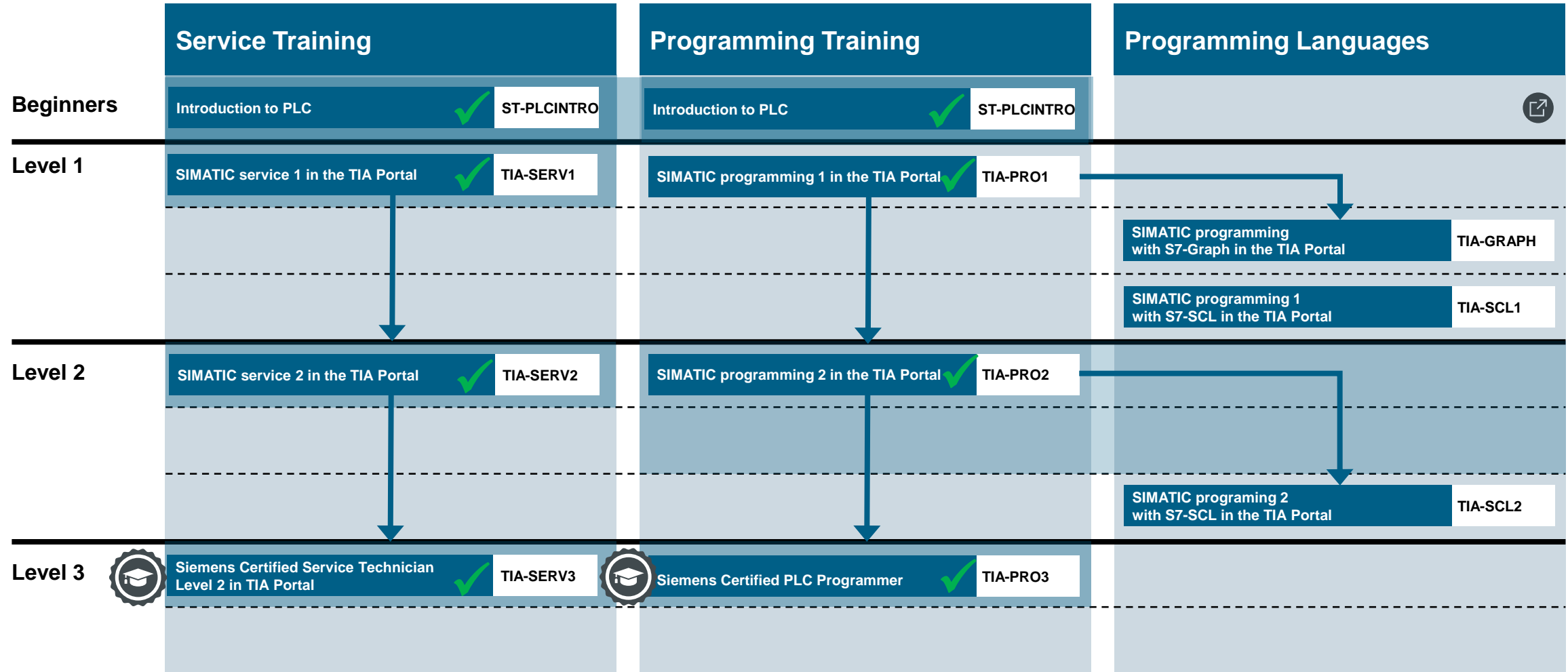
SIMATIC S7-1500, TIA Portal,
SIMATIC S7-300/-400, SIMATIC S7-1200



Trainings for SIMATIC S7-1500 in the TIA Portal



SIEMENS
Ingenuity for life



Trainings for SIMATIC S7-1500 in the TIA Portal



	Communication	Operate and Monitoring	Motion Control
Level 1			
	<p>SIMATIC programming 1 in the TIA Portal ✓ TIA-PRO1</p>		
	<p>PROFINET with Industrial Ethernet in the TIA Portal ✓ IK-TIAPN</p>	<p>SIMATIC WinCC SCADA in the TIA Portal ✓ TIA-WCCS</p>	<p>SIMATIC Motion Control 1 in the TIA Portal ✓ TIA-MC1</p>
	<p>OPC UA – Basics and Configuration IK-OPCUA1</p>	<p>SIMATIC WinCC on the machine level in the TIA Portal ✓ TIA-WCCM</p>	
Level 2			
		<p>SIMATIC WinCC on the machine level in the TIA Portal system course 2 TIA-WCCM2</p>	<p>SIMATIC Motion Control 2 in the TIA Portal ✓ TIA-MC2</p>
Level 3			



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

Trainings for Totally Integrated Automation in the Digital Enterprise (TIA in the DE)



	Basics	Programming	Programming / Commissioning
Level 1	TIA in the DE – Introduction to Standardization ✓ DI-STAND		
	Basics of Industrial Security in the factory automation ST-SECFA1	SIMATIC programming 1 in the TIA Portal ✓ TIA-PRO1	
	OPC UA – Basics and Configuration IK-OPCUA1	TIA Portal Openness Programming 1 DI-OPEN1	
Level 2		SIMATIC programming 2 in the TIA Portal ✓ TIA-PRO2	
		TIA in the DE – Automatic execution of engineering tasks ✓ DI-AUTOEN	TIA in the DE – Virtual Commissioning for Machines ✓ DI-VIRTCOM
		TIA Portal Openness Programming 2 DI-OPEN2	SIMIT in Discrete Automation Technology for Beginners DI-SIMITFA
Level 3			



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

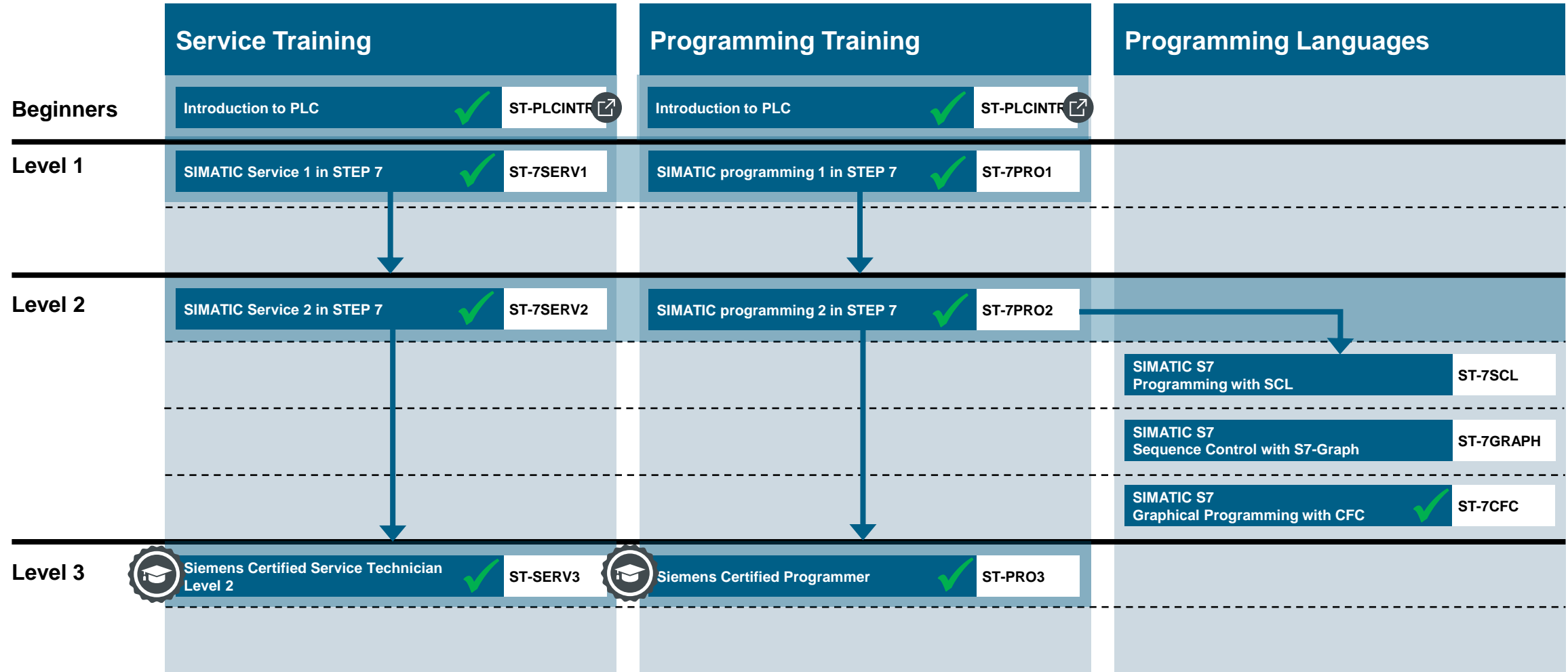


Courses offered in South Africa

Trainings for SIMATIC S7-300/-400 STEP 7 V5.x



SIEMENS
Ingenuity for life



Trainings for SIMATIC S7-300/-400 STEP 7 V5.x



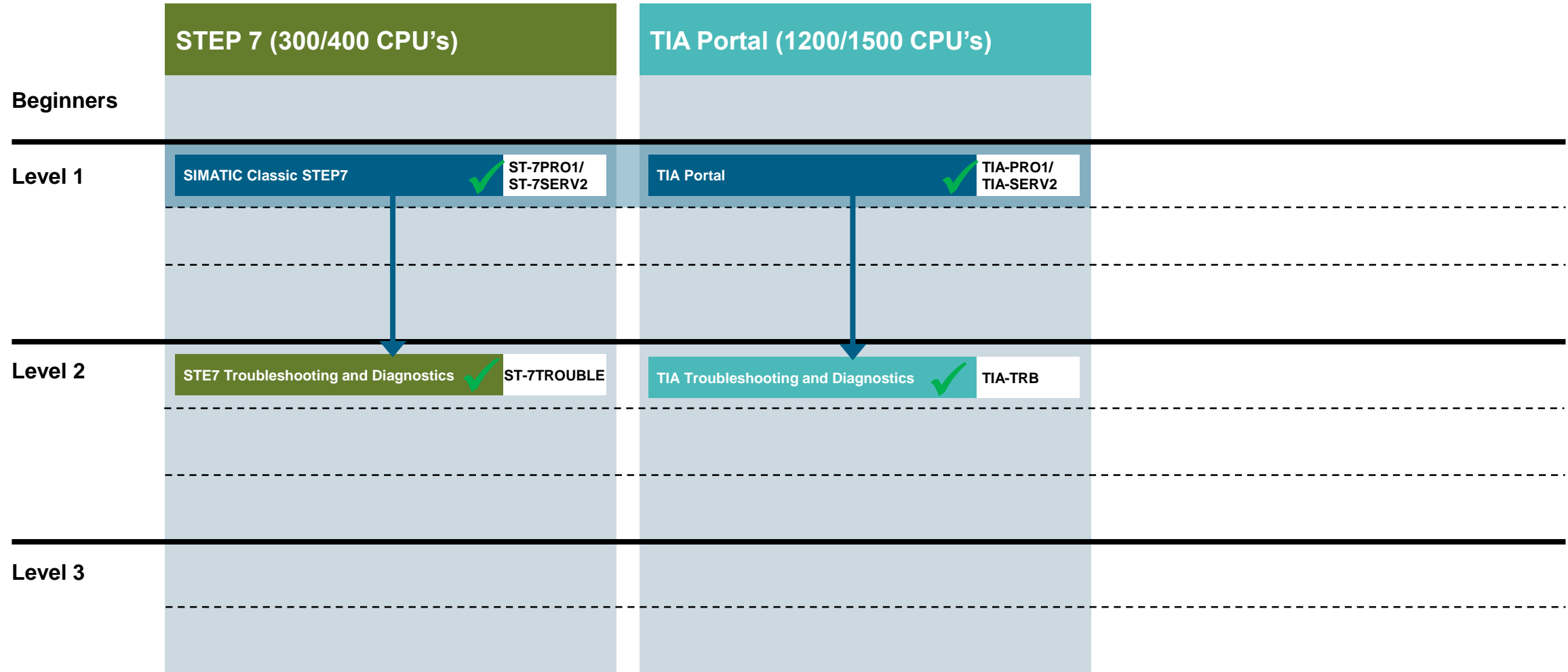
	Communication	Operate and Monitoring	Safety
Beginners	Introduction to Profibus, Profinet and Ethernet ✓ SCT-S7NETSIA		
Level 1	Actuator Sensor Interface Course ✓ IK-ASISYS		
Level 2	SIMATIC programming 2 in Classic STEP7 ✓ ST-7PRO2		
	PROFINET System Course ✓ ST-ETHERPR	SIMATIC WinCC flexible System Course 1 ✓ ST-WINCCFLEX	Programming of safety related SIMATIC S7 controller via Distributed Safety ✓ ST-PPDS
	PROFIBUS System Course ✓ ST-PRIFIBU	SIMATIC WinCC System Course ✓ ST-WINCC	
		SIMATIC WinCC flexible System Course 2 ✓ ST-WINCCFLEX ADV	
Level 3			



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

Trainings on faultfinding and diagnostics



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

Courses offered in South Africa

Trainings for SIMATIC S7-1200

Programmers, commissioning engineer, maintenance personnel, operators		
Level 1	SIMATIC S7-1200 Basic Course ✓	TIA-MICRO1
Level 2	SIMATIC S7-1200 Advanced Course ✓	TIA-MICRO2



SIEMENS
Ingenuity for life

2

Industrial Communication

PROFINET, PROFIBUS, Industrial Ethernet,
OPC and Industrial Remote Communication



Trainings for Industrial Communication

	PROFINET	PROFIBUS	ASI
Beginners	<div style="background-color: #4F7942; color: white; padding: 5px;">Introduction to Profibus, Profinet and Ethernet</div> <div style="background-color: #4F7942; color: white; padding: 5px; text-align: right;">✓</div> <div style="background-color: #D9E1F2; padding: 5px;">SCT-S7NETSIA</div>		
Level 1			<div style="background-color: #4F7942; color: white; padding: 5px;">Actuator Sensor Interface Course</div> <div style="background-color: #4F7942; color: white; padding: 5px; text-align: right;">✓</div> <div style="background-color: #D9E1F2; padding: 5px;">IK-ASISYS</div>
Level 2	<div style="background-color: #4F7942; color: white; padding: 5px;">PROFINET with Industrial Ethernet in TIA Portal</div> <div style="background-color: #4F7942; color: white; padding: 5px; text-align: right;">✓</div> <div style="background-color: #D9E1F2; padding: 5px;">TIA-PN</div>	<div style="background-color: #4F7942; color: white; padding: 5px;">PROFIBUS System Course for STEP7</div> <div style="background-color: #4F7942; color: white; padding: 5px; text-align: right;">✓</div> <div style="background-color: #D9E1F2; padding: 5px;">ST-PROFIBU</div>	
	<div style="background-color: #4F7942; color: white; padding: 5px;">PROFINET System Course for STEP7</div> <div style="background-color: #4F7942; color: white; padding: 5px; text-align: right;">✓</div> <div style="background-color: #D9E1F2; padding: 5px;">ST-ETHERPR</div>		










The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

Certified Profibus International Courses

SIEMENS
Ingenuity for life

	PROFINET 		PROFIBUS 	
Level 1	 Certified Installer ✓ CPN-INS	 Certified Installer ✓ CPI-INS		
Level 2	 Certified Engineer ✓ CPN-ENG	 Certified Installer with Troubleshooting ✓ CPI-INT		
		 Certified Installer with Engineer ✓ CPI-INE		



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

3

Operator Control and Monitoring Systems **SIMATIC HMI**

SIMATIC WinCC in the TIA Portal,
SIMATIC WinCC V7.x



Trainings for Operator Control and Monitoring Systems SIMATIC HMI



	SIMATIC WinCC V7.x	SIMATIC WinCC in the TIA Portal – Machine level	SIMATIC WinCC in the TIA Portal – SCADA
Level 1	SIMATIC programming 1 in STEP 7 ✓ ST-7PRO1	SIMATIC programming 1 in the TIA Portal ✓ TIA-PRO1	SIMATIC programming 1 in the TIA Portal ✓ TIA-PRO1
	SIMATIC WinCC System Course ✓ ST-BWINCCS	SIMATIC WinCC on the machine level in the TIA Portal ✓ TIA-WCCM	SIMATIC WinCC SCADA in the TIA Portal ✓ TIA-WCCS
Level 2		SIMATIC WinCC on the machine level in the TIA Portal System Course 2 TIA-WCCM2	
		SiVArc – Options of Automatic Visualization Generation ✓ TIA-SIVARC	

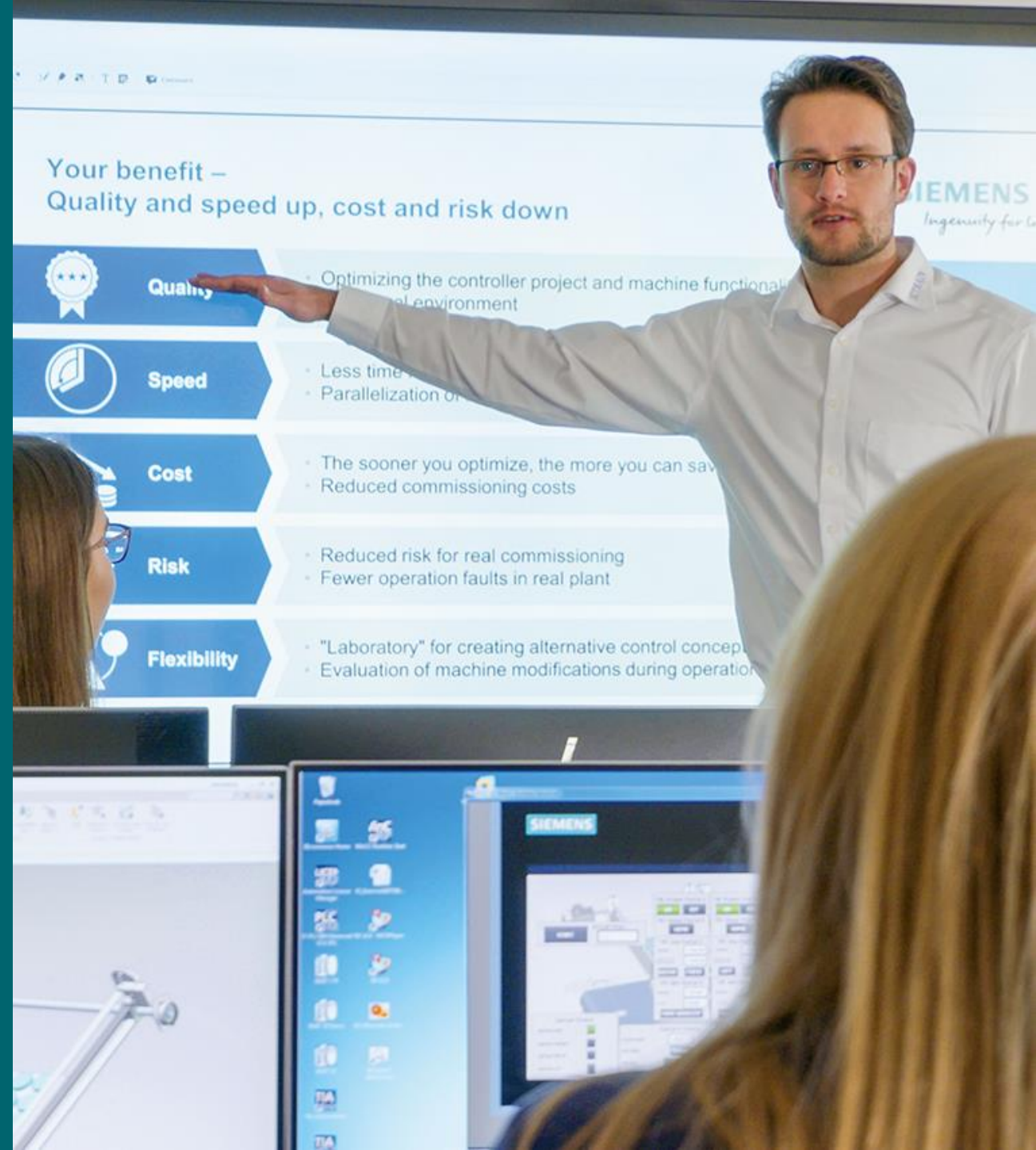


The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

4

Digital Enterprise



Your benefit –
Quality and speed up, cost and risk down



Quality

- Optimizing the controller project and machine functional environment



Speed

- Less time to market
- Parallelization of tasks



Cost

- The sooner you optimize, the more you can save
- Reduced commissioning costs



Risk

- Reduced risk for real commissioning
- Fewer operation faults in real plant



Flexibility

- "Laboratory" for creating alternative control concepts
- Evaluation of machine modifications during operation

Trainings for the Digital Enterprise





	Trainings for Totally Integrated Automation in the Digital Enterprise	Totally Integrated Automation in the Digital Enterprise – Basics	Totally Integrated Automation in the Digital Enterprise – Code Generation
Level 1	TIA in the DE – Introduction Compact ✓ DI-INTROC	TIA in the DE – Introduction to Standardization ✓ DI-STAND	
		Basics of Industrial Security In the factory automation ST-SECFA1	SIMATIC programming 1 in the TIA Portal ✓ TIA-PRO1
		OPC UA – Basics and Configuration IK-OPCUA1	TIA Portal Openness Programming 1 DI-OPEN1
Level 2			SIMATIC programming 2 in the TIA Portal ✓ TIA-PRO2
			TIA in the DE – Automatic execution of engineering tasks ✓ DI-AUTOEN
			TIA Portal Openness Programming 2 DI-OPEN2



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

Trainings for the Digital Enterprise

	Totally Integrated Automation in the Digital Enterprise – Virtual Commissioning	Totally Integrated Automation in the Digital Enterprise – Specialization Courses	Digitalization in the Process Automation
Level 1			SIMATIC PCS 7 Integrated Engineering and Simulation ST-PCS7INS
			SIMATIC PCS 7 System Course  ST-PCS7SYS
Level 2	SIMATIC programming 2 in the TIA Portal  TIA-PRO2		SIMATIC PCS 7 Plant Automation Accelerator Workshop for beginners ST-PCS7PAA
	TIA in the DE – Virtual Commissioning for Machines  DI-VIRTCOM	SiVArc – Options of Automatic Visualization Generation  TIA-SIVARC	SIMIT in Process Automation ST-PCS7SIM
	SIMIT in Discrete Automation Technology for Beginners DI-SIMITFA	Energy management with SIMATIC Energy Suite TIA-EMES	PROFINET and H-Systems in the Process Automation ST-PCS7PNH



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

 Courses offered in South Africa

5

Drive Technology **SINAMICS**

Low Voltage Converter

SINAMICS G120, SINAMICS S120

SINAMICS G130 / G150 / S150

SINAMICS DCM

SINAMICS Medium Voltage Converter

SIMOTICS Motors



Trainings for SINAMICS G120

	Planners, decision makers and sales personnel	Commissioning engineer, programmers	Service personnel, maintenance personnel
Basics	Introduction to Drives ✓ DR-DRV-FUN	Introduction to Drives ✓ DR-DRV-FUN	Introduction to Drives ✓ DR-DRV-FUN
Level 1		SINAMICS G120 – Parameterizing and Commissioning ✓ DR-G12-PM	SINAMICS G120 – Parameterizing and Commissioning ✓ DR-G12-PM
Level 2		SINAMICS G120 – Parameterizing Advanced ✓ DR-G12-PA	



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

Trainings for SINAMICS S120



	Planners, decision makers and sales personnel	Commissioning engineer, programmers	Service personnel, maintenance personnel
Basics	Introduction to Drives ✓ DR-DRV-FUN	Introduction to Drives ✓ DR-DRV-FUN	Introduction to Drives ✓ DR-DRV-FUN
Level 1	SINAMICS S120 – Planning and Engineering ✓ DR-S12-PL	SINAMICS S120 – Parameterizing and Commissioning in the TIA Portal ✓ DR-S12-PMT	SINAMICS S120 – Diagnostics and Service ✓ DR-S12-DG
	SIMOTICS Motion Control Motors – Planning and Engineering DR-MCM-PL	SINAMICS S120 – Parameterizing and Commissioning ✓ DR-S12-PM	
	SIMOGEAR Geared Motors – Planning and Engineering DR-SGM-PL	SINAMICS S120 – Upgrade to TIA Portal and Startdrive ✓ DR-S12-UP	
Level 2		SINAMICS S120 – Parameterizing Advanced DR-S12-PA	SINAMICS S120 – Diagnostics at Chassis- and Cabinet Units DR-S12-CHA
		SINAMICS S120 – Parameterizing Safety Integrated DR-S12-SAF	SINAMICS S120 – Diagnostics PROFINET and PROFIBUS DR-S12-NET
		SINAMICS S120 – Parameterizing and Optimization DR-S12-OPT	



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows



Courses offered in South Africa

Trainings for SINAMICS G150 / G130 / S150



	Service personnel, maintenance personnel	
Basics	Introduction to Drives ✓	DR-DRV-FUN
Level 1	SINAMICS G150 / G130 / S150 – Diagnostics and Service ✓	DR-G15-DG



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

Trainings for SINAMICS DCM



	Service personnel, maintenance personnel	
Basics	Introduction to Drives 	DR-DRV-FUN
Level 1	SINAMICS DCM – Diagnostics and Service 	DR-DCM-DG
Level 2	SINAMICS DCM – Parameterizing Advanced	DR-DCM-PA



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

 Courses offered in South Africa

Trainings for SINAMICS Medium Voltage Converter

	Service personnel, maintenance personnel	
Basics	Introduction to Drives 	DR-DRV-FUN
Level 1	SINAMICS Perfect Harmony GH150 – Diagnostics and Service	DR-GH15-DG
	SINAMICS Perfect Harmony GH180 – Diagnostics and Service 	DR-GH18-DG
	SINAMICS GL150 – Diagnostics and Service	DR-GL15-DG
	SINAMICS GM150 – Diagnostics and Service	DR-GM15-DG
	SINAMICS SL150 – Diagnostics and Service	DR-SL15-DG
	SINAMICS SM150 – Diagnostics and Service	DR-SM15-DG



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

 Courses offered in South Africa

6

Motion Control



Trainings for Motion Control SIMOTION

	Commissioning engineer, programmers	Service personnel, maintenance personnel
Level 1	<p>SIMOTION – Programming and Commissioning ✓ MC-SMO-PM</p>	<p>SIMOTION und SINAMICS S120 – Diagnostic and Service ✓ MC-SMO-DG</p>
Level 2	<p>SIMOTION – Programming Advanced ✓ MC-SMO-PA</p>	

[siemens.com/sitrain-simotion](https://www.siemens.com/sitrain-simotion)

Trainings for Motion Control SIMATIC

Commissioning engineer, programmers	
Level 1	SIMATIC programming 1 in the TIA Portal ✓ TIA-PRO1
	SIMATIC – Motion Control 1 in the TIA Portal ✓ TIA-MC1
Level 2	SIMATIC – Motion Control 2 in the TIA Portal ✓ TIA-MC2



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

✓ Courses offered in South Africa

7

Process Instrumentation Courses



Trainings for Process Instrumentation



Instrumentation Tech's & Maintenance	
Basics	Fundamentals of Process Instrumentation PI-FUN ✓
Level 1	Flow Instruments PI-FLOW ✓
	Level Instruments PI-LVL ✓
	Weighing Instruments PI-WNG ✓
	Pressure, Temperature and Positioners PI-PTP ✓
Level 2	

8

Process Control Systems **SIMATIC PCS 7** **SIMATIC PCS neo**

SIMATIC PCS 7, SIMATIC PCS neo

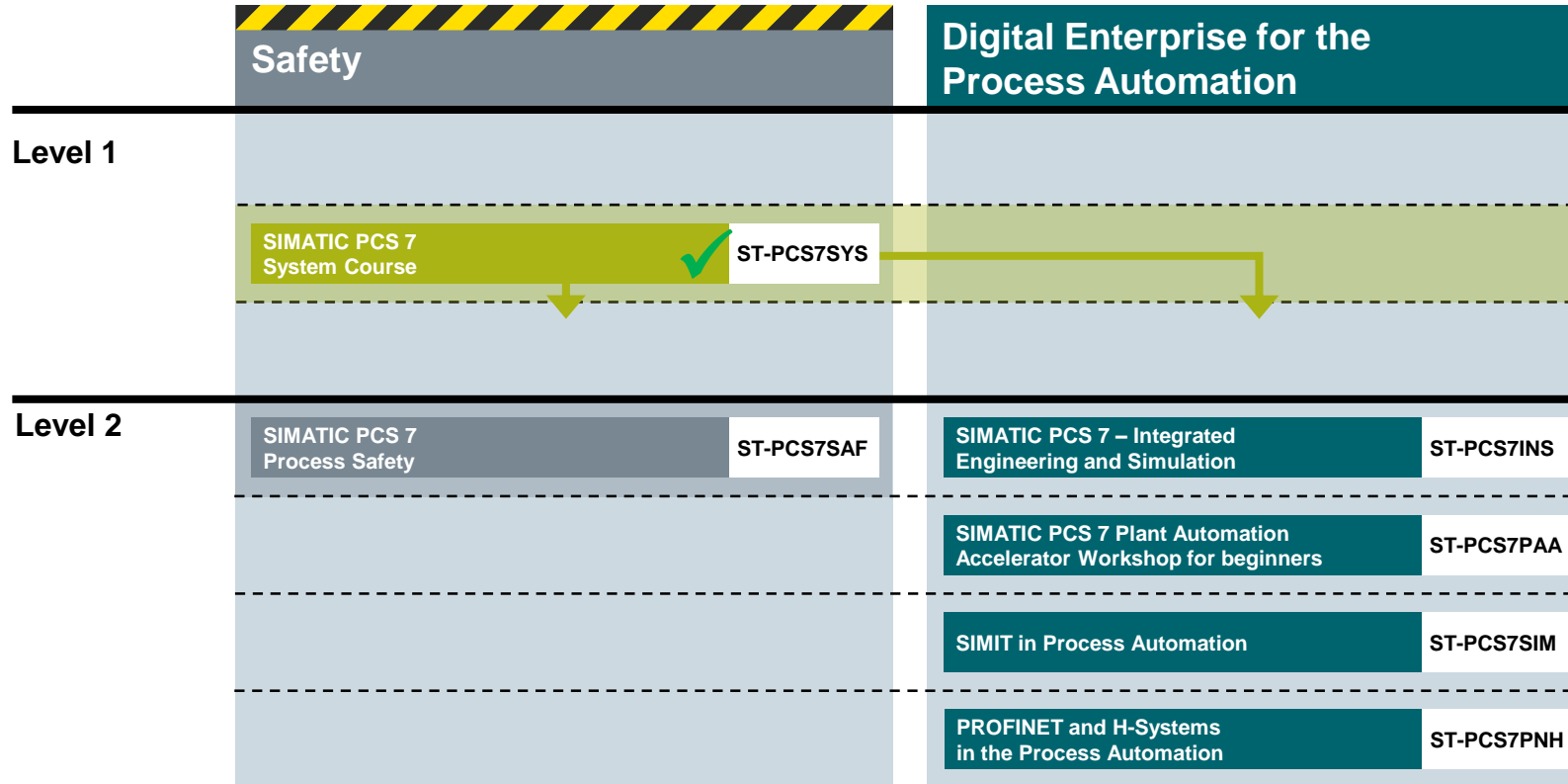


Trainings for SIMATIC PCS 7

	Planning and Engineering	Extensions and Technology	Service
Level 1			SIMATIC PCS 7 Service 1 ✓ ST-PCS7SR
	SIMATIC PCS 7 System Course ✓ ST-PCS7SYS		
	Siemens SIMATIC PCS 7 Basic Engineer ✓ CP-PCS7-1		
Level 2	SIMATIC PCS 7 AS-Engineering ✓ ST-PCS7ASE	PCS 7 Batch Course ST-PCS7BAT	
	SIMATIC PCS 7 OS-Engineering ✓ ST-PCS7OSE	Introduction of the technologic libraries in SIMATIC PCS 7 ST-PCS7LIB	
	Siemens Certified SIMATIC PCS 7 Engineer CP-PCS7-2		



Trainings for SIMATIC PCS 7



The contents of a course in a field with coloured background are recommended requirements for attending the courses connected by arrows.

Courses offered in South Africa

Trainings for SIMATIC PCS neo



	Future of the Process Automation	
Level 1	SIMATIC PCS neo System Training for Beginners	NEO-BASIC
Level 2	SIMATIC PCS neo System Training for PCS 7 Engineers	NEO-SYSUP

[siemens.com/sitrain-simaticpcsneo](https://www.siemens.com/sitrain-simaticpcsneo)