



Andhra Pradesh State Skill Development Corporation



Basics of PLC

**Automation License manager and
TIA Portal**



Automation License manager and TIA Portal



SIEMENS



SIEMEN

TIA Portal - Central Engineering

The **Totally Integrated Automation Portal** constitutes the working environment for an integrated engineering for:

- Programming automation systems

The screenshot shows the Siemens TIA Portal interface. On the left is a navigation bar with 'Start' and four categories: 'Devices & Networks', 'PLC Programming', 'Visualization', and 'Online & Diagnostics'. The main area is titled 'Totally Integrated Automation Portal' and contains three sections: 'STEP 7' (SIMATIC Controller), 'WinCC' (SIMATIC HMI), and 'Startdrive' (SINAMICS). Each section displays images of the respective hardware and software components. At the bottom, it says 'SITRAIN TIA-MICRO1 / Introduction TIA Portal', 'Page 2', and 'Siemens AG © 2011'.

TIA Portal: Scope of the Products

SIMATIC STEP 7

Programming languages

LAD, FBD, SCL, STL*,!
S7-GRAFH*

** only for S7-300/400/1500/WinAC

Machine-level operator control and monitoring and process visualization (SCADA)

Integration of drives

WinAC (incl. Failsafe)

S7-1500 (incl. Failsafe)



SCADA



TIA Portal - Central Engineering Framework

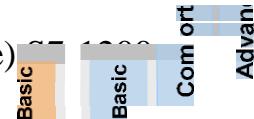


The **Totally Integrated Automation Portal** constitutes the working environment for an integrated engineering for:

- Programming automation systems
- Visualizing the process

S7-300

ET 200 CPU, (incl. Failsafe)



Communication

- PROFIBUS, PROFINET, AS-i, IO-Link, Network topology

Shared Functions

- System diagnostics, Import/Export to Excel, Undo

SITRAIN
TIA-MICRO1 / Introduction TIA Portal

TIA Portal: STEP 7 Licensing

	S7-1200 (LAD, FBD, SCL)	S7-300 / S7-400 / S7-1500 / WinAC (LAD, FBD, STL, SCL, S7-GRAFH, PLCSIM) Engineering System(ES)
STEP 7 Basic	Floating license	
STEP 7 Professional	Floating license	Upgrade license + generates Combo license STEP7V5.4(and higher) and —+ STEP7 V12 Professional parallel installation possible

