

# Smart Devices for Industry 4.0

## COURSE MATERIALS

### Overall Materials

The table below presents the materials necessary for completion of the course. See Table 2 on the next page for a breakdown of materials by course section and hardware bundle.

**Table 1. All Course Materials**

		Quantity	Note
Hardware	Intelitek IO-Link Proximity and Distance Lab Kit	1	
	Intelitek IO-Link Identification Lab Kit	1	
Software	LR Device or Moneo Configure		For basic device configuration
	Moneo		For remote monitoring
	Ethernet Configuration Tool (Hilscher)		
Required Hardware for the Additional Content Section	JMTS Double-Sided Panel		
	PLC Module	1	With Siemens S7-1200 or Allen-Bradley CompactLogix
	Power Supply Module	1	
	HMI Module	1	
	Electrical connectors		Banana plugs
	Ethernet cables		
	USB A to B cable	1	For configuring the CompactLogix's IP address
Required Software for the Additional Content Section	Siemens TIA Portal		If using Siemens system
	Studio 5000 Logix Designer and View Designer		If using Allen-Bradley system
Other	Personal Computer		
	Ethernet switch		

## Materials by Section/Bundle

This table breaks down the materials requirements by course section and hardware bundle:

**Table 2. Materials by Section/Bundle**

Course Section	Bundle	Main Bundle Components	Bundle Prerequisites
Activities 1-9	IO-Link Proximity and Distance Lab Kit	<ul style="list-style-type: none"> <li>• IO-Link master</li> <li>• Photoelectric sensor</li> <li>• Ultrasonic sensor</li> <li>• Inductive sensor</li> <li>• LR Device or Moneo Configure software</li> <li>• Test materials</li> </ul>	N/A
Activity 10	Cloud Monitoring Kit	<ul style="list-style-type: none"> <li>• Moneo software</li> </ul>	<ul style="list-style-type: none"> <li>• IO-Link Proximity and Distance Lab Kit</li> </ul>
Activities 11-12	IO-Link Identification Lab Kit	<ul style="list-style-type: none"> <li>• RFID read/write head</li> <li>• RFID tags</li> <li>• Stack light (Signal lamp)</li> </ul>	<ul style="list-style-type: none"> <li>• IO-Link Proximity and Distance Lab Kit</li> </ul>
Activity 13	IO-link PLC Kit	<ul style="list-style-type: none"> <li>• PLC module</li> <li>• Power module</li> <li>• HMI module</li> <li>• PLC control software</li> </ul>	<ul style="list-style-type: none"> <li>• IO-Link Proximity and Distance Lab Kit</li> <li>• IO-Link Identification Lab Kit</li> </ul>