

## SINUMERIK ONE Start-up and Service (NC-ONE-SIP)

---

### Kurzbeschreibung

---

This course will be renamed. For dates from 01.01.2025 please see [NC-ONE-COM](#). This course provides knowledge for project planning and commissioning of the SINUMERIK ONE as digital twin and real, as well as the knowledge to create and test different machine configurations.

### Ziele

---

This course provides knowledge for project planning and commissioning of the SINUMERIK ONE as digital twin and real, as well as the knowledge to create and test different machine configurations.

In practical exercises, you train commissioning and service on training equipment.

After the course ends, you will master the commissioning of the SINUMERIK ONE control system with a SINAMICS S120 drive. By knowing the various functions of the controller, you are able to optimally adapt the control to the machine and thus maximize the productivity of your machine.

NC-NCAN course participants are advised to attend this course only after a period of gaining practical experience of 2 to 4 months.

### Zielgruppe

---

Commissioning engineers  
Engineering personnel  
Service personnel

### Inhalte

---

Overview and components of SINUMERIK ONE  
Overview of SINUMERIK ONE functionality  
Data backup of the SSD/SD as well as the IPC, recommissioning, SW upgrade  
Commissioning of the digital twin with TIA portal and CreateMyVirtualMachine  
Adaptation of the control functions to the machine with machine data and interface signals  
Machine kinematics and collision monitoring  
Transfer of data to the real machine  
Drive configuration and axls assignment  
Basics of optimization  
PLC basic program and interface signals  
PLC user program and user alarms  
Commissioning of compensations and axls couplings  
Adaptation SINUMERIK Operate  
Introduction of synchronous actions  
Practical commissioning exercises on the PC (digital twin) as well as on a SINUMERIK training device

### Teilnahmevoraussetzung

---

Basic knowledge according to the course NC-NCAN.  
Knowledges in TIA Portal equivalent to the course Tia-Sysup.  
Relevant education, knowledge and experience to enable him or her to analyze risks and to avoid hazards which electricity could create.

### Hinweise

---

none

### Typ

---

Präsenztraining

### Dauer

---

10 Tage

### Sprache

---

de