This course is designed to provide participants with an overall understanding of CENTUM CS 3000 hardware, maintenance procedures, software installation, backup procedures and maintenance tools.

**Course Code** CKMN  
**Duration** 3 days  
**Max Class Size** 12

**Prerequisite** Participants should preferably be familiar with CENTUM CS 3000 operation and engineering.

**Who should attend this course?**  
For engineers and technicians who need to perform maintenance on CENTUM CS 3000 system.

**Day 1**  
- Control station hardware overview  
- Wiring of control bus  
- Functions of each unit  
- Maintenance of FCS  
- FCS status display window  
- Laboratory work: Hardware setting, modifying Vnet connection on-line, replacing FCS parts

**Day 2**  
- Requirements for installation  
- Hardware/software environment  
- Software list/installation, Windows OS setup procedure  
- Trouble-shooting for installation and Backup procedure

**Day 3**  
- Network operation/specifications  
- Time management function  
- Vnet TCP/IP communication function  
- HIS communication function trouble-shoot  
- VL-net utility commands  
- Trouble-shooting of overall windows  
- Windows TCP/IP trouble-shooting tools  
- Information to be gathered in case of trouble FCS communication function trouble-shooting