



CAN bus and integrated systems



This is a one day advanced level technical course covering the following main subjects:

- Overview of automotive bus systems (CAN, VAN, LIN, MOST and FlexRay)
- Technical features of the CAN bus
- CAN hardware and terminating resistors
- Testing CAN voltage levels and resistance
- ISO standards for CAN bus
- The CAN protocol explained
- Physical properties of CAN networks
- CAN baud rates
- The CAN gateway and diagnostic interface
- CAN network topology
- Function communication chains
- Fault tolerance of the CAN bus
- Diagnosis of CAN bus related system faults
- Programming
- Course assessment and feedback



During the course, delegates learn how to test the voltage and resistance levels of CAN bus on live vehicles. They will investigate the topology of CAN networks using oscilloscopes and diagnostic equipment in conjunction with workshop technical information.

By the end of the course, delegates will understand and be able to explain the functions of CAN bus networks. They will have gained the knowledge and skills required for diagnosing bus related faults and be able to put into practice what they have learnt when working on CAN enabled vehicle electronic systems.

Course assessment and accreditation

The course is accredited by IMI Awards Ltd for QAA level 3 certification. It is also accredited by IRTEC as a supplementary module at master technician level under the IRTEC technician licensing scheme.

Pre requisites

Those attending this course should have either successfully completed vehicle electrical principles and circuit testing techniques with AK Training or be accredited by IRTEC at advanced technician level. Alternatively, they will have at least three years motor industry experience with an in depth knowledge and background of vehicle electrical systems and diagnostics. Delegates should also be competent with use of an oscilloscope. PC skills would be beneficial at this level.

The course features the following diagnostic tools and technical information systems:

- Tech II diagnostic scan tool
- Carman Scan VG+ diagnostic scan tool
- PicoScope
- Autodata CD3



After successfully completing this course, the following courses may also be of interest:

- Petrol engine management diagnostics
- Common rail diesel fuel systems



Telephone: 01908 579309 **Mobile:** 07968 842274

E-mail: enquiries@akautomotivetraining.co.uk

www.akautomotivetraining.co.uk