

Course code: S1021

# ISO/SAE 21434

## Cybersecurity for Road Vehicle/Automotive

### INTRODUCTION

ISO/SAE 21434 is a standard that sets forth guidelines for cybersecurity risk management regarding concept, product development, production, operation, maintenance and decommissioning of electrical and electronic (E/E) systems in road vehicles, including their components and interfaces. The standard contains guidance on managing automotive cybersecurity. This course helps aspiring participants to understand how ISO/SAE 21434 helps to continually improve organisational management system using its best practice. Participants learn the details of each clause of the standard requirement to be able to apply within their organization.

### OBJECTIVE

- To describe the concept overview of the ISO/SAE 21434 requirement.
- To provide knowledge on management system and describe how Risk-Based Thinking is applied in ISO/SAE 21434.
- To explain the importance of customer-specific requirements in the management system.
- To build awareness and encourage continual improvement within organization.

### CONTENT

#### • Session 1: Introduction

Describe cybersecurity approach and how to use standard mapping to understand the requirement. Describe history and importance of cybersecurity.

#### • Session 2: Terms and Definitions

Describe relevant terms and definitions that normally use in the cybersecurity engineering and international standard.

#### • Session 3: Cybersecurity concept and awareness

Describe Cybersecurity concept which is implemented in conjunction with ISO/SAE 21434 management system. Explain cyberattack concept of prevention cybersecurity.

#### • Session 4: Interpretation of standard requirement

Describe the ISO/SAE 21434 requirement clause by clause that implemented in conjunction with management system. Explain concept and encourage awareness to improve effectiveness of the system.

#### • Session 5: Conclusion

Conclude requirement and explain step to implement the system.

\*Exercise workshop will also be delivered in all key sessions\*

### PREREQUISITES

Basic knowledge in management system is beneficial.

