

Connected Vehicle Professional™

CVP II – V2X, Standards



### **Connected Vehicle Professional™**

CVP II – V2X, Standards

Connected Vehicle Professional II – V2X, Standards (CVP II) focuses on connected vehicle standards from various organizations including SAE International and the Institute of Electrical and Electronics Engineers (IEEE), and provides an overview of major consortia and training in Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I), and Vehicle-to-Anything (V2X) technologies.

CVP II is the second in a series of three courses that comprise the Connected Vehicle Professional™ Credentialing Program approved by SAE International and the Connected Vehicle Trade Association (CVTA) and offered exclusively by Mobile Comply.

### **Domains of CVP II**

Domain 7.0 Standards

Domain 8.0 Major Consortia for Connected Vehicles

Domain 9.0 V2X

#### **Outcomes**

Participants will build upon the foundational knowledge obtained in CVP I to develop a broader understanding of the Connected Vehicle sector and Intelligent Transportation System (ITS) as a whole.

Participants will develop the working knowledge and skills necessary to support connected vehicle initiatives within their organization and professional community.

CVP II, In addition to preparing participates for the final Connected Vehicle course in the CVP series - CVP III, supports the attainment of official credentialing by SAE International and CVTA in connected vehicle technology via the Connected Vehicle Professional Credentialing Program.



### **Objectives**

Participants who successfully complete CVP II will be able to:

- Identify and differentiate elements and functions that pertain to connected vehicle.
- Describe connected vehicle application variations (V2V, V2I, etc.) and define their similarities and differences.
- Dive deep into elements of Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I), Vehicle-to-Anything (V2X), which involves pedestrians, bicyclists, motorcyclists, etc.
- Discuss deployment, integration, and support of applicable communication protocols.
- Discuss trends, advancements, and impacts for safer, cleaner, and more efficient transportation.
- Identify how advanced safety, information, and entertainment can be used in vehicle communications.
- Be familiar with specific standards that are required for safety systems and autonomous vehicles.
- Reference key international and federal standards and industry technologies affecting connected vehicle form and function design and development.

### **Intended Audience**

CVP II builds upon the foundational knowledge obtained in CVP I. CVP II is designed to provide essential education to those individuals who are new to the Connected Vehicle sector, while adding in-depth exposure to connected vehicle technologies to benefit seasoned industry professionals.

Anyone interested in enhancing their career in this growing sector will benefit from completion of CVP II, including:

IT Professionals | Software Engineers | Automotive Engineers |
Information and Vehicle Technicians | Insurance and Telecommunications Professionals |
Transportation Providers | Business Leaders



### **Pre-Requisites**

No pre-requisites exist for CVP II. However, it is recommended that participants successfully complete CVP I before enrolling in CVP II.

### **Learning Approach**

CVP II uses a blended learning approach which combines classroom and online training techniques to achieve knowledge and skill-elevated participant outcomes.

Participants attend the instructor-led portion of the course for four and a half hours per day, over a total five days. This classroom learning is supplemented by online reading materials, knowledge checks, and practice assessments which help to prepare participants for the final SAE International/CVTA-approved assessment.

CVP II provides a total of 30 hours of classroom and online training. Course materials will be provided in hard or soft copy format.

### **Certificate of Competency**

Participants will receive a Certificate of Competency from SAE International and CVTA upon completion of all course requirements, as detailed below:

- Attendance of all classroom training
- Completion and submission of online learning requirements
- Passing of a SAE International/CVTA-vetted assessment

### **Connected Vehicle Professional™ Credentialing Program**

Completion of CVP II is the second step toward obtaining Connected Vehicle Professional credentials. Please see the next page for additional information about this one-of-a-kind program.



## **Connected Vehicle Professional™ Credentialing Program**

Mobile Comply, in collaboration with SAE International and the Connected Vehicle Trade Association (CVTA), has launched the first-ever Connected Vehicle Professional™ (CVP) Credentialing Program.

The series of three in-depth courses provides professional an understanding of Vehicle-to-Vehicle, Vehicle-to-Infrastructure, and Vehicle-to-X connectivity necessary to succeed in the rapidly advancing fields of Intelligent Transportation System and Connected Vehicle.

#### CONNECTED VEHICLE PROFESSIONAL™ CREDENTIALING PROGRAM

# CVP I – Function, Protocols, and Architecture

Focus on connected vehicle application concepts and vision, performance functions, communication protocols, hardware architecture components and software architecture methodologies within the connected vehicle ecosystems.

Learners are given in-depth, wideranging course materials, suggested reading resources, and are tested on various key areas of instruction.



Total learning content equals 30 hours of training.

#### CVP II – Standards, Organizations, Programs, V2X

Emphasis on connected vehicle standards from various organizations such as SAE International and the Institute of Electrical and Electronics Engineers (IEEE), as well as training in Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I) and Vehicle-to-X (V2X) technologies.

Learners are given in-depth, wideranging course materials, suggested reading resources, and are tested on various key areas of instruction.



Total learning content equals 30 hours of training.

# CVP III - Data, Markets, Policy and Regulations

Focus on data generated by connected vehicle and data security with an introduction to major consortia and agencies supporting the development, implementation and regulation of connected cars and other connected vehicle ecosystems.

Learners are provided overviews on policies and regulations being introduced into this space, and presented with in-depth, wide-ranging course materials, suggested reading resources, and are tested on various key areas of instruction.



Total learning content equals 40 hours of training.

Individuals who successfully complete the end-of-course learning assessments are awarded the SAE International/CVTA Certificate of Competency.

#### **Benefits of a CVP Credential**

The CVP Credentialing Program helps individuals build a valuable skill set and increases professional credibility in the Intelligent Transportation System (ITS) community.

CVP is a vendor-neutral credentialing program that signifies that an individual has the requisite foundational understanding of connected vehicle and intelligent transportation best practices, in-vehicle safety, infrastructure, communication protocols, security and more.