# Course Details

## Course Title: Master CAN development from beginner to expert

## Course Link: <https://www.udemy.com/course/canpart2-master-candevelopment-beginner-expert/?referralCode=16815E1D156712C414CE>

## Course Discount Coupon Details : In the blogpost whose link given below has discount coupon details

Blogpost Link: <https://vichara-manthana.blogspot.com/2020/12/automotive-udemy-courses-bestsellers.html>

This blog post contains Course links and discount coupons for all my udemy courses.

# Syllabus of CAN 2: Master CAN Development Course

## Section 1: Introduction

### Lecture 1: Course Instructor Introduction

### Lecture 2: Course Pre-Requisites

### Lecture 3: Course Overview

## Section 2: Can Node Basics

### Lecture 1: Elements of a CAN Node – 14m 58s

### Lecture 2: CAN Transceiver – 31m 58s

### Lecture 3: CAN Controller – 1h 3m 10s

### Lecture 4: Basic CAN vs Full CAN – 17m 23s

### Lecture 5: CAN Acceptance Filtering – 14m 1s

### Lecture 6: CAN Processing – Interrupt Vs Polling – 38m 12s

### Lecture 7: CAN Mailbox Structure

### Lecture 8: Autosar Comstack structure and overview – 9m 21s

## Section 3: CAN Bit timing parameters

### Lecture 1: Recap of CAN Bit segments and Baud rate

### Lecture 2: Time Quanta [TQ]

### Lecture 3: Bit Sampling and Strategies

### Lecture 4: Clock frequency and BRP [Baud Rate Prescalar]

### Lecture 5: Can driver configuration for baud rate

### Lecture 6: Equating baud rate for nodes with different clock frequencies

## Section 4: Synchronization in CAN protocol.

### Lecture 1: Need for Synchronization in CAN

### Lecture 2: Hard Synchronization in CAN

### Lecture 3: Re-Synchronization in CAN

### Lecture 4: Bit stuffing and maximum tolerance for Re-synchronization

### Lecture 5: Synchronization Jump Width [SJW] and its configuration in Can Driver

### Lecture 6: Re-Synchronization Usecase – Positive Phase Error

### Lecture 7: Re-Synchronization Usecase – Negative Phase Error

## Section 5: CAN DBC and Comstack in Davinci Configurator Pro

### Lecture 1: CAN Database

### Lecture 2: Various Can Databases in Automotive Industry

### Lecture 3: CAN Database components and Our Setup

### Lecture 4: CAN DBC structure in text editor

### Lecture 5: CAN DBC structure in CANDB++ Tool

### Lecture 6: Editing CAN DBC

### Lecture 7: Signal Properties in a DBC File

### Lecture 8: Message Properties in a DBC File

### Lecture 9: DBC Attributes

### Lecture 10: Comstack configuration in Davinci Configurator Pro using DBC