

**oPIP Overview:**

*Electronic components in the automotive systems is growing rapidly. The embedded controllers are one of the basic components of any automotive control system and with the help of sensors and actuators makes possible the multitude of vehicle control applications now available.*

*Embedded electronic control systems are catering to various applications in a vehicle such as powertrain, braking and suspension, engine efficiency, comfort, fuel economy, reliability and overall system integration, safety and environment control, driver information, entertainment and host of other applications.*

*The Primary aim of this module is to bring together the theory and practices for sensors & actuators, be it for engine monitoring & performance, safety, security or comfort. Demo on sensors will also be one of the possible exposure.*

**Learning Outcome:**

- Understand Transducer fundamentals
- Familiarize Sensors characterization
- To understand Sensor and Actuator interaction
- Understand System Calibration
- Understand Automotive applications of Sensors and Actuators

Candidates with more than 50 % marks in the assessment test are eligible for the certificate.

Note : ARAI reserves the right to change the dates, contents, schedule, etc. for the programme without any notice. No recordings of the training session will be provided . Hence, request to attend all the sessions.

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**Registration Fees :**

**04 days**  
**09 hours**

**Rs.1800 + 18% GST =**  
**Rs.2124**  
**(per participant)**

**Mode of Payment: Online Transaction**  
**ARAI Pune Account No: 0447020000280**  
**IFSC/RTGS/NEFT Code: BARB0KARVER (0=Zero)**

Participants whose organization is in SEZ, kindly confirm for GST applicability, before making the payment.



**Schedule from 13<sup>th</sup> to 15<sup>th</sup> October 2020 via Online Platform like ZOOM**

Sr.	Session	Date	Day	Time
1	Inauguration	13-Oct-20	Tuesday	09:15 -09:30
2	Introduction to Automotive Electronics	13-Oct-20	Tuesday	09:30 -11:00
3	Sensors & Transducers : Basics & Characterization	13-Oct-20	Tuesday	11:00- 12:30
4	Actuators: Basics & Characterization	14-Oct-20	Wednesday	09:30- 11:00
5	System Integration (Open & Closed Loop)	14-Oct-20	Wednesday	11:00- 13:00
6	Specialized Sensors (Powertrain, Chassis & Body)	15-Oct-20	Thursday	09:30- 11:30
7	Calibration of Sensors	15-Oct-20	Thursday	11:30-12:30
8	Quiz & Feedback	16-Oct-20	Friday	10:00-11:00
9	Declaration of Toppers & Certificate Distribution	16-Oct-20	Friday	15:00-16:00