



# NEW HORIZON COLLEGE OF ENGINEERING

New Horizon Knowledge Park, Ring Road, Marathalli  
Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC  
Accredited by NAAC with 'A' Grade, Accredited by NBA

## DEPARTMENT OF AUTOMOBILE ENGINEERING

### BOARD OF STUDIES MEETING (Online Meeting)

**DATE** : 26-06-2020


**VENUE** : Department of Automobile Engineering

**TIME** : 10:00 AM onwards

Chairman - BOS (AU Board)  
Department of Automobile Engineering  
New Horizon College of Engineering (Autonomous)  
Bengaluru - 560 103

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Chairman - BOS (AU Board)  
Department of Automobile Engineering  
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Bengaluru - 560 103

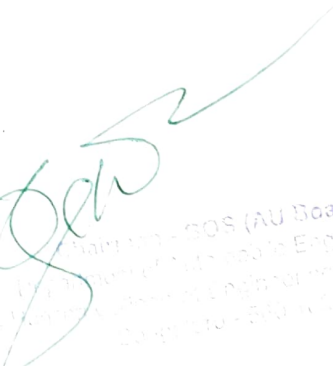
# AGENDA FOR THE MEETING

## **Agenda 1**

Deliberation of Scheme and Syllabus of V and VI semester of Automobile Engineering(175 credit scheme)

## **Agenda 2**

Deliberation of Scheme of VII and VIII semester of Automobile Engineering(175 credit scheme)

  
Chairman - BOS (AU Board)  
Department of Automobile Engineering  
University of Automobile Engineering  
Bangalore - 560 012



# LIST OF MEMBERS

## DEPARTMENT OF AUTOMOBILE ENGINEERING

### BOS MEETING- LIST OF MEMBERS

Sl. No	Category	Nomination of the committee	Name of the person
1	HOD (Chairperson)	Chairperson	<b>Dr Shridhar Kurse</b>
2	Faculty Members	Member	
		1	Mr.JayasheelKumar K A-Sr.Asst.Prof
		3	Ms Smitha B S- Sr.Asst. Prof
		4	Mr. Karthik A V - Asst. Prof
		5	Mr. Mohan Kumar G R- Sr.Asst. Prof
3	Subject Matter Expert from outside the College	Member	<b>Dr.Nandakumar</b> Associate Professor, Automobile Engineering Dept., DSCE,B'Lore Email: nandakumarmb@gmail.com Mob: 9900826039
4	VTU Nominee	Member	<b>Dr.Y.M.Shashidhara</b> Professor & HOD, Dept of Automobile Engineering MCE,Hassan, Email:shashi.yms@gmail.com Mob: 9341967755
5	Industry Expert	Member	<b>Mr.Ashoka Kumar V A</b> – Director, RV- Automotive Electronics Design Center, B'Lore Email: ashoka@rv-ae.com Mob: 8237010047
6	Meritorious Alumni	Member	<b>Mr. Sagar Suri (VTU 5<sup>th</sup> Rank holder)</b> Engineer, Tescom Engg., Services Pvt.Ltd, Bangalore Email: surisagar27@gmail.com Mob:,9591058705
7	Co-opted members	Member	
		1	Dr.Ganesh Prasad Dean & HOD-ME,NHCE
		2	Dr.Sujin Jose Associate Prof. NHCE
		3	Mr. Sunil Prashanth Kumar- Asst. Prof <b>Department Placement Coordinator</b>
		4	Dr.Nisha – Professor, EC Dept., NHCE, B'Lore
5	Mr.Vinod Kumar – Asst. Prof., EEE Dept., NHCE, B'Lore		

**LIST OF MEMBERS PRESENT (ONLINE MEETING)**

Sl. No.	Name
1	Dr Shridhar Kurse 
2	Dr.Y.M.Shashidhara 
3	Dr.Nandakumar
4	Mr.Ashoka Kumar V A
5	Mr. Sagar Suri
7	Dr.Sujin Jose
8	Mr.JayasheelKumar K A
9	Mr Karthik A V
10	Ms Smitha B S
11	Mr. Sunil Prashanth Kumar
13	Mr. Mohan Kumar G R-
14	Dr.Ganesh Prasad
15	Dr.Sujin Jose
16	Dr.Nisha
17	Mr.Vinod Kumar
18	Mr.Gangadhar Immadi



# WELCOME ADDRESS BY THE CHAIRMAN OF BOS AND INTRODUCTION OF MEMBERS

Minutes

(Online Platform: Zoom )

The BOS meeting of the Department of Automobile Engineering started at 10.00 AM at the department with the welcome address by the Chairman-BOS **Dr Shridhar Kurse**. He briefed about the dept. & introduced the BOS members and faculty of the department.

1. Dr.Nanda Kumar - Associate Professor, Automobile Engineering Dept., DSCE,B'Lore
2. Dr. Dr.Y.M.Shashidhara - Professor & HOD , Dept. of Automobile Engg., MCE, Hassan (VTU Nominee)
3. Mr.Ashoka Kumar V A - Director, RV-Automotive Electronics Design Center, B'Lore
4. Mr.Sagar Suri - Alumni member

Chairman-BOS briefed about the agenda of the meeting.

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Chairman introduced all the BOS members,

Prof. Shashidhar (MCE, Hassan), Mr. Ashokumar (Industry Expert)

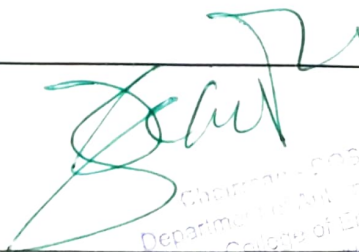
Prof. Nandakumar (Domain Expert), Prof. Wisla (from E & C Dept).

Prof. Brangadha Inmadi (Comp. Sc. Expert).

Prof. Vinod (Electrical Engg Dept).

BOS consists of experts from all the domains, since the curriculum should be interdisciplinary in nature.

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Chairman-BOS (AU Board)  
Department of Automobile Engineering  
Hon'ble College of Engineering (Autonomous)  
Bangalore - 560 103

## AGENDA -1

### TITLE

**Deliberation of Scheme and Syllabus of V & VI semester**

*The discussion on the agenda began at 10.30 AM. Presentation on the Scheme of V & VI sem Automobile Engineering was given by **Dr. Shridhar Kurse***

*The agenda was unanimously approved by the members with few suggestions and corrections.*

*Focus was more on 175 credit scheme, especially scheme of 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, & 8<sup>th</sup> Semesters. The syllabus of 5<sup>th</sup> & 6<sup>th</sup> sem was discussed at length.*

## AGENDA -2

### TITLE

**Deliberation of Scheme of VII and VIII semester Automobile Engineering**

*The discussion on the agenda began at 11:30 AM. Presentation on the Scheme and Solution of VII and VIII sem Automobile Engineering was given by respective Course Coordinators.*

*The agenda was unanimously approved by the members with few suggestions and corrections.*

*Scheme of 7<sup>th</sup> & 8<sup>th</sup> sem was also discussed.*

# RECOMMENDATIONS OF THE BOARD

Recommendations/Suggestions by BOS Members are given below:

Sl. No.	Subject	comments
<b>V Semester</b>		
1	Theory of Machines	<ul style="list-style-type: none"> <li>• Velocity and Acceleration should be included in the first module before discussing gears and cams</li> <li>• Governors (types of governors) to be included</li> <li>• Governors and gyroscope can be made a single module</li> <li>• Flywheel can be shifted to Automotive Components Design.</li> <li>• Syllabus is quite lengthy</li> </ul>
2	Automotive Engines and Components Design	<ul style="list-style-type: none"> <li>• Design of valves and clutches can be combined</li> <li>• Design of Crankshaft and flywheel can be made a module</li> </ul>
3	Automotive Engines and Auxiliary Systems	<ul style="list-style-type: none"> <li>• Exhaust After treatment methods should be discussed in module 4</li> </ul>
4	Auto Electricals	<ul style="list-style-type: none"> <li>• Module 1- Battery, charging and starting system to be combined</li> <li>• Module 2- only lighting and accessories</li> <li>• Module 3- can be shifted to Auxiliary system to avoid repetition</li> <li>• Module 4- pitch, roll and yaw sensor to be included</li> <li>• .Module 4- Name as Sensors and Actuators and discuss related topics</li> <li>• Module 3 and module 4 (first part) can be combined</li> </ul>

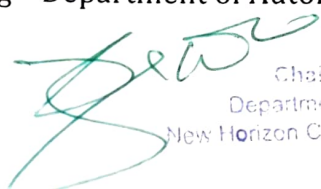




		<ul style="list-style-type: none"> <li>Chassis Electricals topic can be discussed in Automotive chassis subject</li> </ul>
5	Python	<ul style="list-style-type: none"> <li>Case Studies to be added</li> <li>Automotive related assignments to be designed</li> </ul>
6	Automobile Engineering Lab I	<ul style="list-style-type: none"> <li>Name of the lab is correct</li> <li>Part A- Try to add pitch, roll and yaw sensors, temperature sensor and load sensors</li> </ul>
7	Automotive Electrical and Electronics Lab	<ul style="list-style-type: none"> <li>Try to add Lithium Ion battery testing</li> <li>Raspberry pi programming exercise can be added</li> <li>EEProm programming can be removed</li> </ul>
8	Vehicle Transport Management	<ul style="list-style-type: none"> <li>Shared mobility concepts can be included</li> </ul>
9	Management and Entrepreneurship	<ul style="list-style-type: none"> <li>Should be a core subject as per VTU guidelines</li> </ul>

### VI Semester

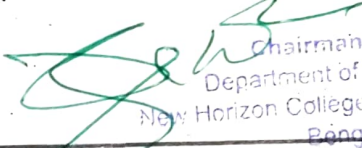
1	Design of Machine Elements	<ul style="list-style-type: none"> <li>Module 1 to be included in V semester, Automotive Engine Components Design.</li> </ul>
2	Finite Element Analysis	<ul style="list-style-type: none"> <li>Syllabus is lengthy</li> <li>To be made, 40% theory and 60% numerical based</li> </ul>
3	Automotive Chassis	<ul style="list-style-type: none"> <li>Module 2 should be named as brakes</li> <li>ABS, EBD concepts can be discussed</li> <li>Chassis Control system can be included</li> </ul>
4	Finite Element Analysis Lab	<ul style="list-style-type: none"> <li>Non linear Analysis exercises can be included</li> </ul>
5	Electric and Hybrid Vehicle	<ul style="list-style-type: none"> <li>Should be made a core subject</li> <li>Battery Management system and charging stations topics to be included</li> <li>Design of Chassis for EV module to be included</li> <li>Battery, motor sizing calculations can be included</li> </ul>



		<ul style="list-style-type: none"> <li>• Introduction to EV terms, comparison between engine and motor power train to be discussed in module 1</li> </ul>
6	Automotive Emission and Control	<ul style="list-style-type: none"> <li>• Should be made a core subject</li> <li>• Effect of air pollution topic can be removed</li> </ul>
7	Hydraulic and Off road vehicles	<ul style="list-style-type: none"> <li>• Subject name to be changed, can be renamed as Mining and construction vehicle or Earth moving equipments</li> <li>• In module1 , electro hydraulics to be included</li> </ul>
8	Alternate Fuels and Energy Systems	<ul style="list-style-type: none"> <li>• Module 5 to be removed</li> <li>• EMS for dual fuel engines to be included</li> </ul>

#### VOTE OF THANKS BY THE CHAIRMAN-BOS

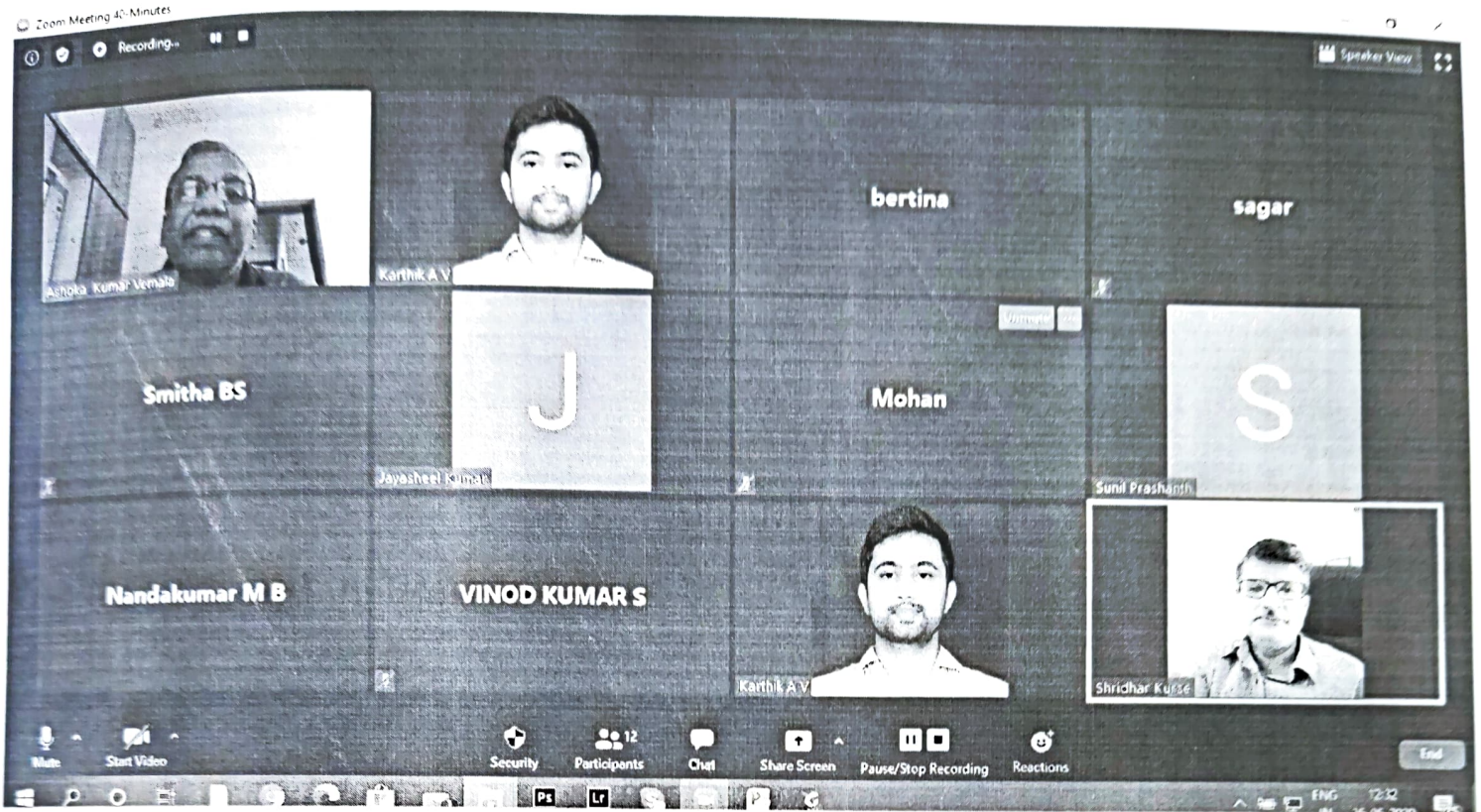
Finally, chairman thanked all the BOS members for spending their valuable time in framing curriculum for auto dept.

  
 Chairman - BOS (AU Board)  
 Department of Automobile Engineering  
 New Horizon College of Engineering (Autonomous)  
 Bengaluru - 560 103



# APPENDIX

## Sample Photos of Online Meeting



### Professional Elective-III

#### AUTOMOTIVE EMISSIONS AND CONTROL

Course Code: 19AUT651

L: T: P: 3:0:0

Exam Hours: 3

Credits:03

CIE Marks: 50

SEE Marks: 50

Course Outcomes: At the end of the Course, the student will be able to:













CO1	Understand various emission norms, standards
CO2	Understand the formation of various pollutants like HC, CO, CO <sub>2</sub> , NO <sub>x</sub> .
CO3	Analyze control techniques, design changes for minimizing pollution.
CO4	Understand the influence of fuel properties on emissions and various post combustion treatments in automobile.
CO5	Identify the effect of air pollution on humans, animals and plants
CO6	Evaluate the sampling methods and test procedures.

Mapping of Course Outcomes to Program Outcomes:



*[Signature]*  
 Chairman - BOS (AU Board)  
 Department of Automobile Engineering  
 New Horizon College of Engineering (Autonomous)  
 Bengaluru - 560 103

Close **Participants (14)**

-  Karthik A V (host)
-  Jayasheel Kumar
-  Nandakumar M B
-  shashidhara
-  Shridhar Kurse
-  Ashoka Kumar Vemala
-  bertina
-  Mohan
-  sagar
-  Smitha BS
-  SUJIN JOSE ARUL
-  Sunil Prashanth

Invite



**Join our Cloud HD Video Meeting**  
 Zoom is the leader in modern enterprise video communications, w...  
[us04web.zoom.us](https://us04web.zoom.us)

Karthik A V is inviting you to a scheduled Zoom meeting.

**Topic: AUTOMOBILE DEPT., BOS MEETING-26/06/2020**  
**Time: Jun 26, 2020 10:00 AM India**

**Join Zoom Meeting**  
<https://us04web.zoom.us/j/9380123665?pwd=NW50M0xYcFNodHk0WFVibWkzRzVjQT09>

**Meeting ID: 938 012 3665**  
**Password: 018745**

09:19

*(Handwritten signature)*  
 Chairman - BOS (AU) Board  
 Department of Automobile Engineering  
 Anna University, Chennai