

CIRCULAR

Ref No:22-23/Even/VAC/01 Date:02.05.2023

The Department of Mechanical Engineering is conducting a Value-Added Course on "AUTOMOTIVE DIAGNOSTICS SYSTEM" from 15.05.2023 to 25.05.2023. All the interested students requested to register and attend the course.

The invitation is herewith attached.



HOD

Circulated to:	1. All the faculty members
	2. All the students
Copy to	1. Principal Office
	2. Department Notice Board









Value Added Course ENROLLED STUDENTS LIST

SI. No.	Register Number	Name of the Student	Year
1	3441873502	ANEES	IV
2	3441910501	ABHAY VERMA	IV
3	3441910502	ABHINANDH LAL	IV
4	3441910503	AJAY KUMAR	IV
5	3441910505	AMIT KUMAR	IV
6	3441910506	ASHISH KUMAR	IV
7	3441910509	ASTLIN SAM S	IV
8	3441910511	BRAJESH KUMAR	IV
9	3441910512	BRAJESH KUMAR	IV
10	3441910513	DEVARJUN V S	IV
11	3441910515	GOBIND MAURYA	IV
12	3441910517	IRSHAD ANSARI	IV
13	3441910520	MANGAMPATLA PAVAN	IV
14	3441910521	MANISH KUMAR	IV
15	3441910522	MD ABDULLAH KHAN	IV
16	3441910523	MD JAFAR ALAM	IV
17	3441910524	MOHAMED RASHID A	IV
18	3441910525	NADEEM ALAM	IV
19	3441910526	NAUSHAD ALAM	IV
20	3441910527	NIRANJAN KUMAR	IV
21	3441910529	RAHUL KUMAR	IV
22	3441910530	RAHUL KUMAR	IV
23	3441910532	RAKESH KUMAR	IV
24	3441910533	RANJIT TIWARY	IV
25	3441910536	SANJEEV KUMAR	IV
26	3441910539	SHAIK RIYAZ	IV
27	3441910543	VIKASH KUMAR SINGH	IV
28	3442020502	NITHISH S	IV
29	3442020503	RAKESH M	IV
30	3442020504	UDHAYAKUMAR J	IV
31	3442020505	YOGESHWARAN D	IV
32	3442054501	DEEPAK P V	IV
33	3442155501	AMAL S	IV
34	3442155502	DIAZ K BIJU	IV
35	3442155503	JITHIN Y OOMMEN	IV
36	3442156501	AMAL SANTHOSH	IV
37	3442156502	ANANDHU K RAGHUNATHAN	IV
38	3442156503	ARJUN GIRISH	IV
39	3442156504	AROMAL K S	IV
40	3442156505	JERIN MATHEW THOMAS	IV
41	3442156506	JISHNU RAJU	IV
42	3442156507	MELWIN P EBIN	IV
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44	3442156509	RIBO JOHN ABRAHAM	IV

45	3442257501	ADAM JOSEPH CHIYEZHAN	IV
46	3442257502	ADARSH R S	IV
47	3442257503	AKHIL CHANDRAN	IV
48	3442257504	AKSHAY PRADEEP	IV
49	3442257505	AMALJITH BIJU	IV
50	3442257506	ASHISH SEBASTIAN	IV
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55	3442257511	HISHAM KARIM	IV
56	3442257512	JACOB ALEXANDER PHILIP	IV
57	3442257513	MOHAMMAD NAMEER	IV
58	3442257514	MUHAMMAD SALIH K	IV
59	3442257515	MUHAMMED P	IV
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61	3442257517	PRATHYUSH PREMARAJAN	IV
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64	3442257520	SHAIQUE FAREEDH BABU	IV
65	3442257521	SIDHARTH K R	IV
66	3442257522	SURYAPRAKASH T	IV
67	3442257523	VENKATESHAN G	IV
68	3442257524	YADHUKRISHNA SURESH	IV

Coordinator HOD Vice Principal Academics Principal



Cordially invites you all for the

Value Added Course

On

AUTOMOTIVE DIAGNOSTICS SYSTEM DATE: 15.05.2023 to 25.05.2023

Resource Persons

Dr.M.Saravana Kumar AP (Gr-II)/Mech, AVIT

Mr.B.Samuvel Michael AP (Gr-II)/Mech, AVIT

Mr.A.Imthiyas AP/Mech, AVIT

In the Presence of

Dr.G.Selvakumar

Principal

Dr. M.Prabhahar,

Professor & HOD / MECH, AVIT

Coordinator

Dr.S.Sangeetha

Professor/ MECH, AVIT



DEPARTMENT OF MECHANICAL ENGINEERING BROCHURE







Cordially invites you all for the

Value Added Course on

Automotive Diagnostics System

iii 15.05.2023 to 25.05.2023

& Bosch Lab

Resource Persons

Dr. M. Saravana Kumar, AP (G-II), Mech., AVIT Mr. Samuvel Michael, AP (G-II), Mech., AVIT Mr. Imthiyas, AP (G-II), Mech., AVIT

In the presence of

Dr. G. Selvakumar, Principal, AVIT Dr. M. Prabhahar, Prof. & HoD, Mech., AVIT

Event Coordinator

Dr. S. Sangeetha, Prof., Mech., AVIT

Organized by: Department of Mechanical Engineering, AVIT









Ref: 22-23/Even/VAC/01 Date: 27.05.2023

From

Dr.S.Sangeetha Professor, Mechanical Engineering, Aarupadai Veedu Institute of Technology, Paiyanoor-603 104

То

The Principal,
Aarupadai Veedu Institute of Technology
Paiyanoor-603 104

Respected Sir,

Sub: Submission of Mechanical Engineering Department Value added course-Report- Reg.

The Department of Mechanical Engineering had conducted a Value-Added Course on "AUTOMOTIVE DIAGNOSTICS SYSTEM" from 15.05.2023 to 25.05.2023. The report of the programme is herewith attached for your kind perusal.

Thanking you,

With regards,

Event Coordinator

HOD









Value Added Course on "AUTOMOTIVE DIAGNOSTICS SYSTEM"

(From 15.05.2023 to 25.05.2023- 30 Hours)

The Department of Mechanical Engineering organised a Value Added Course on "AUTOMOTIVE DIAGNOSTICS SYSTEM" from 15.05.2023 to 25.05.2023- 30 Hours. The course was inaugurated by **Dr. M.Prabhahar, HOD / Mech. and coordinated by Dr.S.Sangeetha Professor/Mech.**

Totally 13 sessions were organised and around 68 students of Final year Mechanical Engineering attended the session.

SESSION 1:

INTRODUCTION TO AUTOMOTIVE ELECTRICAL SYSTEM (03.30 PM to 05.30PM)

The first session on Introduction to Automotive Electrical System was conducted by Mr.A.Imthiyas.

- Introduction to Automotive electrical systems
- Batteries
- Battery design



SESSION 2:

INTRODUCTION TO AUTOMOTIVE ELECTRICAL SYSTEM (03.30 PM to 05.30PM)

The second session on Operation and testing of batteries was conducted by Dr.M.Saravana Kumar. He explored the students with the topics given below:

- Method of operation,
- Lead acid battery construction
- Battery ratings and testing



SESSION 3:

INTRODUCTION TO AUTOMOTIVE ELECTRICAL SYSTEM (03.30 PM to 05.30PM)

The third session on Starting system and charging system was conducted by Mr.A.Imthiyas.

- Maintenance free batteries
- Introduction to Starting system and Charging system

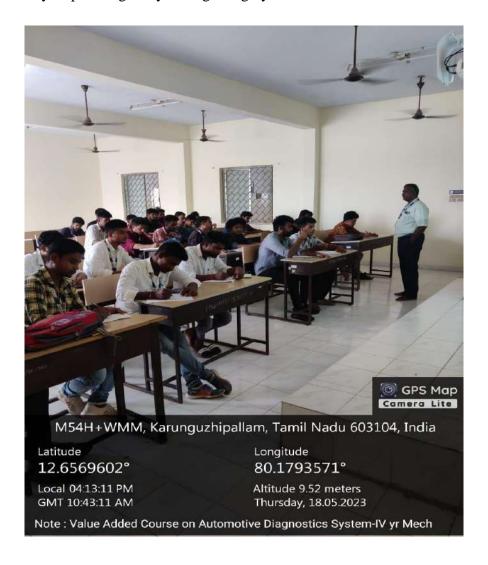


SESSION 4:

TESTING OF AUTOMOTIVE BATTERIES (03.30 PM to 05.30PM)

The fourth session on Introduction to Automotive batteries was conducted by Mr.B.Samuvel Michael.

- Overview of Battery charging
- Electrolyte specific gravity testing using hydrometer



SESSION 5: TESTING OF AUTOMOTIVE BATTERIES (03.30 PM to 05.30PM)

The fifth session on Battery charging system was conducted by Dr.M.Saravana Kumar

- Open voltage test
- High discharge test
- Bosch Battery charging system



SESSION 6: TESTING OF AUTOMOTIVE BATTERIES (9 AM to 11 AM)

The sixth session on Diagnosing battery was conducted by Dr.M.Saravana Kumar

• Diagnosing 12 V and 24 V batteries using Bosch battery load tester



SESSION 7:

AUTOMOTIVE AIR CONDITIONING (12 PM to 04.00 PM)

The seventh session on Introduction to Automotive Air Conditioning was conducted by Mr.A.Imthiyas

- Introduction to Automotive Air Conditioning
- Integrated standard flushing procedure
- Refrigerant extraction and recycling



SESSION 8:

AUTOMOTIVE AIR CONDITIONING (9 AM to 11 AM)

The eighth session on Oil drainage and leakage of oil was conducted by Dr.M.Saravana Kumar

- Used oil drainage
- Evacuation and leak testing
- Fresh oil and UV dye injection
- Precise refrigerant feeding
- Top-up function using Bosch ACS 651

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SESSION 9:

AUTO ELECTRICAL TEST BENCH 3 PHASE (12 PM to 04.00 PM)

The ninth session on Different circuit tests was conducted by Dr.M.Saravana Kumar

- Starter free spin testing directly from battery
- Alternator loading through four rotary switches
- Starter short-circuit test
- Alternator short-circuit test



SESSION 10:

AUTO ELECTRICAL TEST BENCH 3 PHASE (03.30 PM to 05.30PM)

The tenth session on Testing was conducted by Dr.M.Saravana Kumar

- Battery Charging during alternator testing process.
- Testing wide range of electrical components like horns, bulbs, relays child parts of starters and alternators



SESSION 11:

ON BOARD DIAGNOSTICS SYSTEM (03.30 PM to 05.30PM)

The tenth session on Introduction to OBD was conducted by Dr.M.Saravana Kumar

- Introduction to sensors and actuators used in Petrol and diesel engines
- Bosch Diagnostic control unit



SESSION 12:

ON BOARD DIAGNOSTICS SYSTEM (03.30 PM to 05.30PM)

The tenth session on Testing was conducted by Mr.B.Samuvel michael

- Procedure for connecting OBD port with KTS 560 tool kit
- Testing of sensors using Multi-brand car's ECU Diagnostic Scanner



SESSION 13:

ON BOARD DIAGNOSTICS SYSTEM (03.30 PM to 05.30PM)

The tenth session on Bosch KTS was conducted by Dr.M.Saravana Kumar

• Bosch KTS 560- Read and erase error memories

At the end of the session Feedback from participants was collected Assessment was conducted.



Outcome:

The Value-added course was conducted on "AUTOMOTIVE DIAGNOSTICS SYSTEM". The students gained knowledge in the testing of Automotive Electrical equipments and battery diagnosing and charging system. Also the students had depth knowledge on the starting and charging system using Auto Electrical Test Bench and testing of sensors using Bosch KTS 560 toolkit.









Ref: 22-23/Even/VAC/01 Date: 27.05.2023

From

Dr.S.Sangeetha
Value Added Course Coordinator,
Mechanical Engineering,
Aarupadai Veedu Institute of Technology,
Paiyanoor-603 104

To

The Principal,
Aarupadai Veedu Institute of Technology
Paiyanoor-603 104

Respected Sir,

Sub: Submission of Attendance and mark Statement of Eligible Students for Certificate purpose-Reg.

Herewith I had enclosed the duly verified Attendance and Mark Statement of eligible students for availing Value Added Course Certificate on "AUTOMOTIVE DIAGNOSTICS SYSTEM" from 15.05.2023 to 25.05.2023 conducted by our institution for the Academic Year 2022-2023.

Kindly do the needful.

Thanking you,

Yours Sincerely

Dr.S.Sangeetha

Value Added Course Coordinator

Encl: Attendance and mark Statement









Value Added Course

ATTENDANCE PERCENTAGE

SI. No.	Register Number	Name of the Student	Attendance Percentage
1	3441873502	ANEES	100
2	3441910501	ABHAY VERMA	100
3	3441910502	ABHINANDH LAL	100
4	3441910503	AJAY KUMAR	100
5	3441910505	AMIT KUMAR	100
6	3441910506	ASHISH KUMAR	100
7	3441910509	ASTLIN SAM S	100
8	3441910511	BRAJESH KUMAR	100
9	3441910512	BRAJESH KUMAR	100
10	3441910513	DEVARJUN V S	30
11	3441910515	GOBIND MAURYA	100
12	3441910517	IRSHAD ANSARI	86
13	3441910520	MANGAMPATLA PAVAN	100
14	3441910521	MANISH KUMAR	77
15	3441910522	MD ABDULLAH KHAN	100
16	3441910523	MD JAFAR ALAM	100
17	3441910524	MOHAMED RASHID A	85
18	3441910525	NADEEM ALAM	100
19	3441910526	NAUSHAD ALAM	100
20	3441910527	NIRANJAN KUMAR	100
21	3441910529	RAHUL KUMAR	100
22	3441910530	RAHUL KUMAR	100
23	3441910532	RAKESH KUMAR	100
24	3441910533	RANJIT TIWARY	100
25	3441910536	SANJEEV KUMAR	100
26	3441910539	SHAIK RIYAZ	100
27	3441910543	VIKASH KUMAR SINGH	100
28	3442020502	NITHISH S	100
29	3442020503	RAKESH M	100
30	3442020504	UDHAYAKUMAR J	100
31	3442020505	YOGESHWARAN D	100
32	3442054501	DEEPAK P V	100
33	3442155501	AMAL S	100
34	3442155502	DIAZ K BIJU	100
35	3442155503	JITHIN Y OOMMEN	30
36	3442156501	AMAL SANTHOSH	100
37	3442156502	ANANDHU K RAGHUNATHAN	100
38	3442156503	ARJUN GIRISH	77
39	3442156504	AROMAL K S	85
40	3442156505	JERIN MATHEW THOMAS	77
41	3442156506	JISHNU RAJU	92
42	3442156507	MELWIN P EBIN	100

43	3442156508	MIDHUN SHAJI	77
44	3442156509	RIBO JOHN ABRAHAM	100
45	3442257501	ADAM JOSEPH CHIYEZHAN	85
46	3442257502	ADARSH R S	100
47	3442257503	AKHIL CHANDRAN	100
48	3442257504	AKSHAY PRADEEP	92
49	3442257505	AMALJITH BIJU	100
50	3442257506	ASHISH SEBASTIAN	100
51	3442257507	ASHISH VARGHESE	100
52	3442257508	ASWANTH S P	92
53	3442257509	ATHUL JOHNSON	100
54	3442257510	DHEERAJ S	100
55	3442257511	HISHAM KARIM	100
56	3442257512	JACOB ALEXANDER PHILIP	100
57	3442257513	MOHAMMAD NAMEER	100
58	3442257514	MUHAMMAD SALIH K	0
59	3442257515	MUHAMMED P	100
60	3442257516	NUKA NAGA PRASADA REDDY	100
61	3442257517	PRATHYUSH PREMARAJAN	85
62	3442257518	SAJAD S	85
63	3442257519	SAURAG R	85
64	3442257520	SHAIQUE FAREEDH BABU	100
65	3442257521	SIDHARTH K R	100
66	3442257522	SURYAPRAKASH T	85
67	3442257523	VENKATESHAN G	85
68	3442257524	YADHUKRISHNA SURESH	100

Coordinator HOD









Value Added Course MARK LIST

SI. No.	Register Number	Name of the Student	Marks Obtained (100)
1	3441873502	ANEES	76
2	3441910501	ABHAY VERMA	84
3	3441910502	ABHINANDH LAL	80
4	3441910503	AJAY KUMAR	78
5	3441910505	AMIT KUMAR	82
6	3441910506	ASHISH KUMAR	94
7	3441910509	ASTLIN SAM S	74
8	3441910511	BRAJESH KUMAR	92
9	3441910512	BRAJESH KUMAR	82
10	3441910513	DEVARJUN V S	ABSENT
11	3441910515	GOBIND MAURYA	80
12	3441910517	IRSHAD ANSARI	78
13	3441910520	MANGAMPATLA PAVAN	70
14	3441910521	MANISH KUMAR	80
15	3441910522	MD ABDULLAH KHAN	92
16	3441910523	MD JAFAR ALAM	86
17	3441910524	MOHAMED RASHID A	78
18	3441910525	NADEEM ALAM	88
19	3441910526	NAUSHAD ALAM	90
20	3441910527	NIRANJAN KUMAR	80
21	3441910529	RAHUL KUMAR	96
22	3441910530	RAHUL KUMAR	80
23	3441910532	RAKESH KUMAR	78
24	3441910533	RANJIT TIWARY	80
25	3441910536	SANJEEV KUMAR	90
26	3441910539	SHAIK RIYAZ	76
27	3441910543	VIKASH KUMAR SINGH	88
28	3442020502	NITHISH S	86
29	3442020503	RAKESH M	80
30	3442020504	UDHAYAKUMAR J	88
31	3442020505	YOGESHWARAN D	88
32	3442054501	DEEPAK P V	80
33	3442155501	AMAL S	74
34	3442155502	DIAZ K BIJU	80
35	3442155503	JITHIN Y OOMMEN	ABSENT
36	3442156501	AMAL SANTHOSH	76
37	3442156502	ANANDHU K RAGHUNATHAN	80
38	3442156503	ARJUN GIRISH	74
39	3442156504	AROMAL K S	76
40	3442156505	JERIN MATHEW THOMAS	70
41	3442156506	JISHNU RAJU	72
42	3442156507	MELWIN P EBIN	68

43	3442156508	MIDHUN SHAJI	70
44	3442156509	RIBO JOHN ABRAHAM	80
45	3442257501	ADAM JOSEPH CHIYEZHAN	84
46	3442257502	ADARSH R S	76
47	3442257503	AKHIL CHANDRAN	74
48	3442257504	AKSHAY PRADEEP	76
49	3442257505	AMALJITH BIJU	78
50	3442257506	ASHISH SEBASTIAN	66
51	3442257507	ASHISH VARGHESE	60
52	3442257508	ASWANTH S P	70
53	3442257509	ATHUL JOHNSON	72
54	3442257510	DHEERAJ S	74
55	3442257511	HISHAM KARIM	82
56	3442257512	JACOB ALEXANDER PHILIP	84
57	3442257513	MOHAMMAD NAMEER	76
58	3442257514	MUHAMMAD SALIH K	ABSENT
59	3442257515	MUHAMMED P	76
60	3442257516	NUKA NAGA PRASADA REDDY	78
61	3442257517	PRATHYUSH PREMARAJAN	80
62	3442257518	SAJAD S	76
63	3442257519	SAURAG R	74
64	3442257520	SHAIQUE FAREEDH BABU	70
65	3442257521	SIDHARTH K R	78
66	3442257522	SURYAPRAKASH T	78
67	3442257523	VENKATESHAN G	74
68	3442257524	YADHUKRISHNA SURESH	78

Total No. of students: 68 No. of Absentees:03

No. Appeared: 65 No. Passed: 65 No. Failed: Nil

% of Passes: 100%

Coordinator HOD









Ref: 22-23/Even/VAC/01 Date: 27.05.2023

From

Dr.S.Sangeetha Value Added Course Coordinator, Mechanical Engineering, Aarupadai Veedu Institute of Technology, Paiyanoor-603 104

То

The Principal, Aarupadai Veedu Institute of Technology Paiyanoor-603 104

Respected Sir,

Sub: Submission of Eligible students for Value Added Course Certificates- Reg.

Herewith I had enclosed the list of eligible students for availing Value Added Course Certificate on "AUTOMOTIVE DIAGNOSTICS SYSTEM" from 15.05.2023 to 25.05.2023 conducted by our institution for the Academic Year 2022-2023. Kindly do the needful.

Thanking you,

Yours Sincerely

Dr.S.Sangeetha

Value Added Course Coordinator

Encl:List of Eligible Students









Value Added Course on

ELIGIBLE STUDENTS LIST

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Coordinator HOD Vice Principal Academics Principal

FEEDBACK

