



**VIII SEMESTER PROJECT DETAILS EVEN SEM 2020-21**

| Sl.No. | USN        | Name of the Student     | Batch | TOPIC  |
|--------|------------|-------------------------|-------|--|
| 1      | 1NH17AU006 | Arif Mohamed            | 1     | DESIGN AND FABROICATION OF AN ELECTRIC TWO-WHEELER   |
| 2      | 1NH17AU005 | Anurag                  |       |  |
| 3      | 1NH17AU026 | MOHAMMAD FAIZAAN        |       |  |
| 4      | 1NH17AU044 | SAI LOHITH              |       |  |
| 5      | 1NH14AU052 | Suhas Sampangi Ramaiah  | 2     | DESIGN ANALYSIS AND 3D PRINTING OF A TWO WHEELER BRAKE LEVER                                     |
| 6      | 1NH14AU069 | Yogaskandan.A           |       |  |
| 7      | 1NH17AU012 | Harshith S              |       |  |
| 8      | 1NH17AU007 | Arjun                   |       |  |
| 9      | 1NH17AU037 | Raj kumar sen           | 3     | Design and simulation of Automatic Braking System with ABS using Arduino                         |
| 10     | 1NH17AU041 | Rishabh kumar Sinha     |       |  |
| 11     | 1NH17AU051 | Shubham Nayar           |       |  |
| 12     | 1NH17AU063 | K V Harish Kuma         |       |  |
| 13     | 1NH18AU400 | Akshay khot             | 4     | Design and Fabrication of Training Module of Noise, Vibration and Harshness Tester Using Arduino |
| 14     | 1NH17AU014 | Himanshu ranjan mallick |       |  |
| 15     | 1NH18AU403 | Manik kalsotra          |       |  |
| 16     | 1NH18AU406 | Setu mehra              |       |  |
| 17     | 1NH17AU028 | Shriram N               | 5     | A Learning And Assistive Web Application For Driving, For Individuals With Autism                |
| 18     | 1NH17AU047 | Sharfaa Zaib            |       |  |
| 19     | 1NH17AU061 | Vasudevan R             |       |  |
| 20     | 1NH16AU028 | Mounesh rampur          | 6     | ADVANCE WHIPLASH PROTECTION SYSTEM DESIGN AND ANALYSIS   |
| 21     | 1NH16AU045 | santosh Patel           |       |  |
| 22     | 1NH16AU062 | Vishnu kuttan           |       |  |
| 23     | 1NH16AU064 | sachin manivanan        |       |  |

| Sl.No. | USN        | Name of the Student | Batch | TOPIC  |
|--------|------------|---------------------|-------|--|
| 24     | 1NH17AU013 | Hibel Hussain       | 7     | Design and Simulation of Regenerative suspension system            |
| 25     | 1NH17AU042 | Rohith V            |       |  |
| 26     | 1NH17AU019 | Johnjo Josmon       |       |  |
| 27     | 1NH17AU027 | Mohammed Nihal      |       |  |
| 28     | 1NH17AU008 | Avinash             | 8     | BIODIESEL FROM NEEM OIL AS AN ALTERNATIVE FUEL FOR DIESEL ENGINE   |
| 29     | 1NH17AU010 | Chandan K S         |       |  |
| 30     | 1NH17AU052 | Yashwanth Reddy     |       |  |
| 31     | 1NH17AU065 | C Mahesh            |       |  |
| 32     | 1NH17AU021 | Karan K Murthy      | 9     | Vibration Analysis of vehicles using Accelerometer                 |
| 33     | 1NH17AU020 | Prithvi             |       |  |
| 34     | 1NH17AU053 | Sohan S             |       |  |
| 35     | 1NH17AU059 | Tejas A             |       |  |
| 36     | 1NH18AU401 | Anand G             | 10    | Design and analysis of a four wheel steering system for car        |
| 37     | 1NH18AU408 | Shashidhar          |       |  |
| 38     | 1NH18AU409 | Tejas J             |       |  |
| 39     | 1NH18AU413 | Yeshwanth Kumar U R |       |  |
| 40     | 1NH18AU405 | PAVAN PL            | 11    | Finite element analysis of the automotive muffler                  |
| 41     | 1NH17AU069 | Nithin Kumar        |       |  |
| 42     | 1NH17AU031 | Nithin H R          |       |  |
| 43     | 1NH17AU001 | Pranav              |       |  |
| 44     | 1NH17AU033 | Pradeep             | 12    | Cooking Oil As An Alternate Fuel For Single Cylinder Diesel Engine |
| 45     | 1NH17AU040 | Rayyan              |       |  |
| 46     | 1NH17AU024 | Manova              |       |  |
| 47     | 1NH17AU030 | Nirup               |       |  |

| Sl.No. | USN        | Name of the Student | Batch | TOPIC   |
|--------|------------|---------------------|-------|---|
| 48     | 1NH18AU411 | Varun Bharadwaj     | 13    | Design & Analysis of Vertical Axis wind turbine for Power generation                                      |
| 49     | 1NH18AU407 | SHARAN S            |       |   |
| 50     | 1NH18AU404 | NANDEESH R          |       |   |
| 51     | 1NH18AU410 | Thomas              |       |   |
| 52     | 1NH17AU029 | Naveen Raj L        | 14    | Structural and Thermal analysis of Piston and Connecting Rod  |
| 53     | 1NH17AU035 | Prashanth K         |       |   |
| 54     | 1NH17AU003 | Ajith               |       |   |
| 55     | 1NH17AU062 | Waseem N M          |       |   |
| 56     | 1NH17AU058 | Syed Yasar Arafath  | 15    | Designing, Fabrication and Testing of 18650 Lithium-ion Battery Capacity Testing Rig                      |
| 57     | 1NH17AU011 | Danish Ashiq Mir    |       |   |
| 58     | 1NH17AU009 | Bharath Reddy J     |       |   |
| 59     | 1NH17AU038 | Rakshith V          |       |   |
| 60     | 1NH17AU022 | Rhithik M           | 16    | Structural analysis of Automotive Chassis   |
| 61     | 1NH17AU015 | JAYRAJ              |       |   |
| 62     | 1NH17AU034 | PRAJWAL             |       |   |
| 63     | 1NH17AU046 | shakir              |       |   |
| 64     | 1NH17AU066 | Charan km           | 17    | Design and fabrication of sensor operated electromagnetic clutch and braking system                       |
| 65     | 1NH18AU402 | Harshit D           |       |   |
| 66     | 1NH17AU064 | Tejeshwar           |       |   |
| 67     | 1NH17AU039 | Ranjan              |       |   |
| 68     | 1NH17AU032 | Nitin T             | 18    | Development and characterization of flame retardant polymer composite material for automobile application |
| 69     | 1NH17AU036 | Rahul               |       |   |
| 70     | 1NH17AU054 | Sri Hari            |       |   |
| 71     | 1NH17AU002 | Abdul Sathiq        |       |   |
| 72     | 1NH16AU027 | Mordi Sangma        | 19    | DESIGN AND ANALYSIS OF AUTOMOBILE WHEEL RIM   |
| 73     | 1NH14AU001 | Abhijeet            |       |   |
| 74     | 1NH16AU029 | Md. Mansoor         |       |   |
| 75     | 1NH18AU412 | Vishak Vignesh      |       |   |



# **“Design and Fabrication of an Electric Two-Wheeler”**

**PROJECT WORK - [AUT84]**

*Submitted by*

**ANURAG (1NH17AUU05)  
ARIF MOHAMED (1NH17AU006)  
MOHAMMED FAIZAAN(1NH17AU026)  
SAI LOHITH K N (1NH17AU044)**

*In partial fulfillment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Prof. Jayasheel Kumar**

**Senior Assistant Professor**

**Department of Automobile Engineering, NHCE**

*July-2021*

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

**CERTIFICATE**

This is to certify that the Project Work- [AUT84]

On

**“Design and Fabrication of an Electric Two-Wheeler”**



Is a bonafide work carried out by

**ANURAG (1NH17AUU05)**  
**ARIF MOHAMED (1NH17AU006)**  
**MOHAMMED FAIZAAN (1NH17AU026)**  
**SAI LOHITH K N (1NH17AU044)**

In partial fulfillment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library.

The project report has been approved as it satisfies the academic requirements in respect of Project work for prescribed for the said Degree.

**Signature of Internal Guide**  
**Prof. Jayasheel Kumar K A**

**Signature of HOD**  
**Dr. Shridhar Kurse**

**Signature of Principal**  
**Dr. Manjunatha**

**External Viva**

**Name of the Examiners**

**Signature with Date**

- 1.
- 2.



Outer Ring Road, Marathahalli, Bengaluru-560103

## DESIGN, ANALYSIS AND 3D PRINTING OF A TWO-WHEELER BRAKE LEVER



PROJECT WORK [AUT84]

*Submitted by*

|                        |              |
|------------------------|--------------|
| SUHAS SAMPANGI RAMAIAH | (1NH14AU052) |
| YOGASKANDAN A          | (1NH14AU069) |
| HARSHITH S             | (1NH17AU012) |
| ARJUN H                | (1NH17AU007) |

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Prof. JAYASHEEL Kumar K.A.**

**Senior Assistant Professor**

**Department of Automobile Engineering, NHCE**

*July,2021*



Outer Ring Road, Marathahalli, Bengaluru-560103

DEPARTMENT OF AUTOMOBILE ENGINEERING

**CERTIFICATE**

This is to certify that the Project Work [AUT84]

On

**“DESIGN ANALYSYS AND 3D PRINTING OF A TWO-WHEELER BRAKE LEVER”**

Is a bonafide work carried out by

**SUHAS SAMPANGI RAMAIAH** [1NH14AU052]

**YOGASKANDAN A** [1NH14AU069]

**ARJUN H** [1NH17AU007]

**HARSHITH S** [1NH17AU012]

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Signature of Internal Guide  
Prof. Jayasheel Kumar K A

Signature of HOD  
Dr. Shridhar Kurse

Signature of Principal  
Dr. Manjunatha

External Viva

Name of the Examiners

- 1.
- 2.

Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

**DESIGN AND FABRICATION OF AUTOMATIC BRAKING  
SYSTEM WITH ABS USING ARDUINO**

**PROJECT WORK [AUT84]**



*Submitted by*

**RAJ KUMAR SEN(1NH17AU037)**

**RISHABH KUMAR SINHA (1NH17AU041)**

**SHUBHAM NAYAR (1NH17AU051)**

**K V HARISH KUMAR (1NH17AU063)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**PROF. SMITHA B S**

**Assistant Professor**

**Department of Automobile Engineering, NHCE**

*July, 2021*





Outer Ring Road, Marathahalli, Bengaluru-560103

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

***CERTIFICATE***

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**DESIGN AND FABRICATION OF AUTOMATIC BRAKING  
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***RAJ KUMAR SEN(1NH17AU037)***

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***K V HARISH KUMAR(1NH17AU063)***

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**Signature of Internal Guide  
Prof. Smitha B S**

**Signature of HOD  
Dr. Shridhar Kurse**

**Signature of Principal  
Dr. Manjunatha**

**External Viva**

**Name of the Examiners**

- 1.
- 2.

**Signature with Date**



Outer Ring Road, Marathahalli, Bengaluru-560103

**DESIGN AND FABRICATION OF TRAINING MODULE OF  
NOISE, VIBRATION AND HARSHNESS TESTER USING  
ARDUINO**



**PROJECT WORK [AUT84]**

*Submitted by*

**HIMANSHU RANJAN MALLICK  
(1NH17AU014)**

**AKSHAY KHOT (1NH18AU400)**

**MANIK KALSOTRA (1NH18AU403)**

**SETU MEHRA (1NH18AU406)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**PROF. JAYASHEEL KUMAR K A**

**Senior Assistant Professor**

**Department of Automobile Engineering, NHCE**

*July, 2021*



Outer Ring Road, Marathahalli, Bengaluru-560103  
DEPARTMENT OF AUTOMOBILE ENGINEERING

## **CERTIFICATE**

This is to certify that the Project Work [AUT84]

On

### **DESIGN AND FABRICATION OF TRAINING MODULE OF NOISE, VIBRATION AND HARSHNESS TESTER USING ARDUINO**

is a bonafide work carried out by

**HIMANSHU RANJAN MALLICK  
(1NH17AU014)**

**AKSHAY KHOT (1NH18AU400)**

**MANIK KALSOTRA (1NH18AU403)**

**SETU MEHRA (1NH18AU406)**

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**Signature of Internal Guide  
Prof. Jayasheel  
Kumar K A**

**Signature of HOD  
Dr. Shridhar Kurse**

**Signature of Principal  
Dr. Manjunatha**

**External Viva  
Name of the Examiners**

- 1.
- 2.

**Signature with  
Date**



Outer Ring Road, Marathahalli, Bengaluru-560103

**A LEARNING AND ASSISTIVE WEB APPLICATION  
FOR DRIVING, FOR INDIVIDUALS WITH AUTISM**



**PROJECT WORK [AUT84]**

*Submitted by*

**SHRIRAM N(1NH17AU028)**

**SHARFAA ZAIB(1NH17AU047)**

**VASUDEVAN R(1NH17AU061)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Dr. Shridhar Kurse  
Assistant Professor**

**Department of Automobile Engineering, NHCE**

***AUGUST, 2021***



Outer Ring Road, Marathahalli, Bengaluru-560103

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

***CERTIFICATE***

This is to certify that the Project Work[AUT84]

On

**“A LEARNING AND ASSISTIVE WEB APPLICATION FOR  
DRIVING, FOR INDIVIDUALS WITH AUTISM ”**

Is a bonafide work carried out by

**SHRIRAM N(1NH17AU028)**

**SHARFAA ZAIB(1NH17AU047)**

**VASUDEVAN R(1NH17AU061)**

In partial fulfilment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during Even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library.

The project report has been approved as it satisfies the academic requirements in respect of Project Work prescribed for the said Degree.

**Signature of Internal Guide  
Dr. Shridhar  
Kurse**

**Signature of HOD  
Dr. Shridhar Kurse**

**Signature of Principal  
Dr. Manjunatha**

**External Viva**

**Name of the Examiners**

- 1.
- 2.

**Signature with Date**



Outer Ring Road, Marathahalli, Bengaluru-560103

**ADVANCE WHIPLASH  
PROTECTION SYSTEM DESIGN AND  
ANALYSIS**



**PROJECT WORK [AUT84]**

*Submitted by*

**MouneshRampur(1NH16AU028)**

**santosh Patel (1NH16AU045)**

**Vishnu kuttan (1NH16AU062)**

**sachin manivanan  
(1NH16AU064)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Dr. Sujin Jose**

**Associate Professor**

**Department of Automobile Engineering, NHCE**

**AUGUST, 2021**



Outer Ring Road, Marathahalli, Bengaluru-560103

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

***CERTIFICATE***

This is to certify that the Project Work[AUT84]

On

**“ADVANCE WHIPLASH PROTECTION SYSTEM  
DESIGN AND ANALYSIS ”**

Is a bonafide work carried out by

**MouneshRampur(1NH16AU028)**

**santosh Patel (1NH16AU045)**

**Vishnu kuttan (1NH16AU062)**

**sachin manivanan**

**(1NH16AU064)**

In partial fulfilment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during Even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library.

The project report has been approved as it satisfies the academic requirements in respect of Project Work prescribed for the said Degree.

**Signature of Internal Guide**

Dr.Sujin Jose

**Signature of HOD**

Dr. Shridhar Kurse

**Signature of Principal**

**Dr. Manjunatha**

**External Viva**

**Name of the Examiners**

- 1.
- 2.

**Signature with Date**



Outer Ring Road, Marathahalli, Bengaluru-560103

# DESIGN AND SIMULATION OF REGENERATIVE SUSPENSION SYSTEM



A PROJECT REPORT[AUT84]

*Submitted By:*

**HIBEL HUSSAIN(1NH17AU013)**

**JOHNJO JOSMON(1NH17AU019)**

**MUHAMMAD NIHAL KC (1NH17AU027)**

**ROHITH V (1NH17AU042)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under the Guidance of**

**PROF. SMITHA B S**

**Department of Automobile Engineering, NHCE**

*July,2021*





Outer Ring Road, Marathahalli, Bengaluru-560103

DEPARTMENT OF AUTOMOBILE ENGINEERING

**CERTIFICATE**

This is to certify that the Project Work [AUT84]

On

**“DESIGN AND SIMULATION OF REGENERATIVE SUSPENSION  
SYSTEM”**

Is a bonafide work carried out by

***HIBEL HUSSAIN [1NH17AU013]***

***JOHNJO JOSMON [1NH17AU019]***

***MUHAMMAD NIHAL KC [1NH17AU027]***

***ROHITH V [1NH17AU042]***

In partial fulfilment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during Even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of Major Project Work prescribed for the said Degree.

Signature of Internal Guide  
Prof. Smitha B S

Signature of HOD  
Dr. Sridhar Kurse

Signature of Principal  
Dr. Manjunatha

External Viva  
Name of the Examiners

- 1.
- 2.

Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

DEPARTMENT OF AUTOMOBILE ENGINEERING

**CERTIFICATE**

This is to certify that the project work [AUT84]

On

**BIO DIESEL FROM NEEM OIL AS AN ALTERNATIVE FUEL FOR  
DIESEL ENGINE**

Is a bonafide work carried out by  
**AVINASH B (1NH17AU008)**

**CHANDAN K S (1NH17AU010)**

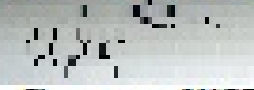
**SIRIGI REDDY YASHWANTH REDDY (1NH17AU052)**

**CHENNAVARAM MAHESH (1NH17AU065)**

In partial fulfilment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during Even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library.

The project report has been approved as it satisfies the academic requirements in respect of Project Work prescribed for the said Degree.

  
Signature of Internal Guide  
Karthik A V

  
Signature of HOD  
Dr. Shridhar Kurse

Signature of Principal  
Dr. Manjunatha

External Viva

Name of the Examiners

- 1.
- 2.

Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

# VIBRATION ANALYSIS OF VEHICLES USING ACCELEROMETER



PROJECT WORK [AUT84]

*Submitted by*

**Karan K Murthy(1NH17AU021)**

**Prithvi (1NH17AU020)**

**Sohan S (1NH17AU053)**

**Tejas A(1NH17AU059)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Dr. Shridhar Kurse  
Assistant Professor**

**Department of Automobile Engineering, NHCE**

***AUGUST, 2021***



Outer Ring Road, Marathahalli, Bengaluru-560103

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

***CERTIFICATE***

This is to certify that the Project Work[AUT84]

On

**“VIBRATION ANALYSIS OF VEHICLES  
USING ACCELEROMETER”**

Is a bonafide work carried out by

**Karan K Murthy(1NH17AU021)**

**Prithvi (1NH17AU020)**

**Sohan S (1NH17AU053)**

**Tejas A(1NH17AU059)**

In partial fulfilment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during Even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library.

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**Signature of Internal Guide  
Dr. Shridhar  
Kurse**

**External Viva**

**Name of the Examiners**

- 1.
- 2.

**Signature of HOD  
Dr. Shridhar Kurse**

**Signature of Principal  
Dr. Manjunatha**

**Signature with Date**



Outer Ring Road, Marathahalli, Bengaluru-560103

# Design and Analysis of a Four Wheel Steering System for a Car



**PROJECT WORK [AUT84]**

*Submitted by*

**ANAND G (1NH18AU401)**

**SHASHIDHAR (1NH18AU408)**

**TEJAS J (1NH18AU409)**

**YESHWANTH KUMAR U R (1NH18AU413)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**UnderTheGuidance of**

**Mr. Mohan Kumar G R  
Sr.Assistant Professor**

**Department of Automobile Engineering, NHCE**

**AUGUST, 2021**



Outer Ring Road, Marathahalli, Bengaluru-560103

DEPARTMENT OF AUTOMOBILE ENGINEERING

**CERTIFICATE**

This is to certify that the Project Work [AUT84]

On

**“Design and Analysis of a Four Wheel Steering System  
for a Car”**

Is a bonafide work carried out by

**ANAND G (1NH18AU401)**

**SHASHIDHAR (1NH18AU408)**

**TEJAS J (1NH18AU409)**

**YESHWANTH KUMAR U R (1NH18AU413)**

In partial fulfilment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during Even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library.

The

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Signature of Internal Guide  
Mr. Mohan Kumar G R

Signature of HOD  
Dr. Shridhar Kurse

Signature of Principal  
Dr. Manjunatha

External Viva

Name of the Examiners

- 1.
- 2.

Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

## FINITE ELEMENT ANALYSIS OF AUTOMOTIVE MUFFLER



PROJECT WORK [AUT84]

*Submitted by*

A S pranav (1NH17AU001)

Nithin H R (1NH17AU031)

Nithin kumar (1NH17AU069)

Pavan P L (1NH18AU405)

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Mr. Mohan Kumar G R**

**Sr.Assistant Professor**

**Department of Automobile Engineering, NHCE**

***AUGUST, 2021***



Outer Ring Road, Marathahalli, Bengaluru-560103

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**“FINITE ELEMENT ANALYSIS OF AUTOMOTIVE MUFFLER”**

Is a bonafide work carried out by

**A S pranav (1NH17AU001)**

**Nithin H R (1NH17AU031)**

**Nithin kumar (1NH17AU069)**

**Pavan P L (1NH18AU405)**

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Dr. Manjunatha**

**External Viva**

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- 2.

**Signature with Date**





Outer Ring Road, Marathahalli, Bengaluru-560103

**COOKING OIL AS AN ALTERNATE FUEL  
FOR SINGLE CYLINDER DIESEL ENGINE**



**PROJECT WORK [AUT84]**

*Submitted by*

**PRADEEP (1NH17AU033)**

**RAYYAN (1NH17AU040)**

**MANOVA (1NH17AU024)**

**NIRUP (1NH17AU030)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Mr. Karthik A V**

**Assistant Professor**

**Department of Automobile Engineering, NHCE**

***AUGUST, 2021***



Outer Ring Road, Marathahalli, Bengaluru-560103

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

***CERTIFICATE***

This is to certify that the Project Work[AUT84]

On

**“COOKING OIL AS AN ALTERNATE FUEL FOR  
SINGLE CYLINDER DIESEL ENGINE”**

Is a bonafide work carried out by

**PRADEEP (1NH17AU033)**

**RAYYAN (1NH17AU040)**

**MANOVA (1NH17AU024)**

**NIRUP (1NH17AU030)**

In partial fulfilment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during Even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library.

The project report has been approved as it satisfies the academic requirements in respect of Project Work prescribed for the said Degree.

Signature of Internal Guide  
Karthik A V

Signature of HOD  
Dr. Shridhar Kurse

Signature of Principal  
Dr. Manjunatha

External Viva

Name of the Examiners

- 1.
- 2.

Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

**DESIGN & ANALYSIS OF VERTICAL  
AXIS WIND TURBINE FOR  
POWERGENERATION**



**PROJECT WORK [AUT84]**

*Submitted by*

**Varun Bharadwaj (1NH18AU411)**

**SHARAN S (1NH18AU0407)**

**NANDEESH R (1NH18AU400)**

**Thomas (1NH18AU410)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Dr. Sujin Jose**

**Associate Professor**

**Department of Automobile Engineering, NHCE**

**AUGUST, 2021**



Outer Ring Road, Marathahalli, Bengaluru-560103

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

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**Signature of Internal Guide**

Dr.Sujin Jose

**Signature of HOD**

Dr. Shridhar Kurse

**Signature of Principal**

Dr. Manjunatha

**External Viva**

**Name of the Examiners**

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**Signature with Date**



Outer Ring Road, Marathahalli, Bengaluru-560103

**STRUCTURAL AND THERMAL ANALYSIS  
OF PISTON AND CONNECTING ROD**



**PROJECT WORK [AUT84]**

*Submitted by*

**NAVEEN RAJ L(1NH17AU029)**

**PRASHANTH K (1NH17AU035)**

**AJITH (1NH17AU003)**

**WASEEM N M (1NH17AU023)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Mr. Karthik A V**

**Assistant Professor**

**Department of Automobile Engineering, NHCE**

***AUGUST, 2021***



Outer Ring Road, Marathahalli, Bengaluru-560103

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Signature of HOD  
Dr. Shridhar Kurse

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Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

**“Designing, Fabrication and Testing of 18650 Lithium-ion  
Battery Capacity Testing Rig”**



**PROJECT WORK [AUT84]**

*Submitted by*

**RAKSHITH V (1NH17AU038)**

**SYED YASAR ARAFATH (1NH17AU058)**

**DANISH ASHIQ MIR (1NH17AU011)**

**BHARATH REDDY J (1NH17AU009)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING  
IN  
AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Prof. Smitha B S  
Assistant Professor**

**Department of Automobile Engineering, NHCE  
AUGUST, 2021**



Outer Ring Road, Marathahalli, Bengaluru-560103

DEPARTMENT OF AUTOMOBILE ENGINEERING

**CERTIFICATE**

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On

**“Designing, Fabrication and Testing of 18650 Lithium-ion  
Battery Capacity Testing Rig”**

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Prof. Smitha B S

Signature of HOD  
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Signature with Date





Outer Ring Road, Marathahalli, Bengaluru-560103

**DEVELOPMENT AND CHARACTERIZATION OF  
FLAME RETARDANT  
POLYMER COMPOSITE MATERIAL FOR AUTOMOBILE  
APPLICATION**



**PROJECT WORK [AUT84]**

*Submitted by*

**Nitin T (1NH17AU032)**

**Rahul (1NH17AU036)**

**Sri Hari (1NH17AU054)**

**Abdul Sathiq (1NH17AU002)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Dr. Sujin Jose**

**Associate Professor**

**Department of Automobile Engineering, NHCE**

**AUGUST, 2021**



Outer Ring Road, Marathahalli, Bengaluru-560103

DEPARTMENT OF AUTOMOBILE ENGINEERING

**CERTIFICATE**

This is to certify that the Project Work[AUT84]

On

**“DEVELOPMENT AND CHARACTERIZATION OF FLAME**

**RETARDANT POLYMERCOMPOSITE MATERIAL FOR**

**AUTOMOBILE APPLICATION”**

Is a bonafide work carried out by

**Nitin T (1NH17AU032)**

**Rahul (1NH17AU036)**

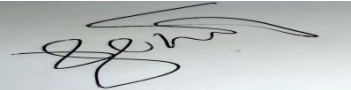
**Sri Hari (1NH17AU054)**

**Abdul Sathiq (1NH17AU002)**

In partial fulfilment for the award of degree of Bachelor of Engineering in Automobile Engineering of the Visvesvaraya Technological university, Belgaum during Even Semester, 2020-21. It is certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library.

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Signature of Internal Guide  
Dr.Sujin Jose

  
Signature of HOD  
Dr. Shridhar Kurse

Signature of Principal  
Dr. Manjunatha

External Viva

Name of the Examiners

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Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

## **Design and fabrication of sensor operated electromagnetic clutch and braking system**



**PROJECT WORK [AUT84]**

*Submitted by*

**KM CHARAN (1NH17AU006)**

**HARSHIT D NAIK (1NH18AU402)**

**TEJESHWAR S (1NH17AU064)**

**RANJAN R (1NH17AU039)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

**UnderTheGuidance of**

**Mr. Mohan Kumar G R**

**Sr.Assistant Professor**

**Department of Automobile Engineering, NHCE**

***AUGUST, 2021***



Outer Ring Road, Marathahalli, Bengaluru-560103  
DEPARTMENT OF AUTOMOBILE ENGINEERING

### **CERTIFICATE**

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On

**“Design and fabrication of sensor operated electromagnetic clutch and braking system”**

Is a bonafide work carried out by

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Signature of Internal Guide  
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Signature of HOD  
Dr. Shridhar Kurse

Signature of Principal  
Dr. Manjunatha

External Viva

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Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

**DEVELOPMENT AND CHARACTERIZATION OF  
FLAME RETARDANT  
POLYMER COMPOSITE MATERIAL FOR AUTOMOBILE  
APPLICATION**



**PROJECT WORK [AUT84]**

*Submitted by*

**Nitin T (1NH17AU032)**

**Rahul (1NH17AU036)**

**Sri Hari (1NH17AU054)**

**Abdul Sathiq (1NH17AU002)**

*In partial fulfilment for the award of the degree of*

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**IN**

**AUTOMOBILE ENGINEERING**

**Under The Guidance of**

**Dr. Sujin Jose**

**Associate Professor**

**Department of Automobile Engineering, NHCE**

**AUGUST, 2021**



Outer Ring Road, Marathahalli, Bengaluru-560103

DEPARTMENT OF AUTOMOBILE ENGINEERING

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**RETARDANT POLYMERCOMPOSITE MATERIAL FOR**

**AUTOMOBILE APPLICATION”**

Is a bonafide work carried out by

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**Rahul (1NH17AU036)**

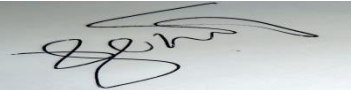
**Sri Hari (1NH17AU054)**

**Abdul Sathiq (1NH17AU002)**

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Signature of Internal Guide  
Dr.Sujin Jose

  
Signature of HOD  
Dr. Shridhar Kurse

Signature of Principal  
Dr. Manjunatha

External Viva

Name of the Examiners

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- 2.

Signature with Date



Outer Ring Road, Marathahalli, Bengaluru-560103

## DESIGN AND ANALYSIS OF AUTOMOBILE WHEEL RIMS



PROJECT WORK [AUT84]

*Submitted by*

**ABHIJEET KUMAR (1NH14AU001)**

**MORDI SANGMA (1NH16AU027)**

**MUHAMMAD MANSOOR P(1NH16AU029)**

**VISHAK VIGNESH (1NH18AU412)**

*In partial fulfilment for the award of the degree of*

**BACHELOR OF ENGINEERING**

**IN**

**AUTOMOBILE ENGINEERING**

*Under the Guidance of*

**Mr. SUNIL PRASHANTH KUMAR**

**ASSISTANT PROFESSOR**

**Department of Automobile Engineering, NHCE**

***JULY, 2021***



Outer Ring Road, Marathahalli, Bengaluru-560103

**DEPARTMENT OF AUTOMOBILE ENGINEERING**

***CERTIFICATE***

This is to certify that the Project Work [AUT84]

On

**“DESIGN AND ANALYSIS OF AUTOMOBILE  
WHEEL RIM”**

Is a bonafide work carried out by

**MUHAMMAD MANSOOR P[1NH16AU029]**

**ABHIJEET KUMAR[1NH14AU001]**

**MORDI SANGMA[1NH16AU027]**

**VISHAK VIGNESH[1NH18AU412]**

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**Signature of Internal**

**Guide**

**Mr. Sunil Prashanth  
Kumar**

**Signature of HOD  
Dr. Shridhar Kurse**

**Signature of Principal  
Dr. Manjunatha**

**External Viva**

**Name of the Examiners**

- 1.
- 2.

**Signature with Date**