

NEW HORIZON COLLEGE OF ENGINEERING

DEPARTMENT OF MECHANICAL ENGINEERING

IV Sem PG (Machine Design) Project Details AY: 2020-21

Code:19MMD43

Sl No	USN	Student Name	Title of the Project	Guide Name
1	1NH19MMD01	BASAVA KUMAR K G	Design Improvement pf Knucle Component using Topology and Shape Optimiztion	Prof. Chetan Kumar D S
2	1NH19MMD02	KAVITA V S	Validationj of Structural Integrity of Thrust Block with Design Enhancements and Material Recomondation in Renewable Energy Application	Dr. Srinath M K
3	1NH19MMD03	MOHAMMED FAROOQ YELLUR	Development of Ansys Automated Macros for Design and Analysis of Mechanical components using APDL Macros	Prof. Chetan Kumar D S
4	1NH19MMD04	PATIL DIVYESH KANTILAL	Experimental Optimization of Metal Inert Gas Welding process parameter of AL 6061 Alloy	Prof. Puneeth H V
5	1NH19MMD05	RAKSHITH K U	Design and Analysis of an Electric Vehicle Chasis	Prof. Veerasha G
6	1NH19MMD06	V N TANUJA GORRE	Four Jegged Spider Workable on Vertical Glass Surface	Prof. Santhosh A N

  
Professor & HoD-ME

HOD  
Department of Mechanical Engineering  
New Horizon College of Engineering  
Bengaluru - 560 103.

# NEW HORIZON COLLEGE OF ENGINEERING

New Horizon Knowledge Park, Ring Road, Marathalli  
Autonomous College Permanently Affiliated to VTU. Approved by AICTE & UGC  
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## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

It is certified that the Project work entitled "**Design improvement of knuckle component using topology and shape optimization**" carried out by **BASAVA KUMAR KG, USN - 1NH19MMD01** the bonafide student of **New Horizon College of Engineering, Bengaluru**, in partial fulfillment for the award of **Master of Technology in Machine Design** of the **Visvesvaraya Technological University, Belagavi** during the year **2020-21**. It is further 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 **Master of Technology** degree.

Signature of the Guide

**Prof. Chetan Kumar D.S**  
Senior Assistant Professor  
Dept. of Mechanical Engineering,  
NHCE

Signature of the HOD

**Dr. Shridhar Kurse**  
HOD-ME  
Dept. of Mechanical Engineering,  
NHCE

Signature of the Principal

**Dr. MANJUNATHA**  
Principal  
NHCE

Name(s) of the student:

**BASAVA KUMAR KG**

University Seat Number:

**1NH19MMD01**

**External Viva**

**Examiner**

1.

2.

**Signature with date:**

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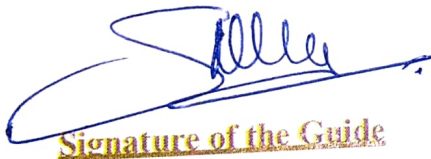
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## DEPARTMENT OF MECHANICAL ENGINEERING



### CERTIFICATE

It is certified that the Project work entitled "**Validation of Structural Integrity of Thrust Block with Design Enhancements and Material recommendation in Renewable Energy Application**" carried out by **Kavita VS (1NH19MMD02)**, is a bonafide student of **New Horizon College of Engineering, Bengaluru**, in partial fulfillment for the award of **Master of Technology in Machine Design** of the **Visvesvaraya Technological University, Belagavi** during the year **2020-2021**. It is further 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 **Master of Technology** degree.



Signature of the Guide

**Dr. SRINATH M. K**

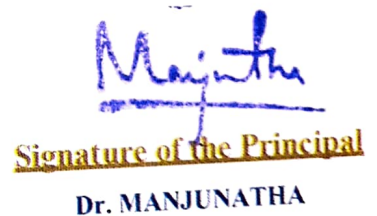
Associate Professor, ME Dept.  
Dept. of Mechanical Engineering.



Signature of the HOD

**Dr. SHRIDHAR KURSE**

Prof. and HoD-ME  
Dept. of Mechanical Engineering.



Signature of the Principal

**Dr. MANJUNATHA**

Principal  
NHCE

Name of the student:

**Kavita VS**

University Seat Number:

**1NH19MMD02**

**External Viva**

**Examiner**

1.

2.

**Signature with date:**



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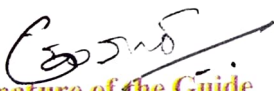
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## DEPARTMENT OF MECHANICAL ENGINEERING

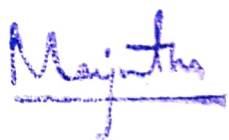


### CERTIFICATE

It is certified that the Internship work entitled "**DEVELOPMENT OF ANSYS AUTOMATED MACROS FOR DESIGN & ANALYSIS OF MECHANICAL COMPONENTS USING APDL MACROS**" carried out by **MOHAMMED FAROOQ YELLUR (1NH19MMD03)**, the bonafide student of **New Horizon College of Engineering, Bengaluru**, in partial fulfillment for the award of **Master of Technology in Machine Design** of the **Visvesvaraya Technological University, Belagavi** during the year **2020-21**. It is further 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 **Master of Technology** degree.

  
Signature of the Guide  
Prof. CHETAN KUMAR DS  
Sr. Assistant Professor  
Dept. of Mechanical Engineering.

  
Signature of the HOD  
Dr. SHRIDHAR KURSE  
Prof. and HOD  
Dept. of Mechanical Engineering.

  
Signature of the Principal  
Dr. MANJUNATHA  
Principal  
New Horizon College of Engineering.

Name(s) of the student:

MOHAMMED FAROOQ  
YELLUR

University Seat Number:

1NH19MMD03

External Viva

Examiner

1.

2.

Signature with date

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### CERTIFICATE

It is certified that the Project work entitled "**EXPERIMENTAL OPTIMIZATION OF METAL INERT GAS WELDING PROCESS PARAMETER ON AA6061 ALLOY**" carried out by **DIVYESH K PATIL (1NH19MMD04)**, the bonafide students of **New Horizon College of Engineering, Bengaluru**, in partial fulfillment for the award of **Master of Technology in Machine Design** of the **Visvesvaraya Technological University, Belagavi** during the year **2020-2021**. It is further 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 **Master of Technology** degree.

*H.V. Puneeth* 24/1/2021

Signature of the Guide

Mr. PUNEETH H V

Assistant Professor

Dept. of Mechanical Engineering.

*Dr. Shridhar Kurse*

Signature of the HOD

Dr. SHRIDHAR KURSE

HoD-ME

Dept. of Mechanical Engineering

*Dr. Manjunatha*

Signature of the Principal

Dr. MANJUNATHA

Principal

NHCE

Name(s) of the student:

DIVYESH K PATIL

University Seat Number:

1NH19MMD04

External Viva

Examiner

Signature with date:

1.

2.



DEPARTMENT OF MECHANICAL ENGINEERING



**CERTIFICATE**

It is certified that the Project work entitled "**DESIGN AND ANALYSIS OF AN ELECTRIC VEHICLE CHASSIS**" carried out by **RAKSHITH K U** (1NH19MMD05), the bonafide students of **New Horizon College of Engineering, Bengaluru**, in partial fulfillment for the award of **Master of Technology in Machine Design** of the **Visvesvaraya Technological University, Belagavi** during the year **2020-2021**. It is further certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library. The Project phase-3 report has been approved as it satisfies the academic requirements in respect of Project Work prescribed for the **Master of Technology** degree.

**Signature of the Guide**  
**Mr. VEERESHA G**

Senior Assistant Professor ME Dept.  
Dept. of Mechanical Engineering.

**Signature of the HOD**  
**Dr. SHRIDHAR KURSE**

Dean, Prof. and HOD-ME  
Dept. of Mechanical Engineering.

**Signature of the Principal**  
**Dr. MANJUNATHA**

Principal  
NHCE

Name(s) of the student:

**RAKSHITH K U**

University Seat Number:

**1NH19MMD05**

**External Viva**

**Examiner**

1.

2.

**Signature with date:**

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### CERTIFICATE

It is certified that the Project phase-3 work entitled **"FOUR-LEGGED SPIDER ROBOT WALKABLE ON VERTICAL SURFACE"** carried out by **V N TANUJA GORRE (1NH19MMD06)**, the bonafide students of **New Horizon College of Engineering, Bengaluru**, in partial fulfillment for the award of **Master of Technology in Machine Design** of the **Visvesvaraya Technological University, Belagavi** during the year **2020-2021**. It is further certified that all corrections/suggestions indicated for internal assessment has been incorporated in the report deposited in the department library. The Project phase-3 report has been approved as it satisfies the academic requirements in respect of Project Work prescribed for the **Master of Technology** degree.

  
Signature of the Guide

SANTHOSH A N

Sr.Asst Professor ME Dept.

Dept. of Mechanical Engineering.

  
Signature of the Principal

Dr. MANJUNATHA

Principal

NHCE

  
Signature of the HOD

Dr. SHIRDHAR KURSE

Dean, Prof. and HoD-ME

Dept. of Mechanical Engineering.