



Heritage Institute of Technology
(An Autonomous Institution by UGC, affiliated to MAKAUT, WB)
Kolkata, India

Ref. No.: HRIT/ME21/11

Date: 12.05.2021

This is to certify that Mr./Ms *Mainak Kundu*
of the Department of Mechanical Engineering having
Class Roll No. 1757001 (Autonomy Roll No. 12617007050)
has completed *Summer Training* at JKB GAS PVT. LTD., Budge Budge
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

Prof. (Dr.) Sumanta Banerjee
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Kolkata, India

Ref. No.: HRIT/ME21/12

Date: 12.05.2021

This is to certify that Mr./Ms *Aditya Gupta*
of the Department of Mechanical Engineering having
Class Roll No. 1757002 (Autonomy Roll No. 12617007011)
has completed *Summer Training* at TATA STEEL LTD., Tatanagar
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sankar Nath Mukhopadhyay.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

Prof. Sankar Nath Mukhopadhyay
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Ref. No.: HRIT/ME21/13

Date: 12.05.2021

This is to certify that Mr./Ms *Rahul Maity*
of the Department of Mechanical Engineering having
Class Roll No. 1757004 (Autonomy Roll No. 12617007071)
has completed *Summer Training* at JKB GAS PVT. LTD., Budge Budge
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

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Ref. No.: HRIT/ME21/21

Date: 12.05.2021

This is to certify that Mr./Ms *Kumar Akash Nath*

of the Department of Mechanical Engineering having

Class Roll No. 1757005 (Autonomy Roll No. 12617007046)

has completed *Summer Training* at

TEGA INDUSTRIES LTD., Joka, Kolkata

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. (Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

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Ref. No.: HRIT/ME21/14

Date: 12.05.2021

This is to certify that Mr./Ms *Mihir Barnuwal*
of the Department of Mechanical Engineering having
Class Roll No. 1757009 (Autonomy Roll No. 12617007055)
has completed *Summer Training* at
HEAVY ENGINEERING CORPORATION LTD., Ranchi
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sankar Nath Mukhopadhyay.

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Ref. No.: HRIT/ME21/15

Date: 12.05.2021

This is to certify that Mr./Ms *Mohit Kumar Choudhary*

of the Department of Mechanical Engineering having

Class Roll No. 1757010 (Autonomy Roll No. 12617007057)

has completed *Summer Training* at

TATA STEEL LTD., Tatanagar

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Sankar Nath Mukhopadhyay.

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Ref. No.: HRIT/ME21/16

Date: 12.05.2021

This is to certify that Mr./Ms *Aayush Kumar Tiwary*
of the Department of Mechanical Engineering having
Class Roll No. 1757011 (Autonomy Roll No. 12617007004)
has completed *Summer Training* at
JKB GAS PVT. LTD., Budge Budge
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/17

Date: 12.05.2021

This is to certify that Mr./Ms *Aditi Singh*
of the Department of Mechanical Engineering having
Class Roll No. 1757012 (Autonomy Roll No. 12617007010)
has completed *Summer Training* at
JKB GAS PVT. LTD., Budge Budge
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/18

Date: 12.05.2021

This is to certify that Mr./Ms *Gishan Ali Mondal*

of the Department of Mechanical Engineering having

Class Roll No. 1757013 (Autonomy Roll No. 12617007043)

has completed *Summer Training* at

JKB GAS PVT. LTD., Budge Budge

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. (Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/22

Date: 12.05.2021

This is to certify that Mr./Ms *Sourav Guha*
of the Department of Mechanical Engineering having
Class Roll No. 1757017 (Autonomy Roll No. 12617007108)
has completed *Summer Training* at
JKB GAS PVT. LTD., Budge Budge
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/19

Date: 12.05.2021

This is to certify that Mr./Ms *Aditya Raj*
of the Department of Mechanical Engineering having
Class Roll No. 1757018 (Autonomy Roll No. 12617007012)
has completed *Summer Training* at
HEAVY ENGINEERING CORPORATION LTD., Ranchi
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sankar Nath Mukhopadhyay.

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Ref. No.: HRIT/ME21/20

Date: 12.05.2021

This is to certify that Mr./Ms *Soham Sinha*
of the Department of Mechanical Engineering having
Class Roll No. 1757020 (Autonomy Roll No. 12617007105)
has completed *Summer Training* at
TEGA INDUSTRIES LTD., Joka, Kolkata
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/31

Date: 17.05.2021

This is to certify that Mr./Ms *Soumabho Bagchi*
of the Department of Mechanical Engineering having
Class Roll No. 1757021 (Autonomy Roll No. 12617007095)
has completed *Summer Training* at TEGA INDUSTRIES LTD., Joka
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sankar Nath Mukhopadhyay

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Ref. No.: HRIT/ME21/32

Date: 17.05.2021

This is to certify that Mr./Ms *Anagh Bardhan*
of the Department of Mechanical Engineering having
Class Roll No. 1757023 (Autonomy Roll No. 12617007020)
has completed *Summer Training* at TEGA INDUSTRIES LTD., Joka
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Amal Kumar Roy

Prof. (Dr.) Sukanta Sarkar
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Ref. No.: HRIT/ME21/33

Date: 17.05.2021

This is to certify that Mr./Ms *Niladri Shekher Adhikary*
of the Department of Mechanical Engineering having
Class Roll No. 1757024 (Autonomy Roll No. 12617007062)
has completed *Summer Training* at TEGA INDUSTRIES LTD., Joka
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Amal Kumar Roy

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Ref. No.: HRIT/ME21/34

Date: 17.05.2021

This is to certify that Mr./Ms *Nishit Kumar Gha*

of the Department of Mechanical Engineering having

Class Roll No. 1757025 (Autonomy Roll No. 12617007063)

has completed *Summer Training* at TEGA INDUSTRIES LTD., Joka

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. (Dr.) Amal Kumar Roy

Prof. (Dr.) Sukanta Sarkar

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Ref. No.: HRIT/ME21/36

Date: 17.05.2021

This is to certify that Mr./Ms *Sahil Verma*
of the Department of Mechanical Engineering having
Class Roll No. 1757029 (Autonomy Roll No. 12617007087)
has completed *Summer Training* at HEAVY ENGINEERING
CORPORATION LIMITED
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Amal Kumar Roy

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Ref. No.: HRIT/ME21/38

Date: 17.05.2021

This is to certify that Mr./Ms *Yagnik Bandyopadhyay*
of the Department of Mechanical Engineering having
Class Roll No. 1757031 (Autonomy Roll No. 12617007124)
has completed *Summer Training* at TEGA INDUSTRIES LTD., Joka
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Amal Kumar Roy

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Ref. No.: HRIT/ME21/39

Date: 17.05.2021

This is to certify that Mr./Ms *Udayan Mahata*

of the Department of Mechanical Engineering having

Class Roll No. 1757032 (Autonomy Roll No. 12617007123)

has completed *Summer Training* at TEGA INDUSTRIES LTD., Joka

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. (Dr.) Amal Kumar Roy

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Ref. No.: HRIT/ME21/40

Date: 17.05.2021

This is to certify that Mr./Ms *Saharsh Jaiswal*

of the Department of Mechanical Engineering having

Class Roll No. 1757033 (Autonomy Roll No. 12617007086)

has completed *Summer Training* at TEGA INDUSTRIES LTD., Joka

during 1st May, 2020 to 31st May, 2020 under the guidance of

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Ref. No.: HRIT/ME21/43

Date: 17.05.2021

This is to certify that Mr./Ms *Manish Kumar*
of the Department of Mechanical Engineering having
Class Roll No. 1757037 (Autonomy Roll No. 12617007051)
has completed *Summer Training* at HEAVY ENGINEERING
CORPORATION LIMITED
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Amal Kumar Roy

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Prof. (Dr .) Amal Kumar Ray

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Ref. No.: HRIT/ME21/44

Date: 17.05.2021

This is to certify that Mr./Ms *Rajababu Rathore*

of the Department of Mechanical Engineering having

Class Roll No. 1757038 (Autonomy Roll No. 12617007074)

has completed *Summer Training* at HEAVY ENGINEERING
CORPORATION LIMITED

during 1st May, 2020 to 31st May, 2020 under the guidance of

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Ref. No.: HRIT/ME21/45

Date: 17.05.2021

This is to certify that Mr./Ms *Kuntal Chakraborty*
of the Department of Mechanical Engineering having
Class Roll No. 1757040 (Autonomy Roll No. 12617007049)
has completed *Summer Training* at TEGA INDUSTRIES LTD., Joka
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Amal Kumar Roy

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Ref. No.: HRIT/ME21/46

Date: 17.05.2021

This is to certify that Mr./Ms *Suraj Kumar*
of the Department of Mechanical Engineering having
Class Roll No. 1757041 (Autonomy Roll No. 12617007117)
has completed *Summer Training* at HEAVY ENGINEERING
CORPORATION LIMITED
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Amal Kumar Roy

Prof. (Dr.) Sukanta Sarkar

Prof. (Dr .) Amal Kumar Ray

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Ref. No.: HRIT/ME21/23

Date: 12.05.2021

This is to certify that Mr./Ms *Anish Kumar*
of the Department of Mechanical Engineering having
Class Roll No. 1757042 (Autonomy Roll No. 12617007021)
has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING LTD., Agarpara
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Amal Kumar Ray.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

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Ref. No.: HRIT/ME21/48

Date: 20.05.2021

This is to certify that Mr./Ms *Suraj Kumar Kedia.*
of the Department of Mechanical Engineering having
Class Roll No. 1757044 (Autonomy Roll No. 12617007118)
has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Dr. Jyotirmoy Saha.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

Prof. Dr. Jyotirmoy Saha.
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Ref. No.: HRIT/ME21/47

Date: 12.05.2021

This is to certify that Mr./Ms *Ankit Raj*
of the Department of Mechanical Engineering having
Class Roll No. 1757046 (Autonomy Roll No. 12617007023)
has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING LTD., Agarpara
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Jyotirmoy Saha.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

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Ref. No.: HRIT/ME21/52

Date: 20.05.2021

This is to certify that Mr./Ms *Abhishek Kumar.*

of the Department of Mechanical Engineering having
Class Roll No. 1757048 (Autonomy Roll No. 12617007007)

has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Dr. Jyotirmoy Saha.

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Ref. No.: HRIT/ME21/53

Date: 20.05.2021

This is to certify that Mr./Ms *Shubham Jee.*

of the Department of Mechanical Engineering having
Class Roll No. 1757049 (Autonomy Roll No. 12617007102)

has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Dr. Jyotirmoy Saha.

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Ref. No.: HRIT/ME21/54

Date: 20.05.2021

This is to certify that Mr./Ms *Kumar Shubham Mahato.*

of the Department of Mechanical Engineering having
Class Roll No. 1757050 (Autonomy Roll No. 12617007048)

has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Dr. Jyotirmoy Saha.

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HoD & Associate Professor

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Ref. No.: HRIT/ME21/57

Date: 20.05.2021

This is to certify that Mr./Ms. *Prateek Kumar.*

of the Department of Mechanical Engineering having
Class Roll No. 1757053 (Autonomy Roll No. 12617007067)

has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Dr. Jyotirmoy Saha.

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Ref. No.: HRIT/ME21/58

Date: 20.05.2021

This is to certify that Mr./Ms. *Riya.*
of the Department of Mechanical Engineering having
Class Roll No. 1757054 (Autonomy Roll No. 12617007081)
has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Dr. Jyotirmoy Saha.

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Prof. Dr. Jyotirmoy Saha.
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Ref. No.: HRIT/ME21/61

Date: 20.05.2021

This is to certify that Mr./Ms. *Rajesh Kumar.*

of the Department of Mechanical Engineering having
Class Roll No. 1757058 (Autonomy Roll No. 12617007076)

has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Dr. Jyotirmoy Saha.

Prof. (Dr.) Sukanta Sarkar
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Ref. No.: HRIT/ME21/62

Date: 20.05.2021

This is to certify that Mr./Ms. *Aashish Verma.*

of the Department of Mechanical Engineering having
Class Roll No. 1757059 (Autonomy Roll No. 12617007003)

has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Dr. Jyotirmoy Saha.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

Prof. Dr. Jyotirmoy Saha.
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Ref. No.: HRIT/ME21/63

Date: 20.05.2021

This is to certify that Mr./Ms. *Ishu Singh.*

of the Department of Mechanical Engineering having

Class Roll No. 1757060 (Autonomy Roll No. 12617007040)

has completed *Summer Training* at
TEXMACO RAIL & ENGINEERING. LTD.
Belgharia & Agarpara Works

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Dr. Jyotirmoy Saha.

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HoD & Associate Professor

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Ref. No.: HRIT/ME21/65

Date: 20.05.2021

This is to certify that Mr./Ms *Subham Saha*
of the Department of Mechanical Engineering having
Class Roll No. 1757063 (Autonomy Roll No. 12617007111)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. (Dr.) Jyotirmoy Saha

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HoD & Associate Professor

Prof. (Dr.) Jyotirmoy Saha
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Ref. No.: HRIT/ME21/67

Date: 20.05.2021

This is to certify that Mr./Ms *Md Asif Khan*
of the Department of Mechanical Engineering having
Class Roll No. 1757065 (Autonomy Roll No. 12617007052)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sovan Bhowmick

Prof. (Dr.) Sukanta Sarkar
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Prof. Sovan Bhowmick
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Ref. No.: HRIT/ME21/24

Date: 12.05.2021

This is to certify that Mr./Ms *Saptarshee Sarkar*

of the Department of Mechanical Engineering having

Class Roll No. 1757066 (Autonomy Roll No. 12617007093)

has completed *Summer Training* at

JKB GAS PVT. LTD., Budge Budge

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. (Dr.) Amal Kumar Ray.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

Prof. (Dr.) Amal Kumar Ray

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Ref. No.: HRIT/ME21/69

Date: 20.05.2021

This is to certify that Mr./Ms *Sagnik Mukherjee*
of the Department of Mechanical Engineering having
Class Roll No. 1757068 (Autonomy Roll No. 12617007085)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sovan Bhowmick

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Prof. Sovan Bhowmick
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Ref. No.: HRIT/ME21/71

Date: 20.05.2021

This is to certify that Mr./Ms *Chandan Kumar*
of the Department of Mechanical Engineering having
Class Roll No. 1757076 (Autonomy Roll No. 12617007032)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sovan Bhowmick

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Ref. No.: HRIT/ME21/71

Date: 20.05.2021

This is to certify that Mr./Ms *Chandan Kumar*
of the Department of Mechanical Engineering having
Class Roll No. 1757076 (Autonomy Roll No. 12617007032)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sovan Bhowmick

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Ref. No.: HRIT/ME21/72

Date: 20.05.2021

This is to certify that Mr./Ms *Souparno Mandal*
of the Department of Mechanical Engineering having
Class Roll No. 1757077 (Autonomy Roll No. 12617007107)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Sovan Bhowmick

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Ref. No.: HRIT/ME21/73

Date: 20.05.2021

This is to certify that Mr./Ms *Rahul Ranjan*
of the Department of Mechanical Engineering having
Class Roll No. 1757078 (Autonomy Roll No. 12617007072)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/74

Date: 20.05.2021

This is to certify that Mr./Ms *Nitesh Soni*
of the Department of Mechanical Engineering having
Class Roll No. 1757079 (Autonomy Roll No. 12617007064)
has completed *Summer Training* at JKB Gas Private Limited
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Ref. No.: HRIT/ME21/75

Date: 20.05.2021

This is to certify that Mr./Ms *Alik Das*
of the Department of Mechanical Engineering having
Class Roll No. 1757080 (Autonomy Roll No. 12617007016)
has completed *Summer Training* at JKB Gas Private Limited
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Ref. No.: HRIT/ME21/76

Date: 20.05.2021

This is to certify that Mr./Ms *Biswadeep Chatterjee*
of the Department of Mechanical Engineering having
Class Roll No. 1757081 (Autonomy Roll No. 12617007030)
has completed *Summer Training* at JKB Gas Private Limited
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Ref. No.: HRIT/ME21/77

Date: 20.05.2021

This is to certify that Mr./Ms *Debojyoti Roy*
of the Department of Mechanical Engineering having
Class Roll No. 1757082 (Autonomy Roll No. 12617007034)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/78

Date: 20.05.2021

This is to certify that Mr./Ms *Susnata Majumder*
of the Department of Mechanical Engineering having
Class Roll No. 1757083 (Autonomy Roll No. 12617007120)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/79

Date: 20.05.2021

This is to certify that Mr./Ms *Ankit Kumar Singh*
of the Department of Mechanical Engineering having
Class Roll No. 1757084 (Autonomy Roll No. 12617007022)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/80

Date: 20.05.2021

This is to certify that Mr./Ms *Shreyansh Deep*
of the Department of Mechanical Engineering having
Class Roll No. 1757085 (Autonomy Roll No. 12617007101)
has completed *Summer Training* at JKB Gas Private Limited
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Rajat Dutta

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Ref. No.: HRIT/ME21/81

Date: 20.05.2021

This is to certify that Mr./Ms *Aman Kumar*
of the Department of Mechanical Engineering having
Class Roll No. 1757086 (Autonomy Roll No. 12617007018)
has completed *Summer Training* at DAIKIN Air-Conditioning
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/25

Date: 12.05.2021

This is to certify that Mr./Ms *Nawab Ali Azad*

of the Department of Mechanical Engineering having

Class Roll No. 1757087 (Autonomy Roll No. 12617007060)

has completed *Summer Training* at

TATA STEEL LTD., Tatanagar

during 1st May, 2020 to 31st May, 2020 under the guidance of

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Ref. No.: HRIT/ME21/84

Date:17.05.2021

This is to certify that Mr. /Ms *Ravi Gupta*
Of the Department of Mechanical Engineering having
Class Roll No. 1757091(Autonomy Roll No. 12617007078)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/85

Date:17.05.2021

This is to certify that Mr. /Ms *Amit kumar Sinha*
Of the Department of Mechanical Engineering having
Class Roll No. 1757092(Autonomy Roll No. 12617007019)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/86

Date:17.05.2021

This is to certify that Mr. /Ms *Santanu Dey*
Of the Department of Mechanical Engineering having
Class Roll No. 1757093(Autonomy Roll No. 12617007090)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/87

Date:17.05.2021

This is to certify that Mr. /Ms *Abhishek Vidyarthi*
Of the Department of Mechanical Engineering having
Class Roll No. 1757094(Autonomy Roll No. 12617007009)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/88

Date:17.05.2021

This is to certify that Md. *Mohsin Raze*
Of the Department of Mechanical Engineering having
Class Roll No. 1757095(Autonomy Roll No. 12617007053)
has completed *Summer Training* at Tata Steel, Jamshedpur
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/89

Date:17.05.2021

This is to certify that Md. *Nadim Jauhar*
Of the Department of Mechanical Engineering having
Class Roll No. 1757096(Autonomy Roll No. 12617007054)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/90

Date:17.05.2021

This is to certify that Mr. /Ms *Ritavash Kunda*
Of the Department of Mechanical Engineering having
Class Roll No. 1757097(Autonomy Roll No. 12617007080)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/91

Date:17.05.2021

This is to certify that Mr. /Ms *Rahul Kumar*
Of the Department of Mechanical Engineering having
Class Roll No. 1757098(Autonomy Roll No. 12617007070)
has completed *Summer Training* at Skipper Limited, Uluberia
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Ref. No.: HRIT/ME21/26

Date: 12.05.2021

This is to certify that Mr./Ms *Abhishek Verma*
of the Department of Mechanical Engineering having
Class Roll No. 1757099 (Autonomy Roll No. 12617007008)
has completed *Summer Training* at
SKIPPER LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/93

Date:17.05.2021

This is to certify that Mr. /Ms *Jashbir Mahato*
Of the Department of Mechanical Engineering having
Class Roll No. 1757102(Autonomy Roll No. 12617007041)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Rajat Dutta.

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Ref. No.: HRIT/ME21/94

Date:17.05.2021

This is to certify that Mr. /Ms *Rishav Anand*
Of the Department of Mechanical Engineering having
Class Roll No. 1757106(Autonomy Roll No. 12617007079)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Ranajit Banerjee.

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Ref. No.: HRIT/ME21/95

Date:17.05.2021

This is to certify that Mr. /Ms *Aashiq Jamal*
Of the Department of Mechanical Engineering having
Class Roll No. 1757107(Autonomy Roll No. 12617007002)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Ranajit Banerjee.

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Ref. No.: HRIT/ME21/96

Date:17.05.2021

This is to certify that Mr. /Ms *Badsha Haque*
Of the Department of Mechanical Engineering having
Class Roll No. 1757108(Autonomy Roll No. 12617007029)
has completed *Summer Training* at Skipper Limited, Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Ranajit Banerjee.

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Ref. No.: HRIT/ME21/27

Date: 12.05.2021

This is to certify that Mr./Ms *Sandip Tirkey*
of the Department of Mechanical Engineering having
Class Roll No. 1757109 (Autonomy Roll No. 12617007089)
has completed *Summer Training* at
SKIPPER LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Ranojit Banerjee.

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Ref. No.: HRIT/ME21/28

Date: 12.05.2021

This is to certify that Mr./Ms *Prafull Raj*

of the Department of Mechanical Engineering having

Class Roll No. 1757110 (Autonomy Roll No. 12617007066)

has completed *Summer Training* at

SKIPPER LTD., Uluberia

during 1st May, 2020 to 31st May, 2020 under the guidance of

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Ref. No.: HRIT/ME21/29

Date: 12.05.2021

This is to certify that Mr./Ms *Satyam Tripathi*

of the Department of Mechanical Engineering having

Class Roll No. 1757111 (Autonomy Roll No. 12617007094)

has completed *Summer Training* at

SKIPPER LTD., Uluberia

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Ref. No.: HRIT/ME21/30

Date: 12.05.2021

This is to certify that Mr./Ms *Sagnik Maity*
of the Department of Mechanical Engineering having
Class Roll No. 1757112 (Autonomy Roll No. 12617007084)
has completed *Summer Training* at
SKIPPER LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/101

Date: 20.05.2021

This is to certify that Mr./Ms *Sudipta Nandi*
of the Department of Mechanical Engineering having
Class Roll No. 1757113 (Autonomy Roll No. 12617007114)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/102

Date: 20.05.2021

This is to certify that Mr./Ms *Abhijeet Raj.*
of the Department of Mechanical Engineering having
Class Roll No. 1757114 (Autonomy Roll No. 12617007006)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/103

Date: 20.05.2021

This is to certify that Mr./Ms *Nitin Singh.*
of the Department of Mechanical Engineering having
Class Roll No. 1757115 (Autonomy Roll No. 12617007065)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/104

Date: 20.05.2021

This is to certify that Mr./Ms *Anshuman Agarwal*.

of the Department of Mechanical Engineering having

Class Roll No. 1757117 (Autonomy Roll No. 12617007024)

has completed *Summer Training* at SKIPPER. LTD., Uluberia

during 1st May, 2020 to 31st May, 2020 under the guidance of

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Ref. No.: HRIT/ME21/105

Date: 20.05.2021

This is to certify that Mr./Ms *Durba Das.*
of the Department of Mechanical Engineering having
Class Roll No. 1757118 (Autonomy Roll No. 12617007036)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/106

Date: 20.05.2021

This is to certify that Mr./Ms *Navonil Basu.*
of the Department of Mechanical Engineering having
Class Roll No. 1757119 (Autonomy Roll No. 12617007059)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/107

Date: 20.05.2021

This is to certify that Mr./Ms *Faizan Firdaus.*

of the Department of Mechanical Engineering having

Class Roll No. 1757120 (Autonomy Roll No. 12617007037)

has completed *Summer Training* at SKIPPER. LTD., Uluberia

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Ref. No.: HRIT/ME21/108

Date: 20.05.2021

This is to certify that Mr./Ms *Siddhanta Saha.*
of the Department of Mechanical Engineering having
Class Roll No. 1757121 (Autonomy Roll No. 12617007104)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/109

Date: 20.05.2021

This is to certify that Mr./Ms *Ayan Lahiri.*
of the Department of Mechanical Engineering having
Class Roll No. 1757122 (Autonomy Roll No. 12617007028)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/110

Date: 20.05.2021

This is to certify that Mr./Ms *Krishnendu Adhikari.*
of the Department of Mechanical Engineering having
Class Roll No. 1757123 (Autonomy Roll No. 12617007045)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
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Ref. No.: HRIT/ME21/111

Date: 20.05.2021

This is to certify that Mr./Ms *Arunesh Tiwari.*
of the Department of Mechanical Engineering having
Class Roll No. 1757124 (Autonomy Roll No. 12617007026)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
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Ref. No.: HRIT/ME21/112

Date: 20.05.2021

This is to certify that Mr./Ms *Subhasmita Sur.*
of the Department of Mechanical Engineering having
Class Roll No. 1757125 (Autonomy Roll No. 12617007112)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/113

Date: 20.05.2021

This is to certify that Mr./Ms *Rajarshi Aich.*
of the Department of Mechanical Engineering having
Class Roll No. 1757126 (Autonomy Roll No. 12617007075)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/31

Date: 12.05.2021

This is to certify that Mr./Ms *Himanshu Sharma*

of the Department of Mechanical Engineering having

Class Roll No. 1757127 (Autonomy Roll No. 12617007039)

has completed *Summer Training* at

SKIPPER LTD., Uluberia

during 1st May, 2020 to 31st May, 2020 under the guidance of

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Ref. No.: HRIT/ME21/115

Date: 20.05.2021

This is to certify that Mr./Ms *Aakash Pal.*
of the Department of Mechanical Engineering having
Class Roll No. 1757130 (Autonomy Roll No. 12617007001)
has completed *Summer Training* at SKIPPER. LTD., Uluberia
during 1st May, 2020 to 31st May, 2020 under the guidance of
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Ref. No.: HRIT/ME21/33

Date: 12.05.2021

This is to certify that Mr./Ms *Nayan Deep*

of the Department of Mechanical Engineering having

Class Roll No. 1757131 (Autonomy Roll No. 12617007061)

has completed *Summer Training* at

DAMODAR VALLEY CORPORATION

during 1st May, 2020 to 31st May, 2020 under the guidance of

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HoD & Associate Professor

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Ref. No.: HRIT/ME21/32

Date: 12.05.2021

This is to certify that Mr./Ms *Tuhin Chatterjee*

of the Department of Mechanical Engineering having

Class Roll No. 1757132 (Autonomy Roll No. 12617007122)

has completed *Summer Training* at

HALDIA ENERGY LTD.

during 1st May, 2020 to 31st May, 2020 under the guidance of

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HoD & Associate Professor

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Ref. No.: HRIT/ME21/118

Date:12.05.2021

This is to certify that Mr./Ms. *Sayan Sarkar*

Of the Department of Mechanical Engineering having

Class Roll No. 1757133 (Autonomy Roll No. 12617007097)

has completed *Summer Training* at THERMAL POWER PLANT, HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Ranojit Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

Prof. Ranojit Banerjee

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Ref. No.: HRIT/ME21/119

Date:12.05.2021

This is to certify that Mr./Ms. *Kaustav Nandi*

Of the Department of Mechanical Engineering having

Class Roll No. 1757134 (Autonomy Roll No. 12617007044)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Ranojit Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

Prof. Ranojit Banerjee
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Ref. No.: HRIT/ME21/120

Date:12.05.2021

This is to certify that Mr./Ms. *Rahul Bajpai*

Of the Department of Mechanical Engineering having

Class Roll No. 1757136 (Autonomy Roll No. 12617007073)

has completed *Summer Training* at HALDIA ENERGY LTD., HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Ranojit Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

Prof. Ranojit Banerjee

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Kolkata, India

Ref. No.: HRIT/ME21/122

Date:12.05.2021

This is to certify that Mr./Ms. *Panini Paul*
Of the Department of Mechanical Engineering having
Class Roll No. 1757138 (Autonomy Roll No. 12617007079)
has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Ranojit Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

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Ref. No.: HRIT/ME21/123

Date:12.05.2021

This is to certify that Mr./Ms. *Aditya Rsj Sarkar*
Of the Department of Mechanical Engineering having
Class Roll No. 1757139 (Autonomy Roll No. 12617007013)
has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Ranojit Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

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Ref. No.: HRIT/ME21/124

Date:12.05.2021

This is to certify that Mr./Ms. *Yogesh Kumar Rajak*

Of the Department of Mechanical Engineering having

Class Roll No. 1757140 (Autonomy Roll No. 12617007125)

has completed *Summer Training* at HALDIA ENERGY LTD., HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof. Ranojit Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

Prof. Ranojit Banerjee

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Ref. No.: HRIT/ME21/125

Date:12.05.2021

This is to certify that Mr./Ms. *Goutam Nandi*

Of the Department of Mechanical Engineering having

Class Roll No. 1757141 (Autonomy Roll No. 12617007120)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

Prof. (Dr.) Sumanta Banerjee

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Kolkata, India

Ref. No.: HRIT/ME21/126

Date:12.05.2021

This is to certify that Mr./Ms. *Dipayan Paul*

Of the Department of Mechanical Engineering having

Class Roll No. 1757142 (Autonomy Roll No. 12617007119)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

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Ref. No.: HRIT/ME21/127

Date:12.05.2021

This is to certify that Mr./Ms. *Tanmoy Sadhukhan*

Of the Department of Mechanical Engineering having

Class Roll No. 1757143 (Autonomy Roll No. 12617007139)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

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Ref. No.: HRIT/ME21/128

Date:12.05.2021

This is to certify that Mr./Ms. *Faisal Mahfuz*

Of the Department of Mechanical Engineering having

Class Roll No. 1757144 (Autonomy Roll No. 12617007121)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

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Ref. No.: HRIT/ME21/129

Date:12.05.2021

This is to certify that Mr./Ms. *Aneesha Chakraborty*

Of the Department of Mechanical Engineering having

Class Roll No. 1757145 (Autonomy Roll No. 12617007114)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

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Ref. No.: HRIT/ME21/130

Date:12.05.2021

This is to certify that Mr./Ms. *Rainak Majumder*

Of the Department of Mechanical Engineering having

Class Roll No. 1757146 (Autonomy Roll No. 12617007122)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

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Prof. (Dr.) Sukanta Sarkar

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Ref. No.: HRIT/ME21/131

Date:12.05.2021

This is to certify that Mr./Ms. *Ankit Rajak*

Of the Department of Mechanical Engineering having

Class Roll No. 1757147 (Autonomy Roll No. 12617007117)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

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Ref. No.: HRIT/ME21/132

Date:12.05.2021

This is to certify that Mr./Ms. *Suwranshu Mukherjee*

Of the Department of Mechanical Engineering having

Class Roll No. 1757148 (Autonomy Roll No. 12617007137)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

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Ref. No.: HRIT/ME21/133

Date:12.05.2021

This is to certify that Mr./Ms. *Ritam Mukherjee*

Of the Department of Mechanical Engineering having

Class Roll No. 1757149 (Autonomy Roll No. 12617007123)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

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Ref. No.: HRIT/ME21/134

Date:12.05.2021

This is to certify that Mr./Ms. *Suwanakar Maity*

Of the Department of Mechanical Engineering having

Class Roll No. 1757150 (Autonomy Roll No. 12617007136)

has completed *Summer Training* at THERMAL POWER PLANT, CESC,
HALDIA

during 1st May, 2020 to 31st May, 2020 under the guidance of

Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

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Kolkata, India

Ref. No.: HRIT/ME21/135

Date:17.05.2021

This is to certify that Mr. /Ms *Sanjeev Kumar Singh*

Of the Department of Mechanical Engineering having

Class Roll No. 1757151(Autonomy Roll No. 12618007125)

has completed *Summer Training* at Kolaghat Thermal Power

Station, Mecheda during 1st May, 2020 to 31st May, 2020 under the

guidance of Prof.(Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/136

Date:17.05.2021

This is to certify that Mr. /Ms *Satyajit Bera*
Of the Department of Mechanical Engineering having
Class Roll No. 1757152(Autonomy Roll No. 12618007127)
has completed *Summer Training* at Kolaghat Thermal Power
Station, Mecheda during 1st May, 2020 to 31st May, 2020 under the
guidance of Prof.(Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/137

Date:17.05.2021

This is to certify that Mr./Ms *Ankit Kumar Sinha*
Of the Department of Mechanical Engineering having
Class Roll No. 1757153(Autonomy Roll No. 12618007116)
has completed *Summer Training* at Kolaghat Thermal Power
Station, Mecheda during 1st May, 2020 to 31st May, 2020 under the
guidance of Prof.(Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/138

Date:17.05.2021

This is to certify that Mr./Ms *Surya Nandan Kumar*

Of the Department of Mechanical Engineering having

Class Roll No. 1757154(Autonomy Roll No. 12618007135)

has completed *Summer Training* at Thermal Power

plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance

of Prof.(Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/139

Date:17.05.2021

This is to certify that Mr./Ms *Samir Roy*
Of the Department of Mechanical Engineering having
Class Roll No. 1757155(Autonomy Roll No. 12618007124)
has completed *Summer Training* at Kolaghat Thermal Power
Station, Mecheda during 1st May, 2020 to 31st May, 2020 under the
guidance of Prof.(Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/140

Date:17.05.2021

This is to certify that Mr./Ms *Sudip Maity*
Of the Department of Mechanical Engineering having
Class Roll No. 1757156(Autonomy Roll No. 12618007133)
has completed *Summer Training* at Thermal Power
plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/142

Date:17.05.2021

This is to certify that Mr./Ms *Sanjoy Prasad*
Of the Department of Mechanical Engineering having
Class Roll No. 1757159(Autonomy Roll No. 12618007126)
has completed *Summer Training* at Thermal Power
plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

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Kolkata, India

Ref. No.: HRIT/ME21/143

Date:17.05.2021

This is to certify that Mr./Ms *Swadesh Saha*
Of the Department of Mechanical Engineering having
Class Roll No. 1757160(Autonomy Roll No. 12618007138)
has completed *Summer Training* at Thermal Power
plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

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Ref. No.: HRIT/ME21/144

Date:17.05.2021

This is to certify that Mr./Ms *Soumyanath Nath*
Of the Department of Mechanical Engineering having
Class Roll No. 1757161(Autonomy Roll No. 12618007130)
has completed *Summer Training* at Kolaghat Thermal Power
Station, Mecheda during 1st May, 2020 to 31st May, 2020 under the
guidance of Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar
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Ref. No.: HRIT/ME21/145

Date:17.05.2021

This is to certify that Mr./Ms *Sayan Konar*
Of the Department of Mechanical Engineering having
Class Roll No. 1757162(Autonomy Roll No. 12618007129)
has completed *Summer Training* at Thermal Power
plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar
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Ref. No.: HRIT/ME21/146

Date:17.05.2021

This is to certify that Mr./Ms *Bidyut Sana*
Of the Department of Mechanical Engineering having
Class Roll No. 1757163(Autonomy Roll No. 12618007118)
has completed *Summer Training* at Thermal Power
plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

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Ref. No.: HRIT/ME21/147

Date:17.05.2021

This is to certify that Mr./Ms *Subrata Halder*
Of the Department of Mechanical Engineering having
Class Roll No. 1757164(Autonomy Roll No. 12618007132)
has completed *Summer Training* at Kolaghat Thermal Power
Station, Mecheda during 1st May, 2020 to 31st May, 2020 under the
guidance of Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

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Ref. No.: HRIT/ME21/148

Date:17.05.2021

This is to certify that Mr./Ms *Aditya Halder*
Of the Department of Mechanical Engineering having
Class Roll No. 1757165(Autonomy Roll No. 12618007113)
has completed *Summer Training* at Thermal Power
plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar
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Ref. No.: HRIT/ME21/149

Date:17.05.2021

This is to certify that Mr./Ms *Subarna Kumari*

Of the Department of Mechanical Engineering having

Class Roll No. 1757166(Autonomy Roll No. 12618007131)

has completed *Summer Training* at Kolaghat Thermal Power
plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar

HoD & Associate Professor

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Ref. No.: HRIT/ME21/150

Date:17.05.2021

This is to certify that Mr./Ms *Tanmoy Saha*
Of the Department of Mechanical Engineering having
Class Roll No. 1757168(Autonomy Roll No. 12618007140)
has completed *Summer Training* at Thermal Power
plant, Kolaghat during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

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Ref. No.: HRIT/ME21/151

Date:17.05.2021

This is to certify that Mr./Ms *Sayan Banerjee*
Of the Department of Mechanical Engineering having
Class Roll No. 1757169(Autonomy Roll No. 12618007128)
has completed *Summer Training* at Kolaghat Thermal Power
plant, Mecheda during 1st May, 2020 to 31st May, 2020 under the guidance
of Prof.(Dr.) Sumanta Banerjee.

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HoD & Associate Professor

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Ref. No.: HRIT/ME21/34

Date: 12.05.2021

This is to certify that Mr./Ms *Baptu Mondal*
of the Department of Mechanical Engineering having
Class Roll No. 1757170 (Autonomy Roll No. 12615007035)
has completed *Summer Training* at
CESC, Haldia
during 1st May, 2020 to 31st May, 2020 under the guidance of
Prof. Ranojit Banerjee.

Prof. (Dr.) Sukanta Sarkar
HoD & Associate Professor

Prof. Ranojit Banerjee
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Summer Internship Report on Solidworks

Presented By :

Akash Roy,

Mechanical Engineering, 3rd Year

Roll - 1757055

Acknowledgement

I am thankful to Dr. Sukanta Sarkar, HOD, Mechanical Engineering Department, Heritage Institute of Technology, Kolkata for giving me this opportunity to pursue the online one-month practical training at Internshala. The guidance and support and clarity received from him greatly helped me to carry out the project work.

I wish to express my profound sense of gratitude to Mr. Tayseer Aimatter, instructor, for thier delightful guidance and wise counsel which has enabled me to understand the topic of discussion and write this report.

I would also like to acknowledge my mentor Dr. Jyotirmoy Saha for the help he has rendered throughout the process.

I take this a my oppurtunity to express my whole hearted thanks to every other person involved in the process who made it possible to achieve the completion of this summer report with success.

Internshala



1. Introduction

Internshala is an internship platform, based out of Gurgaon, India. Founded by Sarvesh Agrawal, an IIT Madras alumnus, in 2010, the website helps students find internships with organisations in India.

2. Vision

Internshala is a dot com business with the heart of dot org. At the core of the idea is the belief that internships, if managed well, can make a positive difference to the student, to the employer, and to the society at large. Hence, the 2 ad-hoc culture surrounding internships in India should and would change. Internshala aims to be the driver of this change.

3. History

The platform started as a WordPress blog which aggregated internships across India and articles on education, technology and skill gap in 2010. The website was launched in 2013. Internshala launched its online trainings in 2014. The platform is used by 2.0 Mn + students and 70000+ companies.

4. Partnerships

- □ In August 2016, Telangana's not-for-profit organisation, Telangana Academy for Skill and Knowledge (TASK) partnered with Internshala to help students with internship resources and career services.
- In September 2016, Team Indus, Google XPRIZE shortlisted entity has partnered with Internshala for college outreach for its initiative, Lab2Moon.

5. Awards and Recognition

- In 2011, the website became a part of NASSCOM 10K Startups.
- In 2015, Internshala was a finalist in People Matters TechHR 2015 Spotlight Awards under 'Futurism in Recruitment' category.

6. PRODUCTS & SERVICES

Internshala offers following products & services to its users:

1. Internship posting: Organization & individuals looking to hire interns can post their internship requirement on Internshala. Currently this service is offered free of charge.
2. Internship search and application: Students from all over India can search and apply for internships and trainings relevant to their coursework and interest free of cost.
3. Internshala Trainings: Internshala offers a variety of online training programs across multiple disciplines (Web development, Java, Hacking) which students can join from the comfort of their homes and learn the skills needed in today's industry.
4. Advertisement: Internshala enjoys a very strong reach among students in campuses all over India and organizations looking to advertise their products, services, events and competitions to college students can avail of customized advertising solutions on various Internshala channels (Website, Newsletter, and Social Media).

DASSAULT SYSTÈMES



1. Introduction

Dassault Systèmes, "The 3DEXPERIENCE Company", is a French multinational software company that develops 3D design, 3D digital mock-up, and product lifecycle management (PLM) software. Bernard Charlès is the Vice Chairman, Chief Executive Officer. Dassault Systèmes develops and markets PLM software and services that support industrial processes by providing a 3D vision of the entire lifecycle of products from conception to maintenance. Dassault Systèmes customers are companies in the following industries: Aerospace & Defense, Architecture, Engineering and Construction, Consumer goods - distribution, FMCG - Distribution, Energy, and processes, Finance and Corporate Services, High Technology, Industrial Equipment, Life Sciences, Marine & Offshore, Natural Resources, and Transport & mobility. Dassault Systèmes has three sites as headquarters: one in Europe (VélizyVillacoublay, France), one in North America (Waltham, Massachusetts), and one in Asia

(Shanghai, China). Passion for Innovation is a corporate initiative which aims at harnessing Dassault Systèmes' technology for developing research, education, culture and arts.

2. Vision

Dassault Systèmes, the 3DEXPERIENCE Company, provides businesses and people with virtual universes to imagine sustainable innovations. Its 3DEXPERIENCE Platform leverages the Company's world-leading 3D software applications to transform the way products are designed, produced, and supported, enabling businesses to craft delightful customer experiences. With the 3DEXPERIENCE Platform, our customers create “social enterprises” that involve their customers in the innovation process. With its online architecture, the 3DEXPERIENCE environment helps businesses to test and evaluate — anywhere in the development lifecycle of a product or service — the eventual experience they will deliver to their customers. In short, 3DEXPERIENCE powers the next-generation capabilities that drive today's Experience Economy.

3. History

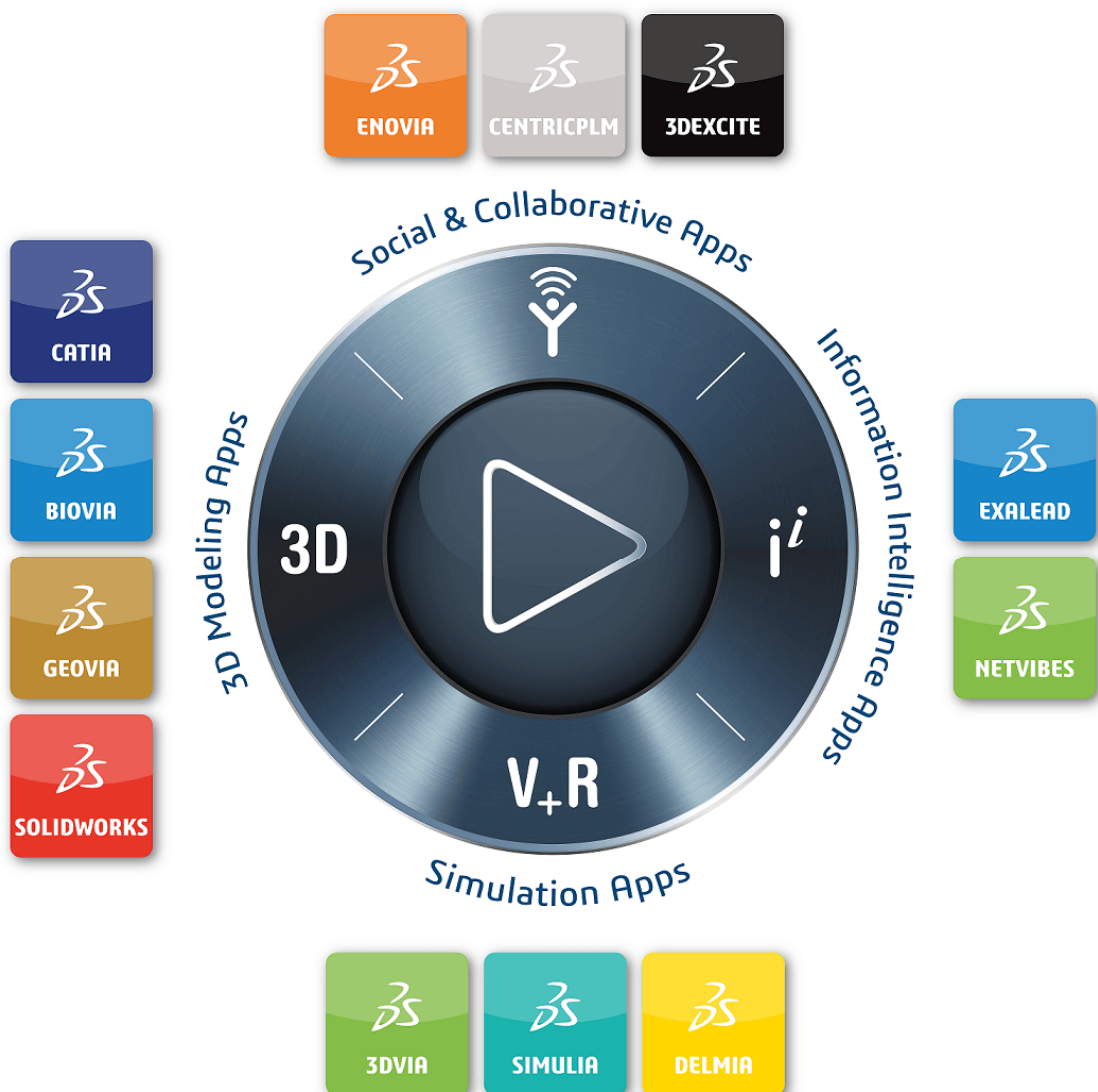
Dassault Systèmes is a subsidiary of the Dassault Group created in 1981 by Avions Marcel Dassault to develop a new generation of computer-aided design(CAD) software called CATIA. Dassault Systèmes moved its corporate headquarters from Suresnes to Velizy-Villacoublay in November 2008. This new European headquarters, located in the south-western suburbs of Paris, is commonly called 3DS Paris Campus. Another campus was established in 2011 in Waltham, Massachusetts, west of Boston (United States) and is called 3DS Boston Campus. Dassault Systèmes was a signatory to the French Small-Medium Enterprise business development Pact (SME Pact) in May 2008. Dassault Systèmes was incorporated in 1981 but in fact started in 1977 with 15 engineers from Avions Marcel Dassault - led by Francis Bernard, aircraft design engineer - who were in charge of providing support for the

aircraft building process. Dassault was one of the major clients of IBM in France; an agreement was negotiated for IBM to sell CATIA. Over the years, Dassault Systèmes improved its software and expanded to the US, Japan and Germany. This rapid growth triggered a chain of products, acquisitions, and partnerships beyond the company's core 3D CAD/CAM software and led to what is known today as Dassault Systèmes.

4. Products

- □ CATIA - The world's leading brand for product design and experience, was Dassault Systèmes's initial product. It is the PLM solution for 3D collaborative creation
- □ SolidWorks - SolidWorks products span 3D mechanical design software, simulation, product data management, and collaboration. They are used by companies in the machinery, medical, consumer, tool and die, electrical and power sectors, and by suppliers to the aerospace and automotive industries.
- □ DELMIA - DELMIA is the Company's PLM digital manufacturing software. It allows manufacturers to virtually define, plan, create, monitor and control all production processes, from the early process planning and assembly simulation to a complete definition of the production facility and equipment.
- ENOVIA - ENOVIA provides a framework for collaboration for Company's PLM software. It is an online environment that involves creators, collaborators and consumers in the product lifecycle.
- □ SIMULIA - SIMULIA automates standard simulation processes and can be deployed across any organization, distributing workload across the computing resources, and managing the simulation results to improve collaborative decision making.
- □ 3DVIA – It is a suite of products designed to help individuals across the enterprise to search, navigate and collaborate in 3D in real-time over the Internet. It enables users to deliver assembly procedures, technical illustrations, and marketing materials using 3D images and other 3D data that remain compatible with other products.

- □ EXALEAD – It is an infrastructure for search engines with search-oriented applications and Internet. Exalead is a global provider of information access software for the enterprise and the Web.
- □ NETVIBES – It provides intelligent dashboards to monitor and manage Web information in real-time.
- □ GEOVIA - It delivers solutions to model and simulate the planet, primarily to support mining.
- 3DSWYM - It is a social platform to share internal and external information.



Solidworks



1. Introduction

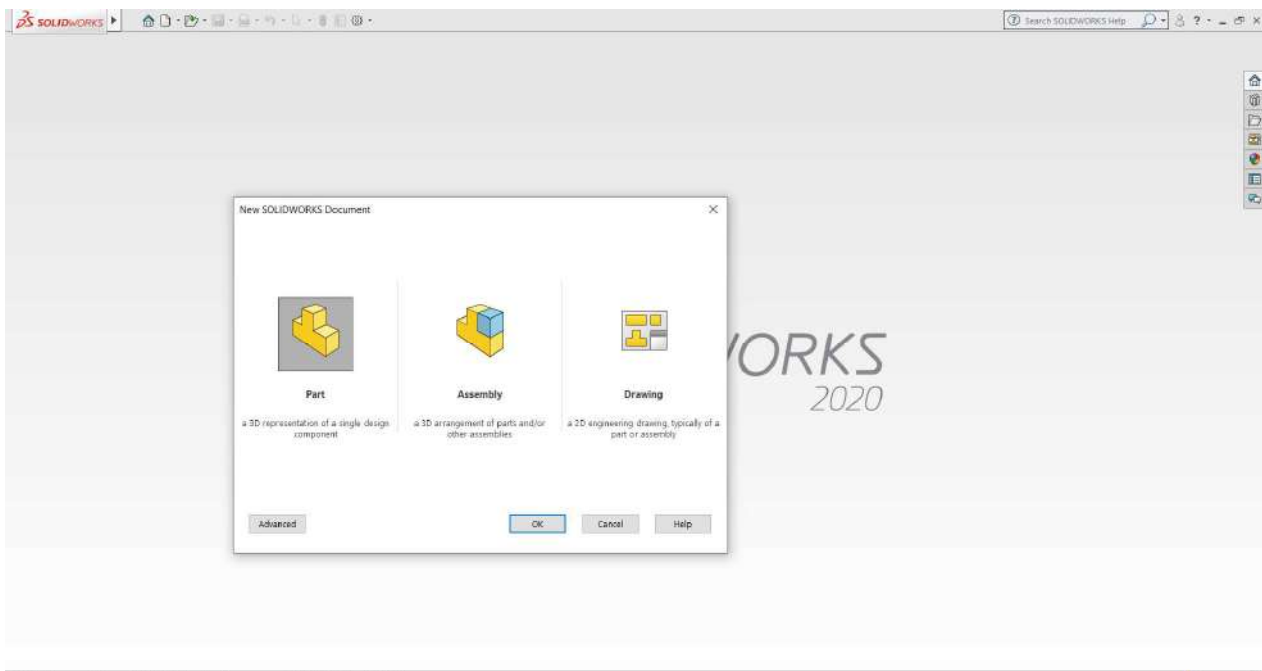
SolidWorks is a solid modeling computer-aided design (CAD) and computer-aided engineering (CAE) computer program that runs on Microsoft Windows. SolidWorks is published by Dassault Systèmes. More than 3,246,750 product designers and engineers worldwide, representing 240,010 organizations, use SOLIDWORKS to bring their designs to life—from the coolest gadgets to innovations that deliver a better tomorrow. Dassault Systèmes SOLIDWORKS Corp. offers complete 3D software tools that let you create, simulate, publish, and manage your data. SOLIDWORKS products are easy to learn and use and work together to help you design products better, faster, and more cost-effectively. The SOLIDWORKS focus on ease-of-use allows more engineers, designers and other technology professionals than ever before to take advantage

of 3D in bringing their designs to life. It is headquartered at Waltham, Massachusetts, USA. The latest version of Solidworks was released on 19th September, 2016 as Solidworks 2017. SolidWorks partners with third party developers to add functionality in niche market applications like finite element analysis, circuit layout, tolerance checking, etc. SolidWorks has also licensed its 3D modeling capabilities to other CAD software vendors, notably ANVIL.

2. History

SolidWorks Corporation was founded in December 1993 by Massachusetts Institute of Technology graduate Jon Hirschtick. Hirschtick used \$1 million he had made while a member of the MIT Blackjack Team to set up the company. Initially based in Waltham, Massachusetts, United States, Hirschtick recruited a team of engineers with the goal of building 3D CAD software that was easy-to-use, affordable, and available on the Windows desktop. Operating later from Concord, Massachusetts, SolidWorks released its first product SolidWorks 95, in November 1995. In 1997 Dassault, best known for its CATIA CAD software, acquired SolidWorks for \$310 million in stock.[5] Jon Hirschtick stayed on board for the next 14 years in various roles. Under his leadership, SolidWorks grew to a \$100 million revenue company. SolidWorks currently markets several versions of the SolidWorks CAD software in addition to eDrawings, a collaboration tool, and DraftSight, a 2D CAD product. SolidWorks was headed by John McEleney from 2001 to July 2007 and Jeff Ray from 2007 to January 2011. The current CEO is Gian Paolo Bassi from Jan 2015. Gian Paolo Bassi replaces Bertrand Sicot, who is promoted Vice President Sales of Dassault Systèmes' Value Solutions sales channel.

1. THE SOLIDWORKS MODEL

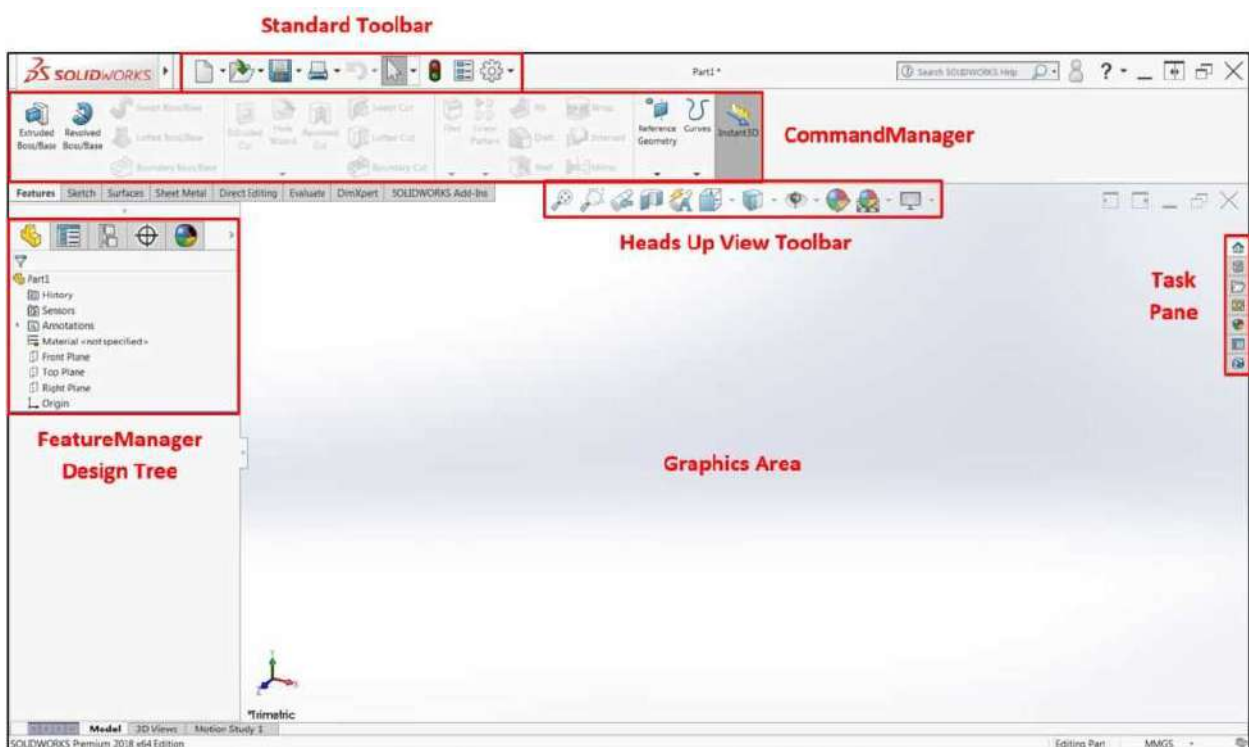


The SolidWorks model is made up of:

- Parts - 2D design (Sketch), 3D design (Features) , Part design consider in the part design section
- Assemblies - Assembling of two or more than two parts consider in this section.
- Drawings - Designing with standards is consider in the drawing section

2. Solidworks User Interface

The interface is native Windows interface, and such behaves in the same manner as other Windows applications



- Menus:
 1. It provides access to all commands that the Solid Works offers.
 2. When a menu item has a right pointing arrow, it means there is a sub-menu associated with the choice,

3. When a menu item is followed by a series of dots, it means that option opens a dialog box with additional choices or information

- **Toolbar Menus:**

1. Provide shortcuts enabling to quickly access the most frequently used commands.
2. They are organized according to function and can be customized, removed and rearranged according to your preferences.

- **Feature Manager Design Tree:**

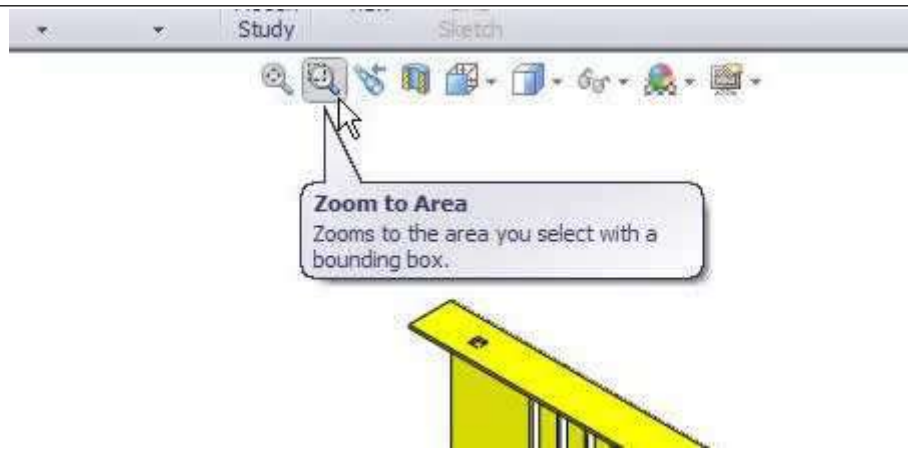
1. It is located on the left side of the Solid Works Graphic window.
2. It displays the details chronological sequence on how all the parts, assembly and drawing are created.
3. It allows access to do editing of the models.

- **The Feature Manager Design Tree makes it easy to:**

1. Select items in the model by name.
2. Identify and change the order in which features are created. You can drag items in the Feature Manager Design tree list to reorder them. This changes the order in which features are regenerated when the model is rebuilt.
3. Display the dimensions of a feature by double-clicking the feature's name.
4. Rename items by slowly clicking two times on a name to select it and then entering a new name.
5. Suppress and Unsuppressed part features and assembly components.

The Property Manager appears on the Property Manager tab in the panel to the left of the graphics area. It opens when you select entities or commands defined in the Property Manager.

- **The View Toolbar:**



The View toolbar provides tools for manipulating Solid Works parts, drawings, and assemblies.

Icon	Description
Zoom to Fit	rescales the view so the entire part, drawing, or assembly is visible.
Zoom to area	<p>Zooms in on a portion of the view that you select by creating a Bounding box.</p> <ol style="list-style-type: none"> 1. Place the cursor where you want the one corner of the box to be. 2. Drag the cursor diagonally to the opposite corner of the bounding Box. 3. Release the cursor. The image enlarges proportionally to the size of the bounding box. 4. To resize the image back to fit the screen, select Zoom to Fit.
Zoom In/Out	<p>dynamically changes the scale of the image.</p> <ol style="list-style-type: none"> 1. To enlarge the image, Press the left mouse button and drag upward.

2. To reduce the image: Press the left mouse button and drag downward.

Rotate View

Dynamically turns the part or assembly image around a view center As you move the mouse. (Not for drawings.)

- To rotate the image on a vertical axis: Move the mouse left to right
- To rotate the image on a horizontal axis: Move the mouse up and down.
- To rotate the image diagonally: Move the mouse diagonally.

Pan

Dynamically moves the image. Press and hold the left mouse button while moving the cursor around on the screen.

Hidden Lines

Displays only those lines that are visible at the angle the model is

Removed

rotated. Obscured lines are removed.

Perspective

Displays a perspective view of the model. A perspective view is the most normal view as seen by the eye or a camera. Parallel lines recede into the distance to a vanishing point. Perspective maybe used in combination with any of the view modes.

3. 2D SKETCHING

➤ **Sketching:** Sketching is the act of creating 2-dimensional profile comprised of wire frame geometry. Sketches are used for all sketched feature in Solid Works including:

- Extrusions
- Sweep
- Revolve
- Loft

Process of completing the sketches:

1. Starting a New part (It can be created in inch, millimetre or other units)
2. Sketches (Collections of 2D geometry that are used to create solid features)
3. Sketch Entities/Geometry (Types of 2D geometry such as lines, circles and rectangles that make up the sketch)
4. Sketch Relations (Geometric relationships such as horizontal and vertical are applied to the sketch entities. The relations restrict the movement of the entities)
5. State of the sketch (Each sketch has a status that determines whether it is ready to be used or not. The state can fully-, under- or over defined)
6. Sketch tools (Tools can be used to modify the sketch geometry that has been created/ this often involves the trimming or extension of the entities)
7. Extruding the sketch (Extruding uses the 2D sketch to create a 3D solid feature)

➤ **Sketch Entities/Geometry:**

Solid Works offers a rich variety of sketch tools for creating profile geometry such as:

- Line
- Circle
- Center Point Arc
- 3 point arc
- Tangent arc
- Ellipse
- Partial ellipse
- Parabola
- Spline
- Polygon
- Rectangle

- Parallelogram
- Point
- Center-line

4. Sketch Relations

The following table describes the entities that you can select for a relation and the characteristics of the resulting relation.

Relation	Entities to select	Resulting relations
Horizontal or Vertical	One or more lines or two or two or more points	The lines become horizontal or vertical as defined by the current sketch space. Points are aligned horizontally or vertically
Co-linear	Two or more lines	The items lie on the same infinite line
Cordial	Two or more arcs	The items share the same center point and radius
Perpendicular	Two lines	The two items are perpendicular to each other.
Parallel	Two or more lines A line and a plane (or a planar face) in a 3D Sketch	The items are parallel to each other. The line is parallel to selected plane.
Tangent	An arc, ellipse, or spline, and a line or arc.	The two items remain tangent

Concentric

Two or more arcs, or a point and an arc.

The arcs share the same center point.

Midpoint

Two lines or a point and a line

The point remains at the midpoint of the line

Intersection

Two lines and one point

The point remains at the intersection of the lines

Coincident

A point and a line, arc or ellipse

The point lies on the line, arc or ellipse

Equal

Two or more lines or two or more arcs

The line lengths or radii remain equal

Symmetric

A centerline and two points, lines, arcs or ellipses

The items remain equidistant from the centerline on a line perpendicular to the centerline.

Fix

Any entity

The entity's size and location are fixed. However, the end points of a fixed line are free to move along the infinite line that underlies it. Also, the

endpoints of an arc or elliptical segment are free to move along the underlying full circle or ellipse.

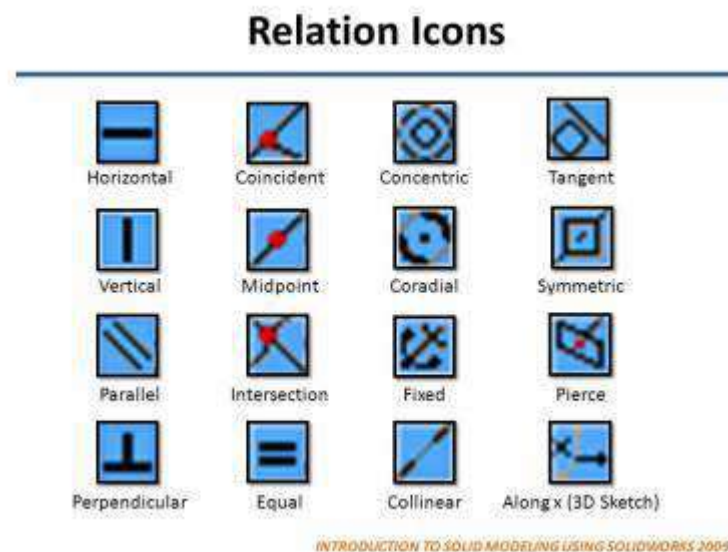
of an arc or elliptical free to move full circle or

Merge Points

Two sketch points or end points.

The two points are merged into a single point.

A line may be constrained vertically or horizontally. Once the line is drawn horizontally, it will remain horizontal unless the relation is removed. The line can be repositioned and resized but must remain horizontal.



The Sketch Tools toolbar and the Tools, Sketch Tools menu provide the following tools:

Convert Entities creates one or more curves in a sketch by projecting an edge, loop, face, external sketch curve, external sketch contour, set of edges, or set of external sketch curves onto the sketch plane. (Available in an active part or assembly document only).

Mirror creates copies of sketch elements by mirroring them around a centerline. When you create mirrored elements, a symmetric relation is applied between corresponding pairs of sketch points (the ends of mirrored lines, the centers of arcs, and so on). If you change a mirrored element, its mirror image also changes.

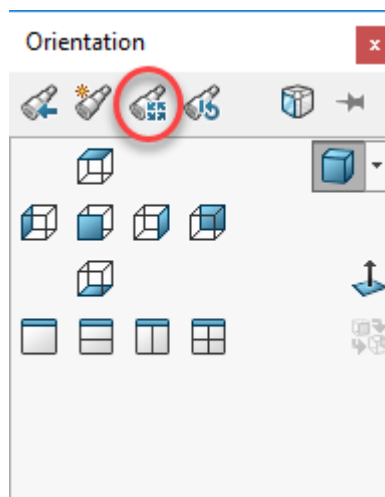
Fillet creates a tangent arc at the intersection of two sketch elements, trimming away the corner.

Offset Entities creates sketch curves offset from a selected model edge, loop, face, external sketch curve, external sketch contour, set of edges, or set of external sketch curves by a specified distance. An offset entity relation is created between each original entity and the corresponding sketch curve. If the entity changes, when you rebuild the model the offset curve also changes. (Available in an active part or assembly document only).

Trim/Extend trims or extends a sketch element.

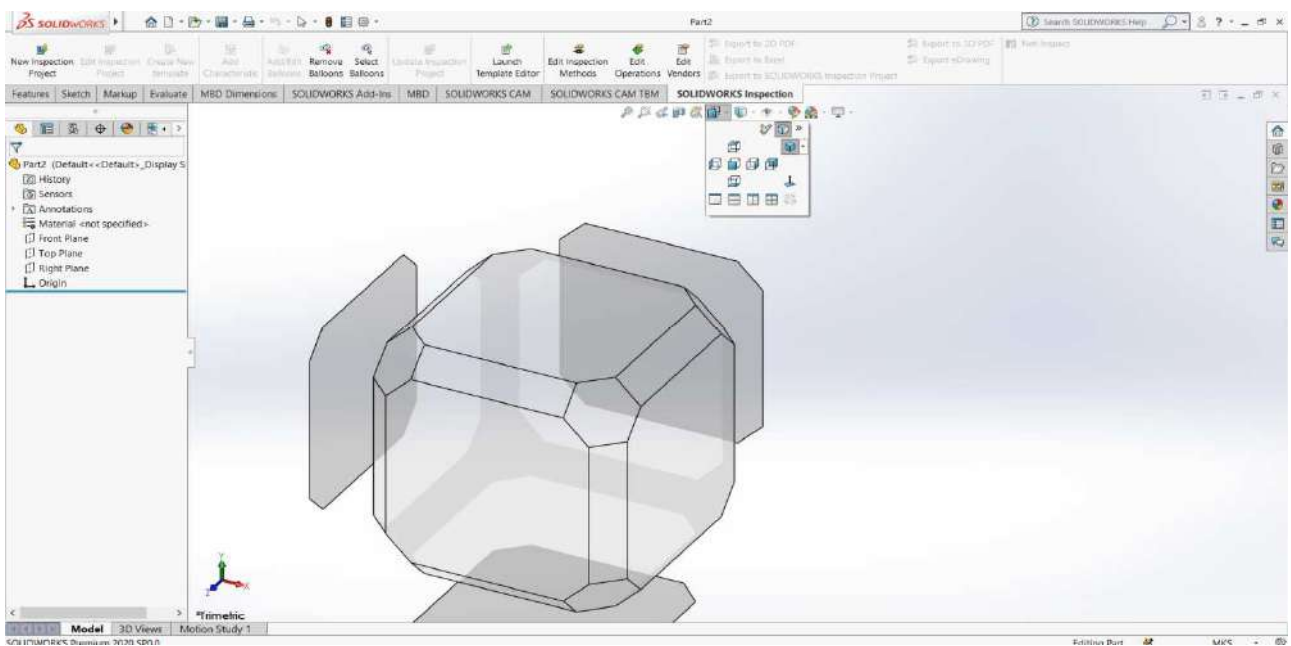
5. View Orientations

It helps to Change the view display to correspond to one of the standard view orientations.

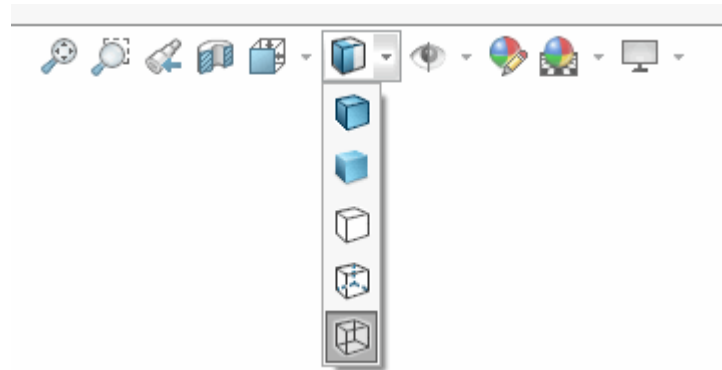


To select a view, do one of the following:

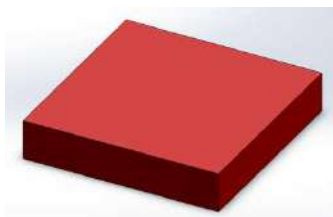
- Click View Orientation (Heads-up View toolbar), and select a view orientation.
- Click a view orientation on the Standard Views toolbar.
- Double-click a view orientation in the Orientation dialog box



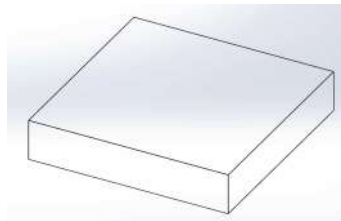
6. View Display Style



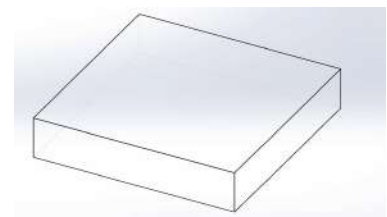
You can display drawing views in the following modes, from either the View toolbar or in the view PropertyManager:



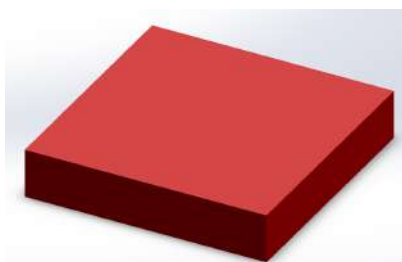
Shaded with edges



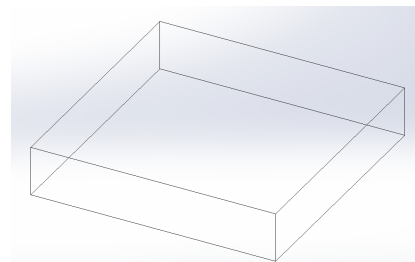
Hidden lines removed



Hidden lines visible

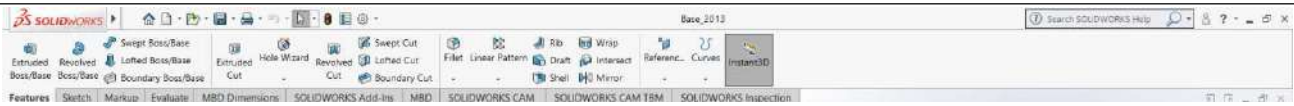


Shaded



Wireframe

7. Creating Features:



Features are the individual shapes that, when combined, make up the part. You can also add some types of features to assemblies. Some features originate as sketches; other features, such as shells or fillets, are created when you select the appropriate menu command and define the dimensions or characteristics that you want. This chapter describes the following:

- Base, Boss, and Cut
- Extrude, Revolve, Sweep, and Loft
- Fillet/Round, Chamfer, and Draft
- Hole - Simple and Hole Wizard
- Shell
- Rib
- Dome
- Pattern - Circular, Linear, and Mirror
- Curve
- Surface

➤ **Extrude**

Extrude extends the sketched profile of a feature in one or two directions as either a thin feature or a solid feature. An extrude operation can either add material to a part (in a base or boss) or remove material from a part (in a cut or hole).

➤ **Cut**

A cut is a feature which removes material from a part or an assembly. A cut may be created by Extrude, Sweep, Revolve, or Loft (from one or more sketches), or Thicken or cut With Surface (from a surface).

➤ **Fillet/Round**

Fillet/Round creates a rounded internal or external face on the part. You can fillet all edges of a face, selected sets of faces, selected edges, or edge loops. In general, it is best to follow these rules when making fillets:

- Add larger fillets before smaller ones. When several fillets converge at a vertex, create the larger fillets first.
- Add drafts before fillets. If you are creating a molded or cast part with many filleted edges and drafted surfaces, in most cases you should add the draft features before the fillets.
- Save cosmetic fillets for last. Try to add cosmetic fillets after most other geometry is in place. If you add them earlier, it takes longer to rebuild the part.
- To enable a part to rebuild more rapidly, use a single Fillet operation to treat several edges that require equal radius fillets. Be aware however, that when you change the radius of that fillet, all the fillets created in the same operation change.

➤ **Chamfer**

Chamfer creates a beveled edge on the selected edges and/or faces.

➤ **Draft**

Draft tapers faces using a specified angle to selected faces in the model, to make a molded part easier to remove from the mold. You can insert a draft in an existing part or draft while extruding a feature. You can draft using either a neutral plane or a parting line.

➤ **Hole**

Hole creates various types of hole features in the model. You place a hole on a planar face, then specify its location by dimensioning it afterwards.

- Simple - Places a circular hole of the depth you specify.
- Wizard - Creates holes with complex profiles, such as Counter bore or Countersunk.

In general, it is best to create holes near the end of the design process. This helps you avoid inadvertently adding material inside an existing hole.

➤ **Dome**

You can add a dome feature to any model face that has a circular, elliptical, or four-sided boundary. A four-sided boundary need not be rectangular, and each side may consist of a single segment or a set of tangent segments.

➤ **Mirror**

Mirror Feature creates a copy of a feature (or features), mirrored about a plane. You can either use an existing plane or create a new one. If you modify the original feature, the mirrored copy is updated to reflect the changes.

➤ **Revolved Feature**

Revolved Boss/Base – material added by rotating the profiles about a centerline

Revolved Cut – material removed by rotating the sketch

➤ **Swept**

Swept Boss/Base – material added by sweeping a profile along the path

Cut Sweep – material removed by sweeping a profile along the path

➤ **Lofted**

Loft creates a feature by making transitions between profiles. A loft can be a base, boss, cut, or surface. You create a loft using two or more profiles. Only the first, last, or first and last profiles can be points. All sketch entities, including guide curves and profiles, can be contained in a single 3D sketch.

➤ **Rib**

Rib is a special type of extruded feature created from open or closed sketched contours. It adds material of a specified thickness in a specified direction between the contour and an existing part. You can create a rib using single or multiple sketches.

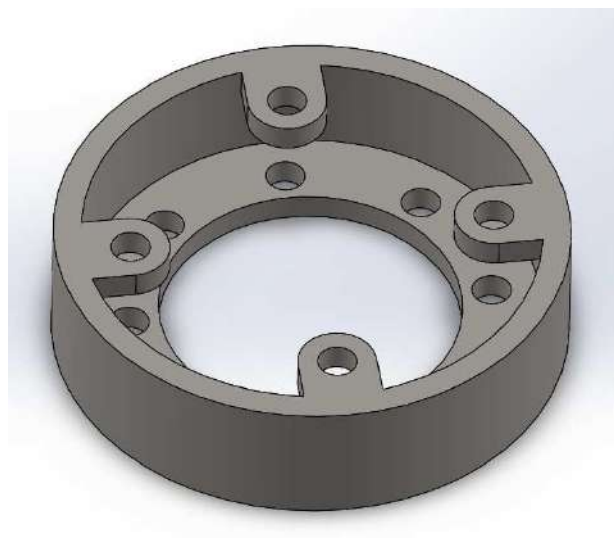
1. Sketch L shape and extrude the sketch
2. Sketch a Line to use as the rib feature on a plane
3. . Click Rib on the Features toolbar, or click Insert, Features, Rib.

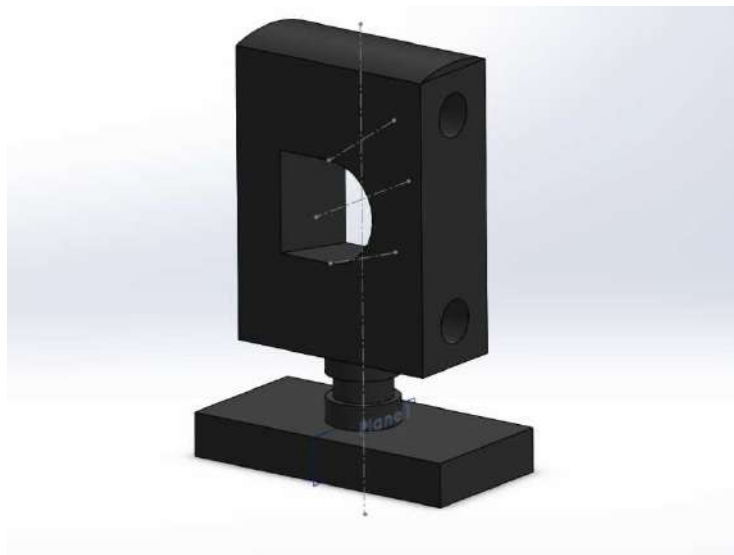
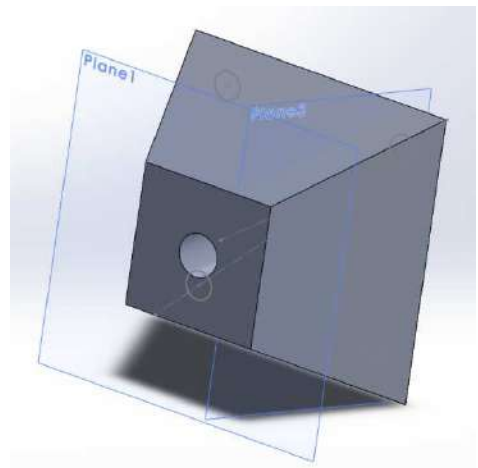
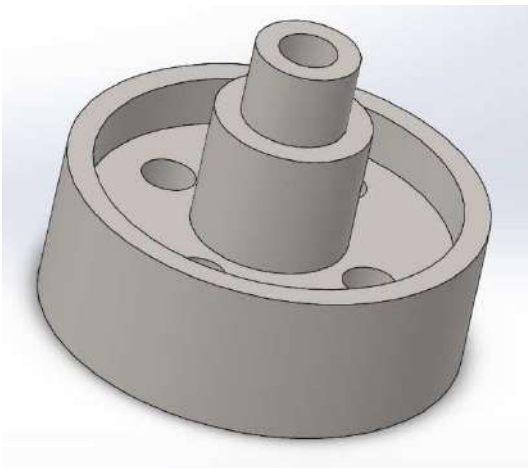
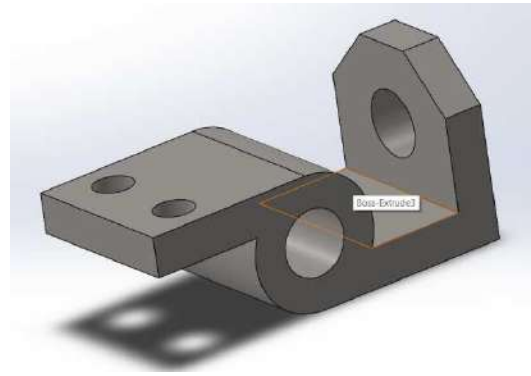
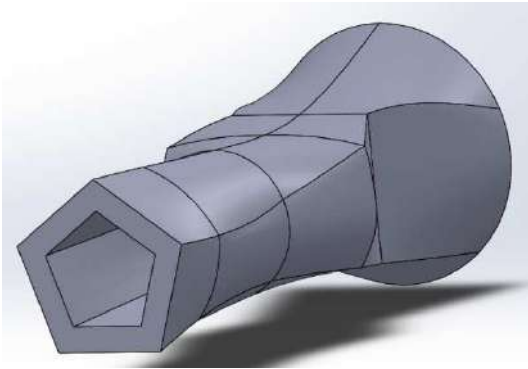
4. . Click OK

➤ **Shell**

Shell tool hollows out a part, leaves open the faces you select, and creates thin walled features on the remaining faces. If you do not select any face on the model, you can shell a solid part, creating a closed, hollow model. You can also shell a model using multiple thicknesses.

Some Drawings:



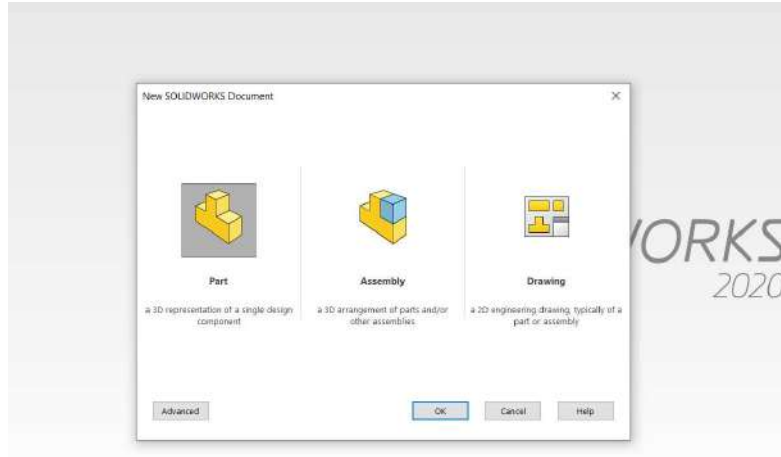


8. Assembly Modeling:

➤ **Stages in the process**

i. Creating a new assembly

New assemblies are created using the same method as new parts



ii. Adding the first component

Components can be added in several ways. They can be dragged and dropped from an open part window or opened from standard browser.

iii. Position of the first component

The initial component added to the assembly is automatically fixed as it is added. Others components can be positioned after they are added.

iv. Mating components to each other

Mates are used to position and orient components with reference to each other. Mates remove degrees of freedom from the components.

v. Sub Assemblies

Assemblies can be created and inserted into the current assembly. They are considered sub-assembly components

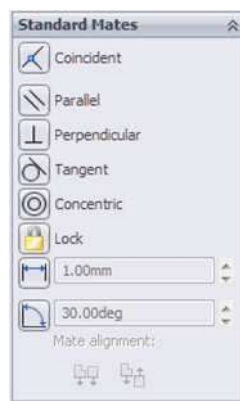
➤ **Assembly toolbars**

- Insert components

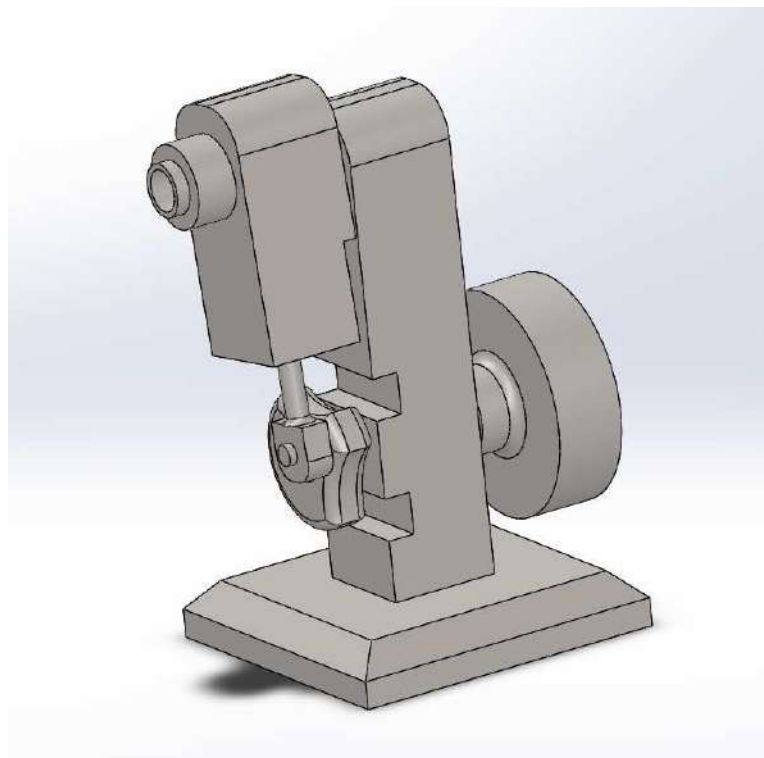
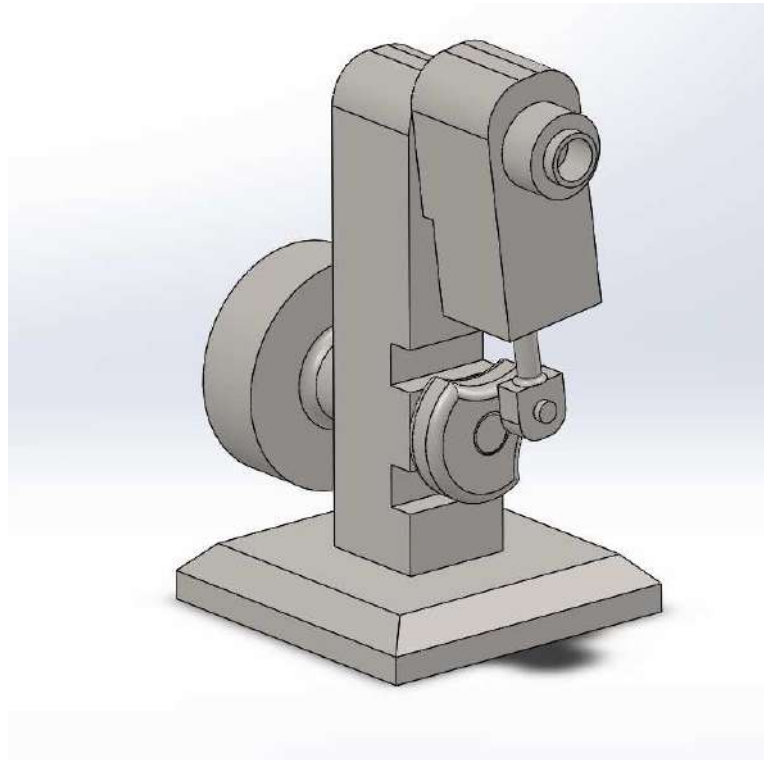
- Hide/show components
- Change suppression state
- Edit component
- No external references
- Mate
- Move component
- Smart fasteners
- Exploded view
- Explode line sketch
- Interference detection
- Simulation

➤ **Basic Assembly mates**

- Coincident – place two flat surfaces in the same Plane
- Parallel – define two flat surfaces as parallel
- Perpendicular – define two lines or planes as perpendicular to one another
- Tangent – defines a cylindrical feature as tangent to a line or plane
- Concentric – align the centerlines of two cylindrical features
- Distance – make two surfaces parallel, with a specified distance between them
- Angle – two lines or planes at a preset angle to one another



Some Assembly Drawings:



Here is the attached copy of the training certificate that I recieved from Internshala



SOLIDWORKS
Training - Certifica

