L T				C
	0	0	2	1
OBJECTIVES:				
Learn about the fundamentals of industrial automation and robotics.				
Understand the concepts of interpolations in robotics.				
Gain knowledge in the robotic application developments.				
COURSE OUTCOMES:				
At the end of this course, the students will be able to				
CO1: recognize the types of robots and applications.				
CO2: Establish 2D and 3D object interpolations.				
CO3: Develop application oriented industrial robotics.				

Introduction to Industrial Robotics-Types, Anatomy, Applications, Introduction to MOTOSIM EG, Addition of End Effector to Robot. Introduction to Interpolation - Types of Interpolation- 2D object using different types of Interpolation-Applications. 3D object-Application development of 3D object, Co-Ordinate system. Working with Timers, Jump, IF condition- Industrial application development – Conveyor Tracking Method. (10)

Introduction to Industrial Robotics - Types of Industrial Robotics- Anatomy of Industrial Robotics -Application of Industrial Robotics - Introduction to Motosim EG - Adding Robot from Library -Teaching for 3D object - Application development of 3D object teaching - Introduction to Co-ordinate System - Different types of Coordinate system. (10)

Adding End Effecter to Robot - Introduction to Interpolation - Different types of Interpolation -Teaching for 2D object using different types of Interpolation - Applications on 2D object teaching -Working with Timers - Working with Jump - Working with If Condition - Industrial applicationDevelopment - Conveyer Tracking Method.(10)

Hardware Training & Assessment

TOTAL : L: 30 = 30 PERIODS

TEXT BOOKS:

 Kaushik Kumar, B. Sridhar Babu "Industrial Automation and Robotics Techniques and Applications" 1st Edition, 2023.

A. K. Gupta, S. K. Arora, J.R.Westcott "Industrial Automation and Robotics: An Introduction Hardcover" Mercury Learning & Information; Har/Cdr edition (1 February 2013)

 Khushdeep Goyal, Deepak Bhandari, "Automation and Robotics" S.K. Kataria & Sons, 2nd Edition, 2023.

REFERENCE BOOKS:

- Maki K Habib "Advanced Robotics and Intelligent Automation in Manufacturing Paperback" Business Science Reference IGI Global, Disseminator of Knowledge, Hershey, PA 17033 USA, 2nd Edition, 2019.
- R. K. Rajput, "Robotics And Industrial Automation" S. Chand and Company Limited, 2008.
- 3. Mikell P Groover, "Industrial Automation and Robotics" Mcgraw-hill Inc Hammond,

N. U.S.A. ISBN 10: 0072325232 / ISBN 13: 9780072325232 June 13, 2005.



PRINCIPAL Nandha Engineering College (Autonomous) Erode 638 052.



Ph: 04294 - 225585, 223711

e-mail: info@nandhaengg.org

Thiru V. SHANMUGAN Chairman Sri Nandha Educational Trust

Thiru S. NANDHAKUMAR PRADEEP Secretary Sri Nandha Educational Trust

NANDHA ENGINEERING COLLEGE (Autonomous) ERODE - 638 052. TAMILNADU

DEPARTMENT OF MECHANICAL ENGINEERING

Thiru S. THIRUMOORTHI Secretary Nandha Educational Institutions

INVITATION

The Management, Principal, Staff and Student members of **Mechanical Engineering Association**

Cordially invite you for the

VALUE ADDED COURSE ON 17MEI08 (VCAC - 01) - Advanced Industrial **Automation & Robotics**

Mr. S. Sudhakar Mr. M. Nagarjun Mr. G. Ruthra Kumaran Senior Business Development & Application Engineer **Axis Global Institute of Industrial Training (AGIIT)** Coimbatore

Date: 26th, 27th & 28th Nov 2022

Time: 09.30 A.M - 05:00 P.M

Target Audience: III Yr Mechanial Engineering Students

Venue NEC - Conference Hall & CAD Lab & Axis Global Industry







Website : http://nandhaengg.org

Dr. S. Arumugam, PhD., CEO - Nandha Educational Institutions

Dr. N. Rengarajan, PhD., Principal - Nandha Engineering College

Dr. J. Senthil, PhD., Director - Nandha Tech Campus

Dr. M. Easwaramoorthi, PhD., Head of the Department

Dr. N. Senniangiri, PhD., Centre for Value Added Course Incharge

ORGANISING TEAM

Dr. Easwaramoorthi M Dr. Muthukumar M Dr. Ashok Kumar B Dr. Magibalan S Dr. Manikandan M Mr. Loganathan V N Mr. Shanmugam M Mr. Sengottaiyan M Mr. Eswaran S Mr. Muruganantham S Mr. Mohamed Ajmal Mahasin M Mr. Ravichandran D Mr. Velliyangiri B Mr. Arjun Raj R Mr. Balakrishnan S Mr. Omprakas M A Mr. Venkateshan T Mr. Rajkumar R Mr. Vishnu A Mr. Murugapandian G S



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52

DEPARTMENT OF MECHANICAL ENGINEERING

17MEI08 – Advanced Industrial Automation & Robotics

One Credit Course Students Name List (ODD Semester 2022-2023)

Batch: 2020 - 2024

Degree: B.E.

Branch : Mechanical Engineering

Year/Semester: III/V

S.No.	Reg.No	Name
1	20ME001	Arunprasanth K
2	20ME002	Ashoksri S
3	20ME006	Gowtham M
4	20ME007	Gunaseelan P
5	20ME011	Jai Dharson B
6	20ME013	Karthi T
7	20ME014	Kavin Adithya A M
8	20ME015	Kavin Kumar A
9	20ME016	Kavin V
10	20ME017	Logananthan A
11	20ME021	Merlin Abinaya D V
12	20ME024	Naveen Kumar S
13	20ME025	Nithishkumar M
14	20ME026	Prathish A R
15	20ME027	Pugazhenthi V
16	20ME030	Santhanakrishnan A
17	20ME032	Santhosh R
18	20ME034	Sasikumar P
19	20ME037	Stephen Ponraj J
20	20ME038	Sukant O P

S.No.	Reg.No	Name		
21	20ME042	Varun K R		
22	20MEL01	Ajayprabu V		
23	20MEL04	Ancelinnishanth M A		
24	20MEL06	Arulmurugan. T		
25	20MEL07	Ashwin B		
26	20MEL08	Balaji.S		
27	20MEL09	Balasurya G		
28	20MEL10	Bhuvaneshkumar N		
29	20MEL12	Boopathi.K		
30	20MEL13	Dharaneesh R		
31	20MEL15	Dheenathayalan P		
32	20MEL18	Divakaran P		
33	20MEL20	Giridharan A		
34	20MEL22	Gugan A		
35	20MEL24	Harikrishnan P		
36	20MEL25	Hariprasath S		
37	20MEL26	Jagadeesh Kumar P		
38	20MEL28	Jeevanantham M		
39	20MEL29	Jeevarathinavel C		
40	20MEL30	Jerin Dhas C		
41	20MEL32	Karthikkumar R		
42	20MEL33	Kavin K S		
43	20MEL34	Keerthivasan P		
44	20MEL37	Krithick S		
45	20MEL42	Mowleeswaran S		
46	20MEL47	Nijil Jeba Mahiban J		
47	20MEL48	Nitharson V		

S.No.	Reg.No	Name
48	20MEL49	Pandya Raja R
49	20MEL50	Pradeep E
50	20MEL51	Ragul K K
51	20MEL52	Ragul Kannan T
52	20MEL56	Rangith G
53	20MEL57	Rathinavel D
54	20MEL58	Ravi Prakash E
55	20MEL59	Sabarish D
56	20MEL60	Sanjai S
57	20MEL61	Santhosh K K
58	20MEL62	Saran R
59	20MEL64	Seenivasan R
60	20MEL65	Sibindharan S
61	20MEL67	Sri Nivas Vel P
62	20MEL68	Sridhar T
63	20MEL71	Suthakar B
64	20MEL72	Thiyagarajan V
65	20MEL73	Vairochanan E P
66	20MEL75	Visva K
67	20MEL76	Yoga Prasath S

N Denniargein CVAC Incharge



On

HoD-Mech-NEC

(Autonomous) ERODE -52.



COURSE CERTIFICATE



This is certify that Mr. / Ms. <u>GUNASEELAN P (20ME007)</u> has successfully completed a Centre for value added course(CVAC) of 3 days (26.11.2022 - 28.11.2022) in "Advanced Industrial Automation and Robotics" organized by Axis Global Institute of Industrial Training (AGIIT) & Department of Mechanical Engineering, Nandha Engineering College (Autonomous), Erode.



HoD

Principal

CourseCoordinator

(Autonomous) ERODE -52.



COURSE CERTIFICATE



This is certify that Mr. / Ms. <u>BOOPATHI K (20MEL12)</u> has successfully completed a Centre for value added course(CVAC) of 3 days (26.11.2022 - 28.11.2022) in "Advanced Industrial Automation and Robotics" organized by Axis Global Institute of Industrial Training (AGIIT) & Department of Mechanical Engineering, Nandha Engineering College (Autonomous), Erode.





Principal

CourseCoordinator

HoD

(Autonomous) ERODE -52.



COURSE CERTIFICATE



This is certify that Mr. / Ms. <u>SUTHAKAR B (20MEL71)</u> has successfully completed a Centre for value added course(CVAC) of 3 days <u>(26.11.2022 - 28.11.2022)</u> in "Advanced Industrial Automation and Robotics" organized by Axis Global Institute of Industrial Training (AGIIT) & Department of Mechanical Engineering, Nandha Engineering College (Autonomous), Erode.





Principal

CourseCoordinator

HoD

17MEI02 – GEOMETRIC DIMESNIONING & TOLERANCING (GD&T)

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OBJECTIVES:

To ensure interchangeability of parts: By using GD&T, engineers can ensure that parts manufactured by different suppliers or at different times will fit together and function properly.

To reduce manufacturing costs: GD&T allows engineers to specify tolerances that are appropriate for the function of the part, rather than using overly strict tolerances that can increase manufacturing costs.

To improve product quality: GD&T helps to eliminate errors and defects by clearly defining the requirements for a part, which reduces the likelihood of misinterpretation and mistakes during manufacturing.

COURSE OUTCOMES:

- > Tolerance design plays a major role in the quality of the product life cycle.
- > Tolerances determine exactly how much room for error you have when you manufacture each part.
- These are grouped into form tolerance, orientation tolerance, location tolerance, and run-out tolerance, which can be used to indicate all shapes.

Module -1 : GEOMETRIC DIMENSIONING AND TOLERANCING

Introduction to Geometric Dimensioning and Tolerancing - definition - terminologies - types of tolerances - reading and interpretation of drawings with respect to GD&T - drawing first and third angle projections – orthographic projections – limits, fits and tolerances – hole based system- shaft based system – application of GD&T – advanced metrology with GD&T – Coordinate measuring system(CMM) - Universal Length Measuring system (ULM) – Laser calibration system. (10)Course Introduction - Terminology & Basic Rules - Features and Rules of GD&T - Intro to Features and Material Conditions - Rule #1 of GD&T (Envelope Principle) - Maximum Material Condition -Least Material Condition - Regardless of Features Size & Rule #2 - Datums Control - Intro to Datums -The Datum Reference Frame - Primary Datum Controls - Intro to MMB - Adding GD&T to a Drawing/Design - The Feature Control Frame - SLOF for Drawings (Size, Location, Orientation & Form) - Form Tolerances - Straightness (Surface) - Straightness (Median Line/MMC) - Release Date: -Flatness (Surface) - Flatness (Median Plane/MMC) - Circularity - Cylindricity. (10)Orientation Tolerances - Parallelism (Surface) - Parallelism (Axis) - Perpendicularity (Surface) -Perpendicularity (Axis) - Angularity (Surface and Axis) - Profile Tolerances - Profile of a Surface -Basics - Profile (Modifiers and More Examples) - Profile of a Line - Location Tolerances - True Position -Basics - True Position vs Coordinate Dimensions - Concentricity - Symmetry - Runout Tolerances - Runout/Circular Runout - Total Runout. (10)

TOTAL : L: 30 = 30 PERIODS

TEXT BOOKS:

- 1. David Madsen, "Geometric Dimensioning and Tolerancing" 7th Edition, 2021
- Gene R. Cogorno, "Geometric Dimensioning and Tolerancing for Mechanical Design" 2nd Edition, 2020
- 3. James D. Meadows "Geometric Dimensioning and Tolerancing" Textbook and Workbook (per ASME Y14.5-2018), 4th Edition, 2020

REFERENCE BOOKS:

- Alex Krulikowski, "Fundamentals of Geometric Dimensioning and Tolerancing 2018: Using Critical Thinking Skills" 5th Edition, 2018
- P.S. Gill, "Geometric Dimensioning & Tolerancing" S.K. Kataria & Sons, 3rd Edition, 2019
- David A. Madsen, David P. Madsen, and Dennis A. Schwartz "Geometric Dimensioning and Tolerancing: Principles and Practices" Machine Trades Print Reading, 10th Edition, 2022

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e-mail: info@nandhaengg.org

Thiru V. SHANMUGAN Chairman Sri Nandha Educational Trust

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Dr. N. Rengarajan, PhD.,

Director - Nandha Tech Campus

Dr. M. Easwaramoorthi, PhD.,

Dr. J. Senthil, PhD.,

Head of the Department

Dr. N. Senniangiri, PhD.,

ORGANISING TEAM

Dr. Easwaramoorthi M

Dr. Muthukumar M Dr. Ashok Kumar B Dr. Magibalan S Dr. Manikandan M

Mr. Loganathan V N Mr. Shanmugam M

Mr. Sengottaiyan M Mr. Eswaran S

Mr. Muruganantham S

Mr. Ravichandran D Mr. Velliyangiri B

Mr. Arjun Raj R

Mr. Balakrishnan S

Mr. Omprakas M A

Mr. Venkateshan T Mr. Rajkumar R Mr. Vishnu A

Mr. Murugapandian G S

Mr. Mohamed Ajmal Mahasin M

CEO - Nandha Educational Institutions

Principal - Nandha Engineering College

Centre for Value Added Course Incharge

Thiru S. NANDHAKUMAR PRADEEP Secretary Sri Nandha Educational Trust

NANDHA ENGINEERING COLLEGE (Autonomous)

ERODE - 638 052. TAMILNADU

DEPARTMENT OF MECHANICAL ENGINEERING

Thiru S. THIRUMOORTHI Secretary Nandha Educational Institutions

Website : http://nandhaengg.org

The Management, Principal, Staff and Student members of **Mechanical Engineering Association**

Cordially invite you for the

VALUE ADDED COURSE ON 17MEI02 (VCAC - 02) - Geometric Dimensioning & **Tolerancing (GD&T)**

Mr. K. C. Pavithran Senior Design Development Engineer Faurecia India Pvt.Ltd Pune - 411057

Date: 16th, 17th & 18th Dec 2023

Time: 09.30 A.M - 05:00 P.M

Target Audience: III Yr Mechanial Engineering Students

Venue NEC - Conference Hall & CAD Lab







<u>INVITATION</u>



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52

DEPARTMENT OF MECHANICAL ENGINEERING

17MEI02 – Geometric Dimensioning & Tolerancing

Faurecia India Pvt. Ltd. Pune

One Credit Course Students Name List (ODD Semester 2022-2023)

Batch: 2020 - 2024

Degree: B.E.

Branch : Mechanical Engineering

Year/Semester: III/V

S.No.	Reg.No	Name
1	20ME001	Arunprasanth K
2	20ME002	Ashoksri S
3	20ME006	Gowtham M
4	20ME007	Gunaseelan P
5	20ME011	Jai Dharson B
6	20ME013	Karthi T
7	20ME014	Kavin Adithya A M
8	20ME015	Kavin Kumar A
9	20ME016	Kavin V
10	20ME017	Logananthan A
11	20ME021	Merlin Abinaya D V
12	20ME024	Naveen Kumar S
13	20ME025	Nithishkumar M
14	20ME026	Prathish A R
15	20ME027	Pugazhenthi V
16	20ME030	Santhanakrishnan A
17	20ME032	Santhosh R
18	20ME034	Sasikumar P
19	20ME037	Stephen Ponraj J

20 21 22 23 24	20ME038 20ME042 20MEL01 20MEL04 20MEL06 20MEL07	Sukant O P Varun K R Ajayprabu V Ancelinnishanth M A Arulmurugan. T
22 23	20MEL01 20MEL04 20MEL06	Ajayprabu V Ancelinnishanth M A Arulmurugan. T
23	20MEL04 20MEL06	Ancelinnishanth M A Arulmurugan. T
	20MEL06	Arulmurugan. T
24		
	20MEL07	
25		Ashwin B
26	20MEL08	Balaji.S
27	20MEL09	Balasurya G
28	20MEL10	Bhuvaneshkumar N
29	20MEL12	Boopathi.K
30	20MEL13	Dharaneesh R
31	20MEL15	Dheenathayalan P
32	20MEL18	Divakaran P
33	20MEL20	Giridharan A
34	20MEL22	Gugan A
35	20MEL24	Harikrishnan P
36	20MEL25	Hariprasath S
37	20MEL26	Jagadeesh Kumar P
38	20MEL28	Jeevanantham M
39	20MEL29	Jeevarathinavel C
40	20MEL30	Jerin Dhas C
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43	20MEL34	Keerthivasan P
44	20MEL37	Krithick S
45	20MEL42	Mowleeswaran S
46	20MEL47	Nijil Jeba Mahiban J

S.No.	Reg.No	Name
47	20MEL48	Nitharson V
48	20MEL49	Pandya Raja R
49	20MEL50	Pradeep E
50	20MEL51	Ragul K K
51	20MEL52	Ragul Kannan T
52	20MEL56	Rangith G
53	20MEL57	Rathinavel D
54	20MEL58	Ravi Prakash E
55	20MEL59	Sabarish D
56	20MEL60	Sanjai S
57	20MEL61	Santhosh K K
58	20MEL62	Saran R
59	20MEL64	Seenivasan R
60	20MEL65	Sibindharan S
61	20MEL67	Sri Nivas Vel P
62	20MEL68	Sridhar T
63	20MEL71	Suthakar B
64	20MEL72	Thiyagarajan V
65	20MEL73	Vairochanan E P
66	20MEL75	Visva K
67	20MEL76	Yoga Prasath S

CVAC Incharge



HoD-Mech-NEC

(Autonomous) ERODE -52.



COURSE CERTIFICATE



This is certify that Mr. / Ms. <u>PUGAZHENTHI V (20ME027)</u> has successfully completed a Centre for value added course (CVAC) of 3 days (<u>16.12.2022 - 18.11.2022</u>) in "Geometric Dimensioning & Tolerancing" organized by Faurecia India Pvt. Ltd. (Pune) & Department of Mechanical Engineering, Nandha Engineering College (Autonomous), Erode.



Principal

CourseCoordinator

(Autonomous) ERODE -52.



COURSE CERTIFICATE



This is certify that Mr. / Ms. <u>GUGAN A (20MEL22)</u> has successfully completed a Centre for value added course (CVAC) of 3 days <u>(16.12.2022 - 18.11.2022)</u> in "Geometric Dimensioning & Tolerancing" organized by Faurecia India Pvt. Ltd. (Pune) & Department of Mechanical Engineering, Nandha Engineering College (Autonomous), Erode.





Principal

CourseCoordinator

HoD

(Autonomous) ERODE -52.



COURSE CERTIFICATE



This is certify that Mr. / Ms. <u>SANJAI S (20MEL60)</u> has successfully completed a Centre for value added course(CVAC) of 3 days (<u>26.11.2022 - 28.11.2022</u>) in "Geometric Dimensioning & Tolerancing" organized by Faurecia India Pvt. Ltd. (Pune) & Department of Mechanical Engineering, Nandha Engineering College (Autonomous), Erode.





Principal

CourseCoordinator

17MEI02 – GEOMETRIC DIMESNIONING & TOLERANCING (GD&T)

L	Т	Ρ	С
0	0	2	1

OBJECTIVES:

To ensure interchangeability of parts: By using GD&T, engineers can ensure that parts manufactured by different suppliers or at different times will fit together and function properly.

To reduce manufacturing costs: GD&T allows engineers to specify tolerances that are appropriate for the function of the part, rather than using overly strict tolerances that can increase manufacturing costs.

To improve product quality: GD&T helps to eliminate errors and defects by clearly defining the requirements for a part, which reduces the likelihood of misinterpretation and mistakes during manufacturing.

COURSE OUTCOMES:

- > Tolerance design plays a major role in the quality of the product life cycle.
- > Tolerances determine exactly how much room for error you have when you manufacture each part.
- These are grouped into form tolerance, orientation tolerance, location tolerance, and run-out tolerance, which can be used to indicate all shapes.

Module -1 : GEOMETRIC DIMENSIONING AND TOLERANCING

Introduction to Geometric Dimensioning and Tolerancing - definition - terminologies - types of tolerances - reading and interpretation of drawings with respect to GD&T - drawing first and third angle projections – orthographic projections – limits, fits and tolerances – hole based system- shaft based system – application of GD&T – advanced metrology with GD&T – Coordinate measuring system(CMM) - Universal Length Measuring system (ULM) – Laser calibration system. (10)Course Introduction - Terminology & Basic Rules - Features and Rules of GD&T - Intro to Features and Material Conditions - Rule #1 of GD&T (Envelope Principle) - Maximum Material Condition -Least Material Condition - Regardless of Features Size & Rule #2 - Datums Control - Intro to Datums -The Datum Reference Frame - Primary Datum Controls - Intro to MMB - Adding GD&T to a Drawing/Design - The Feature Control Frame - SLOF for Drawings (Size, Location, Orientation & Form) - Form Tolerances - Straightness (Surface) - Straightness (Median Line/MMC) - Release Date: -Flatness (Surface) - Flatness (Median Plane/MMC) - Circularity - Cylindricity. (10)Orientation Tolerances - Parallelism (Surface) - Parallelism (Axis) - Perpendicularity (Surface) -Perpendicularity (Axis) - Angularity (Surface and Axis) - Profile Tolerances - Profile of a Surface -Basics - Profile (Modifiers and More Examples) - Profile of a Line - Location Tolerances - True Position -Basics - True Position vs Coordinate Dimensions - Concentricity - Symmetry - Runout Tolerances - Runout/Circular Runout - Total Runout. (10)

TOTAL : L: 30 = 30 PERIODS

TEXT BOOKS:

- 1. David Madsen, "Geometric Dimensioning and Tolerancing" 7th Edition, 2021
- Gene R. Cogorno, "Geometric Dimensioning and Tolerancing for Mechanical Design" 2nd Edition, 2020
- 3. James D. Meadows "Geometric Dimensioning and Tolerancing" Textbook and Workbook (per ASME Y14.5-2018), 4th Edition, 2020

REFERENCE BOOKS:

- Alex Krulikowski, "Fundamentals of Geometric Dimensioning and Tolerancing 2018: Using Critical Thinking Skills" 5th Edition, 2018
- P.S. Gill, "Geometric Dimensioning & Tolerancing" S.K. Kataria & Sons, 3rd Edition, 2019
- 3. David A. Madsen, David P. Madsen, and Dennis A. Schwartz "Geometric Dimensioning and Tolerancing: Principles and Practices" Machine Trades Print Reading, 10th Edition, 2022

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e-mail: info@nandhaengg.org

Thiru V. SHANMUGAN Chairman Sri Nandha Educational Trust

Thiru S. NANDHAKUMAR PRADEEP Secretary Sri Nandha Educational Trust

NANDHA ENGINEERING COLLEGE (Autonomous) ERODE - 638 052. TAMILNADU

DEPARTMENT OF MECHANICAL ENGINEERING

Thiru S. THIRUMOORTHI Secretary Nandha Educational Institutions

Dr. S. Arumugam, PhD., CEO - Nandha Educational Institutions

Dr. N. Rengarajan, PhD., Principal - Nandha Engineering College

Dr. J. Senthil, PhD., Director - Nandha Tech Campus

Dr. M. Easwaramoorthi, PhD., Head of the Department

Dr. N. Senniangiri, PhD., Centre for Value Added Course Incharge

ORGANISING TEAM

Dr. Easwaramoorthi M

Dr. Muthukumar M

Dr. Ashok Kumar B Dr. Magibalan S Dr. Manikandan M Mr. Loganathan V N Mr. Shanmugam M Mr. Sengottaiyan M Mr. Eswaran S Mr. Muruganantham S Mr. Mohamed Ajmal Mahasin M Mr. Ravichandran D Mr. Velliyangiri B Mr. Arjun Raj R Mr. Balakrishnan S Mr. Omprakas M A Mr. Venkateshan T Mr. Rajkumar R Mr. Vishnu A Mr. Murugapandian G S

<u>INVITATION</u>

The Management, Principal, Staff and Student members of **Mechanical Engineering Association**

Cordially invite you for the

VALUE ADDED COURSE ON 17MEI02 (VCAC - 03) - Geometric Dimensioning & **Tolerancing (GD&T)**

Mr. V. Arunkumar Mr. R. K. Gopalakrishnan Mr. K. Sethuraman **Training Head TVS Training Services** Ambattur Chennai

Date: 10th, 11th & 12th May 2023

Time: 09.30 A.M - 05:00 P.M

Target Audience: II Yr Mechanial Engineering Students

Venue NEC - Conference Hall & CAD Lab







Website : http://nandhaengg.org



NANDHA ENGINEERING COLLEGE (AUTONOMOUS), ERODE -52

DEPARTMENT OF MECHANICAL ENGINEERING

17MEI02 – Geometric Dimensioning & Tolerancing

TVS Training Services - Ambattur, Chennai

One Credit Course Students Name List (Even Semester 2022-2023)

Batch: 2021 - 2025

Degree: B.E.

Branch : Mechanical Engineering

Year/Semester: II/IV

S.No.	Reg.No	Name		
1	21ME001	ABISHEK V		
2	21ME002	AJAY PRINCE C		
3	21ME003	AMAL QUAIS R		
4	21ME005	ARASU M		
5	21ME006	ARUN.A		
6	21ME007	BALAJI K		
7	21ME008	BHARATHRAJ R		
8	21ME009	DHARANEESH J		
9	21ME010	DHARANEETHARAN.S		
10	21ME011	DHARANIDHARAN.M		
11	21ME012	DHARSHAN.S		
12	21ME013	GOKUL K		
13	21ME014	GOPALAKRISHNAN S		
14	21ME015	GOWRISANKAR V		
15	21ME016	HARIVIMAL P		
16	21ME017	JAYESH A		
17	21ME018	KALAIVANAN R		
18	21ME019	KATHIRESAN.M		
19	21ME020	KAVIYARASAN E		
20	21ME021	LOGESHWARAN.S		
21	21ME022	MAHESHKUMAR R		
22	21ME023	MANORANJAN T		
23	21ME024	MOHANKUMAR.P		
24	21ME025	MOULISHWARAN H M		
25	21ME026	NANDHAKUMAR K		
26	21ME027	NANDHAKUMAR M		
27	21ME028	NAVANEETHAN M		
28	21ME029	NAVEEN M		
29	21ME031	NAVIN SINGH S		
30	21ME032	NIVETHA V		
31	21ME034	PRANAVKEERTHI P		
32	21ME035	PRASANTH K		
33	21ME036	PUGAZHENDHI K		
34	21ME037	RAJAVIGNESH S		
35	21ME038	RATHIPREETHI S		

S.No.	Reg.No	Name		
36	21ME039	ROHAN.S		
37	21ME040	ROHITH D		
38	21ME041	ROKUMAR S		
39	21ME042	RUTHISH A		
40	21ME043	SAKTHIVEL A		
41	21ME044	SAKTHIVEL S		
42	21ME045	SANTHOSH S (03.12.2003)		
43	21ME046	SANTHOSH S (22.03.2004)		
44	21ME048	SATHISH M		
45	21ME049	SINIVASAN P		
46	21ME050	SRI SAKTHI SAILESH M		
47	21ME051	SUDHARSAN S		
48	21ME052	SURJITHKUMAR C		
49	21ME053	SURYA K		
50	21ME054	SYED IBRAHIM H		
51	21ME055	TAMIZHINIYA A		
52	21ME056	THANISH SAMSON A		
53	21ME057	VINU S		
54	21ME058	YUVARAJ S		
55	21MEL01	AATHIL BASA S U		
56	21MEL02	ABINESH G		
57	21MEL03	AJITH S		
58	21MEL04	ARUL MURUGAN P		
59	21MEL05	ARUNKUMAR K		
60	21MEL06	ARUNKUMAR T		
61	21MEL07	DEEPAK V K		
62	21MEL08	DHARSHAN M		
63	21MEL09	DHARUN S		
64	21MEL10	DINESH KUMAR S		
65	21MEL12	GEETHAI KAVIN K		
66	21MEL13	GILSON J		
67	21MEL14	GOKUL R		
68	21MEL15	GOKUL S		
69	21MEL16	GOKULKANNAN S		
70	21MEL17	GOWSIK V		
71	21MEL18	GOWTHAM S		
72	21MEL19	GUNASEKARAN R		
73	21MEL20	GURUPRASAD S		
74	21MEL21	GURUPRASATH B		
75	21MEL22	HARIHARAN S		
76	21MEL23	JANA E		
77	21MEL24	JEEVABHARATHI P		
78	21MEL25	KABIL RAJ R		
79	21MEL26	KAVIN KUMAR N		
80	21MEL27	KISHORE V A		
81	21MEL28	KISHORE KUMAR K A		

S.No.	Reg.No	Name
82	21MEL29	KOKULNATH T R
83	21MEL32	MANOJ KUMAR K (30.01.2002)
84	21MEL33	MANOJKUMAR K (26.05.2004)
85	21MEL34	MOHAMMED RAFIQUE R
86	21MEL35	MOHAMMED THAHSEEN F
87	21MEL36	NAGULAN B
88	21MEL37	NAVEEN A
89	21MEL38	PRIYANSHU KUMAR MISHRA
90	21MEL39	PRAKASH R
91	21MEL41	PRAVEEN KUMAR B
92	21MEL42	PRITHIVRAJ K
93	21MEL43	SAKTHI ABISHEK K S
94	21MEL44	SANTHOSHKUMAR K
95	21MEL45	SHANKARAN P
96	21MEL46	SRI SAKTHI M
97	21MEL47	SUDHARSHAN S M
98	21MEL48	SUJAY R
99	21MEL49	SYED AMEEN S
100	21MEL50	TAMIZHINIYAN S
101	21MEL51	THANISH KUMAR S
102	21MEL52	UDHAYAKUMAR N
103	21MEL53	VIGNESHWARAN A

N(&

CVAC Incharge



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HoD-Mech-NEC





This is to certify that Mr. Abishek V

(Reg.No :21ME001)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Ajay Prince** C

(Reg.No :21ME002)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Syed Ibrahim H (Reg.No :21ME054)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved







This is to certify that Mr. Jana E

(Reg.No :21MEL23)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Ms. Jeevabharathi P

(Reg.No :21MEL24)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Kabil Raj R

(Reg.No :21MEL25)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Kavin Kumar N

(Reg.No :21MEL26)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Kishore VA**

(Reg.No :21MEL27)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved







This is to certify that Mr. Kishore Kumar K A (Reg.No :21MEL28)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Sminin

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved







This is to certify that Mr. Kokulnath T R

(Reg.No :21MEL29)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Manoj Kumar K

(Reg.No :21MEL32)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Manojkumar K

(Reg.No :21MEL33)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Mohammed Rafique R** (Reg.No :21MEL34) of Nandha Engineering College (Autonomous), Erode – 52 has successfully completed 5 days Training on "Geometric Dimensioning & Tolerancing (GD & T)" Conducted by TVS Training and Services Ltd, Chennai From 08th May 2023 to 12th May 2023.

Sminin

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Mohammed Thahseen F** (**Reg.No :21MEL35**) of **Nandha Engineering College (Autonomous), Erode – 52** has successfully completed 5 days Training on **"Geometric Dimensioning & Tolerancing (GD & T)"** Conducted by **TVS Training and Services Ltd, Chennai** From 08th May 2023 to 12th May 2023.

Sminin

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Nagulan B

(Reg.No :21MEL36)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Naveen A

(Reg.No :21MEL37)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Priyanshu Kumar Mishra** (**Reg.No :21MEL38**) of **Nandha Engineering College (Autonomous), Erode – 52** has successfully completed 5 days Training on "**Geometric Dimensioning & Tolerancing (GD & T)**" Conducted by **TVS Training and Services Ltd, Chennai** From 08th May 2023 to 12th May 2023.

Sminin

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved







This is to certify that Mr. Prakash R

(Reg.No :21MEL39)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Praveen Kumar B** (**Reg.No :21MEL41**) of **Nandha Engineering College (Autonomous), Erode – 52**

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Prithivraj K

(Reg.No :21MEL42)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved







This is to certify that **Mr. Sakthi Abishek K S** (Reg.No :21MEL43) of Nandha Engineering College (Autonomous), Erode – 52 has successfully completed 5 days Training on "Geometric Dimensioning & Tolerancing (GD & T)" Conducted by TVS Training and Services Ltd, Chennai From 08th May 2023 to 12th May 2023.

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Santhoshkumar K** (**Reg.No :21MEL44**) of **Nandha Engineering College (Autonomous), Erode – 52** has successfully completed 5 days Training on **"Geometric Dimensioning & Tolerancing (GD & T)"** Conducted by **TVS Training and Services Ltd, Chennai** From 08th May 2023 to 12th May 2023.

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Shankaran P

(Reg.No :21MEL45)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Sri Sakthi M

(Reg.No :21MEL46)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Sudharshan S M (Reg.No :21MEL47)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved







This is to certify that Mr. Sujay R

(Reg.No :21MEL48)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Smin

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Syed Ameen S

(Reg.No :21MEL49)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Tamizhiniyan S** (**Reg.No :21MEL50**)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Thanish Kumar S

(Reg.No :21MEL51)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Udhayakumar N

(Reg.No :21MEL52)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Vigneshwaran A (Reg.No :21MEL53)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Sminin

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that **Mr. Mohammed Thahseen F** (**Reg.No :21MEL35**) of **Nandha Engineering College (Autonomous), Erode – 52** has successfully completed 5 days Training on **"Geometric Dimensioning & Tolerancing (GD & T)"** Conducted by **TVS Training and Services Ltd, Chennai** From 08th May 2023 to 12th May 2023.

Sminin

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved





This is to certify that Mr. Thanish Kumar S

(Reg.No :21MEL51)

of Nandha Engineering College (Autonomous), Erode – 52

has successfully completed 5 days Training on

Summe

Mr. G. Narayanamurthy (CEO, TVS Training & Services Ltd.)

Day Plan	Topics Covered	Brief Description Of The Subjects
1	Fundamentals of engineering Drawing	What is engineering drawing, Why engineering drawing Types of drawing, Elements of engineering drawing Types of line, Title block Dimensioning methods, Angle of projections Ortho graphic views ,Iso metric views
2	Machine drawing , Surface roughness symbols	Sectional views, Understanding assembly drawing Conventional symbols Reading and understanding the machine manual Understanding the surface roughness symbols Identifying the symbols
3	Dimensional tolerance, Stack up analysis, Metrology	Understanding the terminologies of Limit, Fit and Tolerance Types of tolerances, Types of fits, Fit calculation Understanding the linear stack up Familiarisation of measuring instruments Vernier caliper, Micrometer, Dial test indicator, Sine bar
4	GD&T	Introduction to GD&T, standards Need of GD&T and limitations of dimensional tolerance Feature control frame Interpret the form tolerances and its application Datum System Interpret the Orientation tolerance and apply in the inspection process Interpret the Runout tolerance and apply in the inspection process
5	GD&T & Production Drawing reading practice	Interpret the Runout tolerance and apply in the inspection process Interpret the Location tolerance and apply in the inspection process Interpret the Profile tolerance and apply in the inspection process Material condition concepts and bonus tolerance Reading production drawing and understanding the process involved