

TESTING

CODE: TES / T3

TESTING & QUALITY CONTROL OF PVC AND HDPE PIPES

Duration: 16 hrs / Two days
Proposed dates: 18.11.2024 & 19.11.2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Mrs. Udhayamalar S.
Mobile No: 9952046851

Contents:

Introduction of Plastics Materials, plastics materials used for pipes, LDPE, MDPE, HDPE, & UPVC. Additives used for pipes, Compounding of uPVC material. Testing of UPVC pipes as per IS: 4985 & IS: 12818, Testing of HDPE pipes as per IS: 4984. Pipe Extrusion Technology – Overview.

TOOL ROOM

CODE: MTR / TR1

MOULD MANUFACTURING TECHNIQUES

Duration: 16 hrs / Two days
Proposed dates: 22.07.2024 & 23.07.2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Mr. Vedachalam T. M.
Mobile 88078 22231

Content:

Mould parts and its functions – Selection of Mould materials – Conventional machining process – Role of CNC Milling, CNC Lathe, CNC EDM & Wire EDM machines in mould making - Development of mould parts using CNC machines - Steps involved in mould manufacturing – Mould Assembly & Polishing - Selection of moulding machine - Standard mould base - Case studies on mould manufacturing.

TECHNOLOGY BASED ENTREPRENEURSHIP DEVELOPMENT PROGRAM

CODE: TEDP / PRWM

PLASTICS RECYCLING & WASTE MANAGEMENT

Duration: 16 hrs / Two days
Proposed dates: 16.12.2024 to 17.12.2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Dr. Syed Amanulla
Mobile No: 9937872419

Contents:

Introduction of Plastic Materials, its properties & applications – various plastics processing methods – life cycle of plastics – environmental and social impact of plastics – plastics scenario in India and the world - sustainability in plastics - Introduction to plastics recycling – types and sources of plastics waste – pre & post consumer plastic waste - collection and sorting - various methods of recycling - guidelines for plastics recycling - recycling of Polyolefins, PET, PVC, etc. - recycling of mixed plastics – Plastic recycling equipments & machineries - additives for recyclates – use of recycled plastics – Plastics waste management .

TAILOR MADE COURSES

CIPET: IPT, Chennai also conducts Tailor Made Courses / Onsite training programs exclusively for the participants from any company either at company's premises or at CIPET: IPT, Chennai. The content of the course can be customized based on their requirement or by CIPET.

For further details please Contact :

The Principal Director & Head
CIPET: INSTITUTE OF
PETROCHEMICALS TECHNOLOGY (IPT)
TVK Industrial Estate,
Guindy, Chennai – 600032.
Tel : 044-22254701 - 6
Email: chennai@cipet.gov.in
Website : www.cipet.gov.in



Short Term Course

Annual Calendar 2024 – 2025

Skill

Technology

Academics

Research



केंद्रीय पेट्रोसायन अभियांत्रिकी एवं प्रौद्योगिकी संस्थान
CENTRAL INSTITUTE OF PETROCHEMICALS
ENGINEERING & TECHNOLOGY (CIPET)

INSTITUTE OF PETROCHEMICALS TECHNOLOGY (IPT)

(Department of Chemicals & Petrochemicals,
Ministry of Chemicals & Fertilizers,)

Government of India

Thiru- Vi- Ka. Industrial Estate, Guindy, Chennai – 600032.

www.cipet.gov.in



CIPET Profile

- Central Institute of Petrochemicals Engineering & Technology (CIPET) (formerly known as Central Institute of Plastics Engineering & Technology) is a premier national Institution functioning under the Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India.
- CIPET, Chennai is an ISO 9001:2015 certified institution for its academic, Technology Support Services and the Plastics Testing centre is accredited by NABL as per ISO/IEC 17025:2005 for Quality Control and Testing of raw materials and products of plastics.
- CIPET, Chennai has an enviable interface with its business and industry partners. We provide Technical / Consultancy services in CAD/CAM, Mould Design, Tooling, Plastics Processing, & Testing for the benefits of plastics and allied industries. We have been in the fore front of strengthening technological capabilities and have been constantly building capacities and leveraging our expertise, calibre and skill sets to meet the emerging and evolving needs of the industry.
- CIPET Chennai offers Ph.D., UG, PG, Diploma, Post Diploma, PG Diploma & Skill Development training programs, Short terms Courses and Tailor Made Courses inline with industry needs.

Processing

CODE: PRO / P1

PRINCIPLES OF INJECTION MOULDING PROCESS (Production, Process Control & Trouble Shooting)

Duration: 16 hrs / Two days
Proposed dates: 22.04.2024 & 23.04.2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Mr. A. Rajendran

Mobile No: 9840504889

Contents:

Understanding on Plastics Materials and its properties – Introduction to Injection moulding – Machine parts – Specification – Cycle time – Process Parameters and its control – Trouble Shooting – Types of Injection moulds – operator safety and machine safety. Machine maintenance - Testing and Quality control.

CODE : PRO / P2

PRINCIPLES OF PLASTICS PROCESSING TECHNIQUES (Injection, Extrusion and Blow Moulding)

Duration: 16 hrs / Two days
Proposed dates: 12.08.2024 – 13.08.2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Mr. Balasubramanian R.

Mobile No: 9444009564

Contents:

Understanding on Plastics Materials and its properties – Introduction to Plastics Processing Techniques – Injection Moulding, Extrusion, Blow Moulding Process – Machine Parts – Specification – Cycle time – Process Parameters and its control – Trouble Shooting on products – Testing and Quality control.

Design

CODE: DES / D1

FUNDAMENTALS OF PLASTICS PRODUCT DESIGN

Duration: 16 hrs / Two days
Proposed dates: 20-05-2024 & 21-05-2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Mr. Velladurai A.

Mobile No: 73583 82001

Contents:

Plastic materials – Properties – Mechanical – Thermal – Electrical - Processing Methods – Plastics material selection criteria - Product Design features – Wall thickness – Rib, Bosses, Gussets, Undercuts – Draft – Holes – Tolerance – Moulded in threads - Structural Considerations – Stiffness – Impact – Long term & Short term loading - Design for Assembly – Press fits – Snap fit – Welding – Insert Moulding - Post Moulding Process - Moldflow Analysis reports – product design check list

CODE: DES / D2

FUNDAMENTALS OF INJECTION MOULD DESIGN

Duration: 16 hrs / Two days
Proposed dates: 23-09-2024 & 24-09-2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Mr. Y. Hidayathullah

Mobile No: 7598145203

Contents:

The moulding cycle – Mould Classifications - Nomenclature and function of mould components - Mould Details – Design steps – The Cavity and Core – feed systems - Runner and gates – Runnerless mould – Gate types - Temperature Control – Parting line - Vents – Ejector systems – Cooling system - Mould Actions and Undercuts – Split moulds – Unscrewing Moulds - Shrinkage of Plastics– Types of injection moulds – Plastic Part Analysis.

Testing

Code: TES / T1

TESTING & QUALITY CONTROL OF PLASTICS MATERIALS AND PRODUCTS

Duration: 16 hrs / Two days
Proposed dates: 24.06.2024 & 25.06.2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Mrs. Zarin Khan

Mobile No.:7667790484

Contents:

Introduction of Plastics Materials, properties, Plastics material selection criteria, Mechanical behaviour of polymers, stress strain curves, Viscoelastic behaviour, Creep and stress relaxation, impact/fatigue and cyclic stress, Additives, Specimen preparation, Mechanical, Thermal, Optical and Electrical Testing, Characterization (DSC, TGA & FTIR) and Identification of Plastics by simple methods.

Code: TES / T2

BIODEGRADABLE AND COMPOSTABLE POLYMERS

Duration: 16 hrs / Two days
Proposed dates: 21.10.2024 & 22.10.2024

Fee: Rs.8,000 / person + GST 18%

Coordinator: Dr. Radhashyam Giri

Mobile 9662638530

Contents:

Introduction to Polymers, Bio-polymers, Importance, Classification, Biodegradable & Compostable polymers, Polymers derived from renewable resources, Identification of polymers and its characterization technique. Training on standard methodology and protocol for biodegradation test. Compostability study and its test protocol. Different test methodology available on biodegradable study. Production technologies for Biopolymers, Extrusion and compounding, Injection moulding, other processing methods



CIPET : IPT – CHENNAI
Short Term Course Annual Calendar - 2024 - 25
Batch size: 20



Sl. No.	Date	Description	Course Co-ordinator/ Mobile No.
1	22.04.2024 & 23.04.2024	Principles of Injection Moulding Process	Mr.A.Rajendran Mobile : 9840504889
2	20.05.2024 & 21.05.2024	Fundamentals of Plastics Product Design	Mr.A.Velladurai Mobile : 7358382001
3	24.06.2024 & 25.06.2024	Testing & Quality Control of Plastics Materials and Products	Mrs.Zarin Khan Mobile : 7667790484
4	22.07.2024 & 23.07.2024	Mould Manufacturing Techniques	Mr.T.M.Vedhachalam Mobile : 8807822231
5	12.08.2024 & 13.08.2024	Principles of Plastics Processing Techniques	Mr.R.Balasubramanian Mobile : 9444009564
6	23.09.2024 & 24.09.2024	Fundamentals of Injection Mould Design	Mr.Y.Hidayathullah Mobile : 7598145203
7	21.10.2024 & 22.10.2024	Biodegradable and Compostable Polymers	Dr.Radhashyam Giri Mobile : 9662638530
8	18.11.2024 & 19.11.2024	Testing & Quality Control of PVC and HDPE Pipes	Mrs.S.Udhayamalar Mobile : 9952046851
9	16.12.2024 & 17.12.2024	Plastics Recycling & Waste Management	Dr. Syed Amanulla Mobile : 9937872419