



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 and 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: 14.12.2023 & 15.12.2023

Fee: Rs.10,000 / 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: 20.11.2023 – 21.11.2023

Fee: Rs.10,000 / person + GST 18%

Coordinator: Mr. A. Rajendran
Mobile No: 9840504889

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: 29-01-2024 & 30-01-2024

Fee: Rs.10,000 / 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: 30-10-2023 & 31-10-2023
05.02.2024 & 06.02.2024

Fee: Rs.10,000 / person + GST 18%

Coordinator: Mr. A. Ravichandran
Mobile No: 9600254350

Contents:

The moulding cycle – Mould Classifications - Nomenclature and function of mould components - Mould Details – Design steps – The Cavity and Core - Runner systems – Conventional – Runnerless – Gate types - Temperature Control – Vents – Ejector systems – Interlocks - Mould Actions and Undercuts – Unscrewing Moulds - Shrinkage of Plastics and Rates – Plastic Part Analysis

Testing

Code: TES/T1

TESTING & QUALITY CONTROL OF PLASTICS MATERIALS AND PRODUCTS

Duration: 16 hrs / Two days
Proposed dates: 26.02.2024 & 27.02.2024

Fee: Rs.10,000 / 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

TESTING AND QUALITY CONTROL OF PVC & HDPE PIPES

Duration: 16 hrs / Two days
Proposed dates: 12.12.2023 & 13.12.2023
11.03.2024 & 12.03.2024

Fee: Rs.10,000 / 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 METHOD AND SELECTION OF MOULD MATERIAL & MOULDING MACHINE

Duration: 16 hrs / Two days

Proposed dates: 28.12.2023 & 29.12.2023

Fee: Rs.10,000 / person + GST 18%

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

Content:

Conventional machining process - Development of mould parts using CNC machines - Steps involved in mould manufacturing - Selection of mould material - Selection of moulding machine - Standard mould base and mould parts - Case studies on mould manufacturing.

CODE: MTR/TR2

PLASTIC PRODUCT & MOULD DEVELOPMENT

Duration: 16 hrs / Two days

Proposed dates: 16.11.2023 & 17.11.2023
25.03.2024 & 26.03.2024

Fee: Rs.10,000 / person + GST 18%

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

Content:

Introduction on plastic product features - Selection of plastic moulding method for a product - product manufacturing feasibility study. Injection & blow mould construction - Types of Injection moulds - Machining of mould parts - Mould assembly - Mould polishing - Case studies on injection moulded product and mould development.

TECHNOLOGY BASED ENTREPRENEURSHIP
DEVELOPMENT PROGRAM

RECYCLING OF PLASTIC MATERIALS & WASTE MANAGEMENT

Duration: 16 hrs / Two days

Proposed dates: 08.01.2024 to 09.01.2024

Fee: Rs.10,000 / 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 - Introduction to biodegradable polymers.

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.**

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Email: chennai@cipet.gov.in

Website : www.cipet.gov.in



Short Term Course



Annual Calendar

2023 – 2024 (Q3 & Q4)

Skill

Technology

Academics

Research



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

CIPET : IPT – CHENNAI

Short Term Course Annual Calendar - 2023-2024 (Q3 & Q4)

Sl. No.	Date	Description	Course Co-ordinator/ Mobile No.
1	30.10.2023 & 31.10.2023	STC - Fundamentals of Injection Mould Design	Mr.A.Ravichandran Mobile : 9600254350
2	16.11.2023 & 17.11.2023	STC - Plastic Product & Mould Development	Mr.T.M.Vedhachalam Mobile : 8807822231
3	20.11.2023 & 21.11.2023	STC - Principles of Plastics Processing Techniques	Mr.A.Rajendran Mobile : 9840504889
4	12.12.2023 & 13.12.2023	STC - Testing and Quality Control of PVC & HDPE Pipes	Mrs.S.Udhayamalar Mobile : 9952046851
5	14.12.2023 & 15.12.2023	STC – Principles of Injection Moulding Process	Mr.A.Rajendran Mobile : 9840504889
6	28.12.2023 & 29.12.2023	STC - Mould Manufacturing Methods and Selection of Mould Material & Moulding Machines	Mr.T.M.Vedhachalam Mobile : 8807822231
7	08.01.2024 to 12.01.2024	TEDP - Recycling of Plastics Materials & Waste Management	Dr.Syed Amanulla Mobile : 9937872419
8	29.01.2024 & 30.01.2024	STC - Fundamentals of Plastics Product Design	Mr.A.Velladurai Mobile : 7358382001
9	05.02.2024 & 06.02.2024	STC - Fundamentals of Injection Mould Design	Mr.A.Ravichandran Mobile : 9600254350
10	26.02.2024 & 27.02.2024	STC - Testing & Quality Control of Plastics Materials and Products	Mrs.Zarin Khan Mobile : 7667790484
11	11.03.2024 & 12.03.2024	STC - Testing and Quality Control of PVC & HDPE Pipes	Mrs.S.Udhayamalar Mobile : 9952046851
12	25.03.2024 & 26.03.2024	STC - Plastic Product & Mould Development	Mr.T.M.Vedhachalam Mobile : 8807822231