



Department of Commerce Ministry of Commerce and Industry Government of India

3-MONTHS Intensive Training Course ON PACKAGING 62nd Batch

Accredited by

Endorsed by





1st September – 30th November, 2025

PROSPECTUS

Vision

To make Indian Institute of Packaging a World Class Centre of Excellence with Sustained Commitment from the Stake Holders.

To develop Close International Relationship with
Worldwide Packaging Fraternity.

To make India a Focal Point for Contemporary
Developments in Art, Science, Technology and

Quality Policy

Engineering in the Field of Packaging.

The Quality Policy of Indian Institute of Packaging is to perform Mechanical and Chemical testing of packaging materials as per National, International Standards like IS/ISO/ASTM/TAPPI/IEC/EN etc., and regulations like IMO/ICAO, etc. to impart Training & Education in the field of Packaging; undertake Research & Development;

Organize Packaging; Exhibitions; Publish magazines in Packaging; organize and issue Awards for innovations and developments in Packaging and to Provide Consultancy Services to the Industries.

We believe and strive for the active involvement of very member of the institute in evolving and implementing an effective Quality Assurance System as per ISO/IEC 17025: 2017 and Quality Management System as per ISO 9001: 2015. We shall endeavor meticulous implementation in compliance with the Quality Manual and to build an effective work culture in the institute.

The top management is committed to impartiality in all activities and to safeguard the confidentiality of all information obtained or created during its activities. The institute also follows this quality policy to improve its effectiveness in all the testing activities and management systems.

The institute has made this Quality policy available at various locations in the institute for communication, understanding, and application within the organization and also uploaded the same on the website of the organization for the reference of interested parties.

Indian Institute of Packaging (IIP) is an autonomous body in the field of packaging, education, testing and R&D and working under the administrative control of the Ministry of Commerce and Industry, Government of India. The Institute was established on 14th May, 1966 with its headquarter and

principal laboratories in Mumbai. The Institute set up its irst branch of ice at Chennai in 1971, followed by branches at

Kolkata, Delhi, Hyderabad, Ahmedabad in 1976, 1986, 2006

FROM THE DIRECTOR'S DESK



and 2017 respectively

Mr. R. K Mishra, IRS

Director - Indian Institute of Packaging

The Institute is involved in various activities like training and education in the field of packaging, testing and evaluation of packaging materials and packages, consultancy services and research & development related to packaging. The Indian packaging industry has not only grown in size and volume, but also in its level of operation. Globalization has nudged the Indian packaging industry to become more competitive in the global markets. The Indian packaging industry has not only grown in size and volume, but also in its level of operation. In addition, globalization has also nudged the Indian packaging industry to become more competitive in the global markets and also to win major contracts abroad. The Packaging Market size is estimated at USD 1.18 trillion in 2025, and is expected to reach USD 1.44 trillion by 2030, at a CAGR of 3.92% during the forecast period (2025-2030). This has also created a great demand for packaging professionals by the Indian packaging industry.

A 3-month Certificate Course in Packaging introduced in 1968 is conducted at the Head Office entries of which are on a first-cum-first-served basis. The course is also open to overseas participants deputed by their Governments under various schemes. This course is endorsed by the World Packaging Organization (WPO) and accredited by Asian Packaging Federation (APF)

I am confident that all those who join IIP training and education programmes will make a mark by the learning skill on offer. My best wishes to all the new aspirants who would be joining the illustrious IIP family. I am confident that the whoever would be opting for this course to upgrade their knowledge in packaging. My best wishes to all the new aspirants who would be joining the illustrious IIP family.

GENESIS OF PACKAGING EDUCATION

Packaging is multi-faceted activity. It protects preserves and sells the product at optimum cost. Protection, preservation and marketing involve understanding of environmental concerns, related laws, its economics and management besides knowledge of Packaging Technology. The Course covers study of basic packaging materials like Paper, Paperboard, Glass and Metal containers, Plastic, Films, Laminated, Cushioning Materials, Ancillary Materials and other conventional and modern forms of packaging used in Food, Pharma, Engineering and other Industries. It also covers packaging techniques and processes, quality control and evaluation test and other management topics like standardization, packaging cost and economics etc. The Correspondence Course is designed to develop packaging persons who can find opportunities in marketing, purchase, design and development, quality assurance and package processing of any industrial unit – be it a package manufacturer or a package user.

The 3-month Certificate Course in Packaging introduced in 1968. The Three months full time certificate course in packaging is specially designed to give insight knowledge on various aspects and trends of packaging. The objectives of this course are:

- To provide information on various materials, processes, governing laws and regulations involved in packaging of products through classroom teaching, laboratory and industrial visits along with case studies.
- To create packaging professional from design conception to manufacturing, who learns to speak the language of packaging and utilize it as a key differentiator for his relevant industry / business.

By way of attending this 3-months packaging course, the participants will get a platform to identify new innovations as well as new opportunities in field of packaging. This course is endorsed by the World Packaging Organization (WPO) and accredited by Asian Packaging Federation.

Packaging is one of the most dynamic fields and is sensitive to technical and commercial trends. Packaging trends need to be quickly identified, studied and exploited to survive in competition. Globalization has brought consumers and producers closer than ever before. The role of packaging in modern methods of distribution through super markets and malls has, therefore, assumed great importance. Thus, the demand of this subject makes our job challenging; however, we always like challenges and endeavor to succeed.

Dr. Babu Rao Guduri HOD: T & E Department

ABOUT INDIAN INSTITUTE OF PACKAGING

The Indian Institute of Packaging (IIP) is a national apex body which was set up in 1966 by the packaging and allied industries and the Ministry of Commerce, Government of India, with the specific objective of improving the packaging standards in the country. The Institute is an autonomous body working under the administrative control of the Ministry of Commerce. The Institute endeavors to improve the standard of packaging needed for the promotion of exports and Infrastructural facilities for overall packaging improvement in India. This is achieved through the Institute's multifarious activities which are today, in line with those of premier packaging institutes the world over. The institute aims make India a focal point contemporary developments in Art, Science, Technology and Engineering, with respect to the field of Packaging

The major activities of the Institute are:

- Training & Education
- Research & Development
- Testing, UN-Certification & Consultancy

The other promotional efforts include exhibition and awards, information services and publications, library and database services





The Institute has linkages with International organizations and is a founder member of the Asian Packaging Federation (APF); member of the Institute of Packaging Professionals (IOPP), USA; the Institute of Packaging (IOP), UK; Technical Association of Pulp and Paper Industry (TAPPI), USA and the World Packaging Organization (WPO).

The Indian Institute of Packaging has helped many developing countries in the promotion of packaging through projects carried out for prominent International bodies like the United Nations

Industrial Development Organization (UNIDO), International Trade Centre (ITC), the Commonwealth Fund for Technical Cooperation (CFTC) and the European Union (EU).

The Institute has successfully completed International residential training programmes for APF and WPO for various countries.

At present, the Institute has members in varied categories such as Patron Members, Overseas Members, Life Members and large number of Ordinary Members who regularly use the expertise and the services available in the laboratories.

TRAINING & EDUCATION

To meet the growing demands from industrial units, in both, the organised and unorganized sector for qualified technical manpower, the Institute introduced 2-year programme leading to a Post Graduate Diploma in Packaging (PGDP) in 1985. The course is designed to equip candidates with all the facets of packaging activity.

Other courses being offered by the Institute include the Diploma in Packaging through correspondence - a Distance Education Programme (DEP) 1996, recognized by the World Packaging Organization (WPO) and accredited by Asian Packaging Federation (APF). The 18-month course, designed primarily for working professionals is open to industry personnel and to students in India, the Asia Pacific Region and other countries.

IIP is probably, the first Packaging Institute in the world to hold a training programme for women entrepreneurs. The 1-month Entrepreneurship Development Programme is organized once a year. Short Training Programmes, Seminars and Conferences of 1-day to 1-week duration are organised by the Head Of ice and the Regional Centres throughout the year in various parts of the country, specially designed for working executives as well as professionals needing to update their knowledge in the form of executive development programmes.



Laboratory





Residential Training

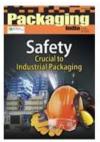
TESTING AND EVALUATION SERVICES - NABL ACCREDITATED LABORATORIES

Over the last 58 years, the Indian Institute of Packaging has been able to establish well-equipped laboratories for testing of various packaging material and packages at its principle laboratory at Mumbai and also its branch of ices at Chennai, Kolkata, Ahmedabad, Delhi and Hyderabad, with continuous efforts towards upgradation. Financial assistance of the Ministry of Commerce and Industry, Government of India is awarded. Today, the Institute is proud to announce that the laboratory has got the facility for testing over 300 parameters covering different areas like mechanical, chemical and physio-chemical properties of packaging material and packages. Laboratories at the Head Of ice and regional centres extend testing facilities to the industry for domestic distribution and export, as per National and International Standards like the Bureau ofIndian Standards (BIS), International Standards Organizations (ISO), British Standards (BS), American Society for Testing Materials (ASTM) and others. IIP also issues UN Certification for export packages for hazardous goods and equipment calibration standardization certificates.

INFORMATION AND PUBLICATION

This division provides information related to packaging industry, in addition publishing various monographs and textbooks, seminar papers and directories, periodically. 'Packaging India', the official Journal of the Institute published six times a year, is an invaluable source of information for the packaging industry. It is mailed free of cost to members of the Institute, packaging and related institutions all the world. over Individual subscriptions are available on The Institute's publications available at the Head Office and the Regional Centres.









LIBRARY AND INTERNET SERVICES

IIP is privileged to have one of the best reference's libraries in the world, with books, International periodicals, bound volumes of journals; besides a large number reports. National & International standards. database on products materials along with reprographic facility also being available. Library facilities are extended to the members of the Institute, all students and faculty. The IIP library has a rich collection of nearly 7000 textbooks besides several packaging related National and International standards from different countries and organisations on materials, methods and systems, testing and quality control etc., besides having a number of seminars. technical reports and dissertations. The information input is also augmented through over 50 technical journals obtained from various sources in the world, on a regular basis.

INDUSTRY CONSULTING SERVICES

The Institute undertakes self-sponsored and industry participated applied projects covering different aspects of standards, substitutions of packaging materials, improvements in the designs of packages for a range of products including agricultural produce, marine products, processed food, pharmaceuticals, chemicals, consumer durables, light and heavy engineering productised. Export packs for fresh fruits and vegetables are developed which include bulk and consumer packs. Consumer and bulk export packs with specification details are

- Techno-economic feasibility studies
- Market research and survey reports
- Projects profile with guidelines for machinery selection, computing investments and working capital as well as establishing economic feasibility.

Some of our esteemed clientele include MNC's, entrepreneurs, government departments, packaging material users and converters.

Who should Attend (Eligibility Criteria)

Anyone who is involved or deals or has inclination in Packaging Industry

- Students who have passed Degree/ Diploma in any branch and wish to enhance their skill in Packaging to grow their career path and to meet challenges of the industry.
- Selected candidates with ITI/12th and fair knowledge of English will also be admitted as a special case.
- Professionals working in company at various levels which have direct impact on packaging of their products.

AGE: No age limit.

Target Audience

Students, Working Professionals, Managers, Entrepreneurs and New Startup professionals

Why you should attend this course

- To gain the knowledge, tools and skills to be an influential professional in the field of packaging
- Able to interact with top Packaging Professionals through different sessions on key topics of packaging
- Have glimpse of various manufacturing units deals in packaging through industrial visits.
- A certificate of accomplishment to differentiate your resume and advance your career.
- A sustainable perspective on package design and development.
- A platform to identify new innovations as well as new opportunities in the field of packaging.

Course

The course comprises over 120 classroom sessions on various aspects of packaging to be dealt by experts from respective fields. Beside theoretical exposure, practical demonstrations on testing and evaluation of packaging materials and packages have been included in the programme. Visits to various industrial establishments and production centers have also been planned to provide an opportunity to the participants in order to get familiarized with the processes conversion, manufacturing and the selection of packaging materials as per current trends of industry.

Certificate

A certificate of attendance will be given to all the participants whose attendance is at least 75% of the total programme duration. Candidates passing all the examination will be awarded passing certificate.

Performance Evaluation

Evaluation is through quizzes, written tests, discussion/literature survey and presentation. In addition, there will be an individual project and group project at the end of the course. In order to get Pass Certificate, a candidate has to acquire a minimum of 40% marks in all the quizzes, written tests, Project & viva voce examination in individual component and 50% aggregate marks.



FEE STRUCTURE

For Indian Participants	For Overseas Participants
 ➤ Ordinary Members – Rs. 57,000/- ➤ IIP – Patron / Life Member - Rs. 55,000/- 	Tuition Fees - US \$ 3,200.00 (The indicative Food Accommodation Charges for 3 months at IIP will be US \$ 4,500.00 per participant)

Fees + 18% GST as applicable

- ➤ All fees are to be paid by Online mode or Demand Draft in favour of Indian Institute of packaging.
- ➤ The Fee includes tuition Fees, essential course material along with expenditure towards transportation for industrial study tours and expert talk from industry professionals during the programme.
- ➤ The Participants have to make their own arrangement for daily attendance and other incidental expenditure.
- > Once the course is commenced, fees will not be refunded under any circumstances.

Re-examination Fee for re-examination, after 1st attempt fee of Rs. 1000/- per paper will be payable for every examination.

Course Material: Course material in the form of packaging technology educational volumes set 1 to 4 along with model questions would be sent to the candidates on registration.

Registration / Admission: Candidates who wanting to take admission in this course may fill the application form after paying a sum of Rs. 250/- in cash or by demand draft in favour of "Indian Institute of Packaging" payable at Mumbai and deposit the mentioned fees. The application form can also be filled online / offline through Institute website and the form fee of Rs. 250/- to be added while depositing the course fees.

The admission to the course will be done on the basis of first come first serve, subject to availability of seats.

The candidates can reserve their seat by depositing the requisite course fee along with application form.

Venue: The venue for this programme will be the Institute's premises in Mumbai.

Timings and Duration: The Classes will normally be held between 10:30 am to 4:30 pm. It will be five days in a week from Monday to Friday. Occasionally Saturday may also be used for Classes/industrial visits, if required. The duration of the programme is 3 months.

Accommodation: The accommodation for participants who wish to reside in the campus can be provided at additional cost. The hostel fee for 3 months course duration at IIP, Mumbai is Rs. 12,500/- plus additional Rs. 1,000/- refundable security deposit. These charges are excluding food.

SYLLABUS

SECTION I - Theory

1) PACKAGING

- a) Historical background, definition of packaging as an integral part of production and marketing.
- b) Basic concepts Physical and Physicochemical such as colligative properties, gas laws, surface tension, dialysis, diffusion, energy measurements, etc.
- c) Package components, separation, clearance, support, positioning, cushioning, weight distribution, suspension and closures.

2) PACKAGING CHARACTERISTICS

- a) Physical Characteristics of the product physical state, weight, centre of gravity, symmetry, fragility, rigidity, surface finish, etc.
- b) Physico-chemical characteristics susceptibility to water, water vapour, gases, odour, heat, light mechanism of spoilage.
- c) Principles of Corrosion and its prevention.
- d) Compatibility permissible plasticisers in plastics and coating media, their migration to food – can lining compounds and lacquers for containers for fruit and vegetables, fish, meat and other products.
- e) Package design factors influencing design/ product-package relationship.

3) PACKAGING MATERIALS

Technology, manufacture, conversion, properties, applications, advantages, Limitations, trends in use and forecast for future:

- a) Paper and speciality papers.
- b) Paper Board Folding cartons.
- c) Cellulosic film and flexible Laminates.
- d) Plastics polyethylene, polypropylene, polystyrene, polyvinyl chloride, polyvinylidene chloride, nylon, polyester, films, laminates and other combinations.

- e) Expanded polystyrene, Expanded polyethylene, Expanded polyurethane, Bubble film.
- f) Aluminium foil.
- g) Lamination and Coatings.
- h) Tinplate, 2 CP Plate, Tin-free steel including closures.
- i) Galvanised drums, coated steel drums and closures.
- j) Aluminium rigid containers, collapsible tubes, closures.
- k) Glass containers including ampoules and vials.
- 1) Composite containers, composite drums and paper tubes.
- m) Textiles Jute textiles Sacks.
- n) Multiwall paper sacks and Plastic Woven sacks.
- o) Wood and Wooden containers, Boxes, Crates, Wire bound packing cases, Plywood cases.
- p) Corrugated Boards, Solid Fibre Board and Boxes-combinations with various materials.
- q) Bio-Degradable plastics in Packaging

4. ANCILLARY MATERIALS

a) Adhesives:

- 1) Theory and principles of adhesion and factors affecting bond strength.
- 2) Different types of adhesives vegetable, animal, inorganic and synthetic.
- 3) Adhesive tapes gum paper tapes, pressure sensitive tapes, their manufacture and applications.

b) Cushioning:

 Physical concepts in cushioning, energy, impact load and concept of shock as a function of deceleration, impulse and time.

- 2) Prevention of shock & damage to articles by various means and their measurement.
- 3) Types of cushioning materials and properties space fillers cork, paper shavings, wood wool, saw dust, coir dust, paddy straw and dry grass. Resilient materials rubberized hair, rubberized coir, poly styrene and polyurethane foams, springs, metal shock mounts, etc. Non-resilient system rigid foams, honeycomb, etc.
- c) Reinforcements straps steel, plastic, rayon based & wires bailing hoops, etc.
- **d) Stitching methods** bags/ paper and textiles, corrugated board boxes and stitching appliances.
- e) Seals and closures
- f) Lining compounds and lacquers for tin containers.
- g) Labels and labelling including instant labels

5) TEST PROCEDURES

- a) For packing materials physical, physic chemical properties, resistance to light, insect and mould.
- b) For Packaged goods Unit package: compatibility studies, shelf life studies with reference to flexible, rigid packs, different types of seals, closures etc. Bulk packages Evaluation of transport worthiness of filled packages physical and climatic hazards.

6) PACKAGING OF FOOD PRODUCTS

- a) Agriculture produces.
- b) Processed and dehydrated food.
- c) Milk and milk products.
- d) Meat and poultry products.
- e) Marine products Shrimps.
- f) Spices.

7) METHOD OF STORAGE

- a) Cold storage, and deep-freezing method of storage, their design and usage.
- b) Irradiation, preservation of perishables and semi perishables.

8) PACKAGING OF OTHER SPECIFIC ITEMS

- a) Pharmaceuticals.
- b) Tea
- c) Cosmetics and Perfumery.
- d) Soaps, detergents and shampoos.
- e) Chemicals, Pesticides and fertilizers.
- f) Petroleum products.
- g) Light Engineering Goods and domestic appliances.
- h) Heavy machinery and equipment's.
- i) Textiles and Garments.
- i) Handicrafts.

9) SPECIALITY PACKAGES

- a) Aerosols, easy opening devices, carry home packs.
- b) Strip packaging, shrink packaging, blister packaging, skin packaging and stretch wrapping.
- c) Systems packaging Lined cartons, Form Fill Seal (FFS), Stand up pouches, etc.
- d) Controlled Atmosphere packaging (CAP) and Modified Atmosphere packaging (MAP).
- e) Aseptic packaging.

10) LOGISTICS AND PHYSICAL DISTRIBUTION

- a) Physical distribution and material handling methods
- b) Handling and transportation.
- c) Unit Load Systems:
 - i. Palletization: Skids and pallets Principles, construction and application.
 - ii. Conveyor: Loading and unloading and other mechanical handling application
 - iii. Containerization: Intermodal containers.
- d) Air (IATA regulations), Sea (IMDG) and Road transportation and packaging.
- e) Bar-Code in Packaging
- f) RFID in Packaging.

11) STANDARD AND QUALITY CONTROL

- a) Basic concepts.
- b) Standard for packaging material rigid, non rigid and ancillary material.
- c) Standard for export packages labelling and marketing regulations.
- d) Packaging quality control criteria.
- e) Sampling, variables and attributes, AQL.
- f) Implication of ISO-9000.
- g) Eco Packaging and regulation.
- h) Recycling and Disposal of Packaging Waste.

12) PACKAGING PROCESS, MACHINERY & EQUIPMENTS

- a) Packaging processes and machinery types, characteristics and Specialties; selection and specification.
- b) Equipment's for canning, paper / board carton, flexible packaging, etc.

13) PACKAGING EMBELLISHMENT AND PRINTING

- a) Graphic design Preparation and reproduction of art work.
- b) Printing Techniques Letterpress. Flexography, Lithography, Gravure, Silkscreen.
- c) Printing inks and Print evaluation.
- d) Ink-Jet Printing in Bar Coding.

14) PACKAGING & MARKETING

- a) Package Design, its impact on sales, role of packaging as silent-salesman-Communication and Sales appeal.
- b) Packaging and Export Marketing.
- c) Better Packaging as an instrument of marketing.
- d) Consumer protection through better packaging.

15) PACKAGING ECONOMICS

- a) Principles of packaging economics.
- b) Planning of packaging and packaging material requirement.
- c) Production planning and control in packaging process.

- d) Inventory control techniques.
- e) Packaging cost controllable and uncontrollable costs; costing methods.
- f) Cost reduction in packaging Value Engineering approach.
- g) Packaging and loss prevention.

16) PACKAGING LAWS & REGULATIONS

- a) Food Safety & Standards Act, 2006
- b) The Legal Metrology Act, 2009 (Packaged Commodities Rules, 2011)
- c) UN certification code for packaging of Dangerous goods.
- d) Packaging laws and regulations legal requirements.

17) PACKAGING MANAGEMENT

- a) Role of packaging technologist in an organization his functions and effectiveness.
- b) Judicious Management of Packaging material for its optimum utilization.
- c) Packaging industry a forecast.
- d) System approach to packaging.

❖ Section II: PRACTICALS

- 1) On the spot studies in industrial units involved in manufacture, use, handling, transportation and storage of packaging materials.
- 2) Identification of packaging materials.
- 3) Tests for physical and physico-chemical properties of packaging material.
- 4) Shelf life studies for packaged goods.
- 5) Evaluation of transport-worthiness of filled packages.
- 6) Case studies.

❖ Section III: PROJECT

- 1) Project Package Development for a selected product a team exercise.
- 2) Dissertation Design & Development of package for certain product individual Exercise.
- 3) Presentation A topic shall be assigned to each participant for making presentation to the group.

APPLICATION FORM

Botter Living	Fo	Form No	
भारतीय पैंकेजिंग संस्थान Indian Institute of Pack Accelerate lady order to Miletry of Commerce & Nobel			
3 Months I	EGISTRATION FORM Intensive Training Certificate (ITC) Programme in Packaging	РНОТО	
Specify Centre for taking admi:	ssion: Delhi	Kolkata	
Father's Name	(Surname)		
Academic Qualification*	hether belong to: SC/ST/OBC/Other (please speci		
Sponsorship: Self Con Work Experience (If any)			
		idate :	
Particulars of the Sponsor/ Par	rents/ Guardian:		
Telephone	Email		
Principal products produced and Packaging sponsored candidate)	, the type of Membership Patron / Life / Ordinary) g materials used for various products (Applicable for in		
	Signature of Sp	onsor / Parent / Guardian	
	mmodation please refer the prospectu ication along with two photographs to be attached		
	(For office use only)		
• •	Cheque / D. D. No		
Remarks:		(Course Cordinator)	



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CHENNAI

KOLKATA

HYDERABAD



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Block CP -10, Sector - V, Salt Lake, Bidhan Nagar, Kolkata - 700 091 Tel: 033-23670763 / 23676016 Fax: 033-23679561

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Lux -3, Industrial Centre, Sanath Nagar, Hyderabad - 500 018 Tel: 040-23814321 Fax: 040-2370 7148 Email: ddhyd.lip@gov.in

AHMEDABAD



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LUCKNOW



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