



Propspectus 2024

Admissions Open

PGDP: Post Graduate Diploma in Packaging

M.S. : Master in Packaging Technology

CPE : Certified Packaging Engineer Course



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
Engineering in the Field of Packaging.

Quality Policy

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.



Mr. R. K Mishra, IRS
Director - IIP

Indian Institute of Packaging (IIP) is an Autonomous Body in the field of packaging 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 headquarters and principal laboratories in Mumbai. The Institute set up its first branch office at Chennai in 1971, followed by branches at Kolkata, Delhi, Hyderabad and Ahmedabad in 1976, 1986, 2006 and 2017 respectively.

The main objective of the Institute is to provide quality education in the field of packaging technology and create skilled packaging technologist of higher calibre. The Institute is also involved in various activities like 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. In addition, globalisation has also nudged the Indian packaging industry to become more competitive in the global markets and also to win major contracts abroad. Today, the India Packaging Market size is estimated at USD 84.37 billion in 2024 and is expected to reach USD 142.56 billion by 2029, registering a CAGR of 11.06% during the forecast period. This has also created a great demand for packaging professionals by the Indian packaging industry..

Since 1966 IIP is conducting various training and education programme for industry & individuals. I am confident that all those who join IIP training and education programmes will succeed in their productive life and contribute to nation building. My best wishes to all the new aspirants who would be joining the illustrious IIP family.

R. K MISHRA, IRS Director - IIP



GENESIS OF PACKAGING EDUCATION

It was in 1985, the institute decided to take a step forward in the direction of Packaging Education. We are second in the world, besides USA, to start two years Post Graduate Diploma in Packaging. With the inputs from expert educationists under the chairmanship of Dr. D. V. Rege, the then Director of University Department of Chemical Technology, Mumbai (now ICT) with Dr. V. Gupchup, the then Principal of Victoria Jubilee Technical Institute, Mumbai (now Veermata Jijabai Technological Institute), Dr. Ravi Talwar; Mr. A. S. Athale; Dr. K. N. Kaul, Technical Director of M/s. Roche Products; Dr. R. Jayaraman, Vice-President of M/s. Britannia Industries Ltd. and others, the curriculum of two years full time Post Graduate Diploma in Packaging was developed.

Since packaging is an inter-disciplinary subject, the first semester includes exposure to subjects like Mathematics, Physics, Chemistry, Mechanical and Electrical Engineering.

Packaging technology is then introduced with detail elaborate coverage on various packaging media, which includes paper and paperboard, glass, metals, plastics and composites. Similarly, laboratory practical training and visit to packaging converters and user industries are included in the curriculum to expose students to the practical aspects of the subject.

In any organisation, since the packaging professional plays a vital role, management subjects such as Production Planning and Control, Total Quality Management, Industrial Engineering, Materials Management, Marketing and Financial Management are also included.

The post graduate diploma course commenced in 1985 and the curriculum is regularly reviewed with addition of new subjects. Some of the subjects recently included are Packaging laws and regulation, Computer Aided Design, Mould Design, Communication Skills, etc., which now form a part of the syllabus. The institute has a separate computer laboratory for Post Graduate Diploma students equipped with necessary software for their training and use. Experienced and dedicated faculty trains the students in CAD.

We have also been conducting three months certificate programme since 1968. The course is accredited by Asian Packaging Federation of which IIP is the founder member and endorsed by World Packaging Organisation. The course is open to overseas participants as well. Both these courses being full time, a need was felt to introduce a Distance Education Course especially for working people who cannot attend the full-time programme. In 1996, the institute has started the Distance Education program for many aspirants who are working in the industry and could not attend our full time courses to improve their professional qualification.

Today we are in the 29^{th} year of Distance Education Programme, which is of $1\frac{1}{2}$ years duration. This course is also accredited by Asian Packaging Federation and is open to participants from any country. We have been receiving overwhelming responses for this course. For overseas students of this course, we conduct the examination in their city of work. Over the years, we have witnessed a significant growth in the number of students enrolling for this course.

The Institute has started with student in-take of 20 for the 2-year Post Graduate Diploma in Packaging and today, our intake is raised to 500. Appreciation of this course by the industry is seen in the responses we receive for the campus interviews, in which almost all of the students are placed within a few days. The value of our course is recognised through repeat visits of many corporate bodies and MNCs for campus placement. All our students are respectfully placed with exciting job offers. Recently, overseas organisations have flown down and recruited our students.

The success story of these programmes is due to the efforts by the eminent faculty, who support the Educational activities; from renowned educational institutions, the industry and many corporate bodies, through industrial visits and training of our students.

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. Globalisation 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 packaging makes our job challenging.

Dr. Babu Rao Guduri HOD T & E Department

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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 endeavours to improve the standard of packaging needed for the promotion of exports and create 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 to make India a focal point for contemporary developments in Art, Science Technology and Engineering, with respect to the field of Packaging.

The Institute began in a very humble way, with an office at Mumbai. It has now expanded, with its Head Quarters at Mumbai and centres located at Delhi, Kolkata, Hyderabad, Chennai and Ahmedabad.



The major activities of the Institute are:

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

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

The Institute has linkages with International organisations 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 Organisation (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 Organisation (UNIDO), International Trade Centre (ITC), the Commonwealth Fund for Technical Cooperation (CFTC) and the European Union (EU). The Institute has successfully completed many International residential training programmes for APF and WPO.

At present, the Institute has member s 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.





Exhibition and Design

This division organises exhibitions on a regular basis.

INDPACK, the Annual National Exhibition organised at various cities around the country, offers the Packaging industry an opportunity to display development in the machinery and material sector.





INDIAPACK International, a collaborative effort with exhibition organisers from overseas, organised once in 2/3 years.

The institutes also organise industry participation in international exhibitions.

The Permanent Exhibition Centre in Mumbai, Delhi, Kolkata, Chennai and Hyderabad offer display outlets for the products of the industry. Industrial designs are developed as per client's requirements.

Awards

The Institute, while maintaining its unique position as an internationally reputed organisation responds to the needs of the country and at the same time acts as a window for India's capabilities in Packaging Science and Technology.

INDIASTAR Awards

IIP has instituted the 'INDIASTAR' Awards, the National award for Excellence in Packaging in the year 1972 to promote and encourage excellence in packaging design, innovation and sustainability, once every two years. Over a period of time, this award programme is firmly entrenched and is most popular as the premier event for India's packaging fraternity.

This biennial INDIASTAR Award is the recognition of excellence in packaging development for functional design and appeal. The INDIASTAR Contest is also open to students under the Student Category.







PACMACHINE Awards

The Machine Award symbolises achievement in the field of packaging and converting machinery, material handling and testing equipment.

Winning INDIASTAR entries may then compete for the ASIASTAR and the WORLDSTAR Awards.





Information and Publication

This division provides information related to the packaging industry, in addition to 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 over the world. Individual subscriptions are available on request.

The Institute's publications are 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 of reports, National & International standards, database on products and 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 products etc. Export packs for fresh fruits and vegetables are developed which include bulk and consumer packs. Consumer and bulk export packs with specification details are developed for pre-cut frozen fruits and vegetables.

Consultancy Services:

- * Package design and development
- * Cost-effective packaging for domestic and overseas distribution
- ℜ On-the-spot advisory visits
- ★ 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.





Global Initiatives

To meet the growing demands from industrial units, in both, the organised and unorganised 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 Graduate Diploma in Packaging through correspondence - a Distance Education Programme (DEP) 1996, recognised by the World Packaging Organisation (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.

A 3-month Certificate Course in Packaging introduced in 1968 is conducted at the Head Office and at the Regional Centres, 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 Organisation (WPO).

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 organised once a year.

Short Training Programmes, Seminars and Conferences of 1-day to 1-week duration are organised by the Head Office 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.

Residential Training Programmes – The Institute conducts Residential Training Programmes at its Campus in Mumbai. These programmes are designed to meet the specific requirements of the organisation/industry.





TESTING AND EVALUATION SERVICES - NABL ACCREDITATED LABORATORIES

Over the last 57 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 offices at Chennai, Kolkata, 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 physicochemical properties of packaging material and packages.

Laboratories at the Head Office and regional centres extend testing facilities to the industry for domestic distribution and export, as per National and International Standards like the Bureau of Indian Standards (BIS), International Standards Organisation (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 standardisation certificates.



Laboratory

The division comprises of the following laboratories:

- * Consumer Package Laboratory
- * Material Testing Laboratory
- * Optical and Barrier Properties Laboratory
- * Chemical Laboratory
- ☀ Transport Laboratory

Activities

Activities carried out include:

- * General chemical and material testing
- * Testing for transport worthiness of packages
- * Testing of packages for the carriage of dangerous goods for export IMDG and ICAO.
- ☀ In-laboratory training programme
- * Training programme on testing and quality control
- Testing based consultancy projects
- Microbiology Laboratory







POST GRADUATE DIPLOMA IN PACKAGING

It was in 1985 that IIP decided to take a step forward in the direction of Packaging Education to meet the growing demands from industrial units, in both, the organised and unorganised sectors for qualified technical manpower. IIP is second in the world, besides USA, to start 2-year Post Graduate Diploma in Packaging. With the inputs of expert educationist under the chairmanship of Dr. D. V. Rege, then Director of UDCT with Dr. V. Gupchup, then Principal of VJTI; Dr. Ravi Talwar; Mr. A. S. Athale; Dr. K. N. Kaul, Technical Director, M/s. Roche Products; Dr. R.Jayaraman, Vice-President, M/s. Britannia Industries Ltd. and others, the curriculum of 2-year full time Post Graduate Diploma in Packaging was developed.



Since packaging is an inter-disciplinary subject, the first semester includes exposure to subjects like Mathematics, Physics, Chemistry, Mechanical and Electrical Engineering.

Packaging Technology is then introduced with detail and elaborate coverage on various packaging media, which includes Paper and Paperboard, Glass, Metals, Plastics and Composites. Similarly, laboratory practical training and visit to packaging converters and user industries are part of the curriculum to expose the students to the practical aspects of the subject.

Since a packaging professional plays a vital role in an organisation, management subjects are also included, such as:

- * Production Planning and Control
- ★ Total Quality Management
- ★ Industrial Engineering
- * Materials Management
- ★ Marketing and Financial Management





The Post Graduate Diploma course commenced in 1985 and the curriculum is regularly reviewed with addition of new subjects. Some of the subjects recently introduced are ecoregulation, computer aided design & mould design and communication skills, which now form a part of the syllabus.

IIP has a separate computer laboratory for Post Graduate Diploma students, equipped with necessary software, for their training and use. Experienced and dedicated faculty trains the students in CAD.



A large number of factory visits are undertaken in line with the curriculum. These provide the students with practical experience with respect to the packaging industries.

The fourth semester is dedicated to industrial training. Every student is placed in an industry for hands-on practical training. At the end of this semester, a 'Campus Placement' drive is conducted at the Institute in Mumbai, and is open for students of all regions of the Institute. IIP takes pride to convey that it takes effects for 100% placement assistance to students of PGDP.

The details of the subjects taught in each semester along with the teaching and examination scheme is as detailed in the Tables ahead.

The students are encouraged to showcase their cultural and extracurricular abilities through the yearly 'PACKFEST' programme. It comprises of a series of cultural and technical competitions related to packaging. This festival was introduced at the 36th Batch Convocation and is continued till date.







STUDENTS MERITAWARD



On the occasion of the 'Silver Jubilee' convocation of the Post Graduate Diploma in Packaging programme (PGDP), it was planned to create a 'Students Merit Award Fund' for the educational activities and the interest amount so generated will be spent every year for making MEDALS for different categories. Thus, all contributions are for perpetuity.

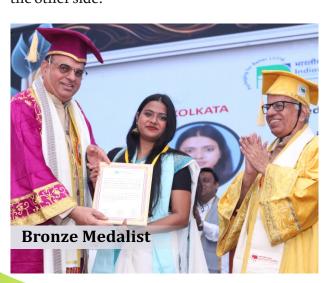
The main objective in awarding Platinum, Gold, Silver and Bronze medals to meritorious students is to motivate the students of Post Graduate Courses and as well as Distance Education Programme (DEP).

The medals will be awarded to the students in the following manner:

Gold Medal – Overall Top Scorer Silver Medal – Overall Second Scorer Bronze Medal – Overall Third Scorer

The three toppers of the PGDP from each region will then compete for the topper amongst them all, for a Platinum Medal. A competitive examination on 'packaging' will be held at Mumbai every year before the convocation.

All medals have been sponsored by leading packaging companies and the contribution will be a onetime contribution towards the Students Merit Award Fund. The medal would have the IIP Logo on one side and the logo of the sponsoring company will be embossed on the other side.







SPONSERS

List of Sponsors for Students Merit Award for Post Graduate Diploma in Packaging (PGDP), Distance Education programme (DEP) and Certified Packaging Engineer (CPE).

Platinum Medal



	Gold Medal	Silver Medal	Bronze Medal
Mumbai	PARKSONS PACKAGING LTD. Parksons Packaging Limited	Associate Capsules Group	Electronics -Devices Balance Brook Brook Electronic Devices
Delhi	Hindustan Adhesives Limited	Micro Mechanical Works	TRIVENI Triveni Polymers Limited
Kolkata	Manjushree Technologies Limited	Tata Tinplate Limited	AVERY DENNISON Avery Dennison
DEP	DIC Limited	Hindustan Tin Works Limited	Perks Engineering
CPE	MULTIPACK INDUSTRIES www.multipackindustries.com Multipack Industries	Blow Packaging (India) Ltd.	Peueco® Neueco Packsolutions Pvt. Ltd.



PLACEMENT

- * Placement in leading MNCs, FMCG, converter industries, KPO, food and pharmaceutical companies.
- * All round professional and personality development.
- ★ Industry oriented teaching.
- * Green campus, reputed faculty, testing laboratories and excellent hostel facility at Mumbai.
- * A unique Resource Centre to facilitate placements all over the world. Leading companies, across the world from various disciplines of packaging come for campus placement.

EMINENT REGULAR RECRUITER

The success continues with a number of eminent recruiters are listed here.

Abbott Laboratories

Agrocel Industries Pvt. Ltd.

Agro Tech Foods Limited

Alpla Limited

Atul Limited

Avery Dennison (I) Pvt. Limited

Agrocel Industries Pvt. Ltd.

Allana Consumer Products Pvt. Ltd.

Alpla India Pvt. Ltd.

Amcor Flexibles India Pvt. Ltd.

Aptar Pharma

Asian Paints

Biostadt India Limited

Bambrew Plant Fibre Technology Pvt Ltd

Bliss Chocolates India Pvt. Ltd.

Britannia Industries Limited

Castrol India Limited

Cavinkare Limited

Chainanalytics Pvt. Limited

Chandras Chemical Entp. Pvt. Limited

Chep India Pvt. Limited

Coco-Cola India Inc.

Creative Polypack Limited

Cummins India Limited

Dabur India Limited

Dolcera ITES (P) Limited

Dr. Reddy's Laboratories Limited

Dream Brakes Pvt. Limited

Eltete India TPC Pvt. Limited

Emami Limited

Emami Biotech Limited

Europack

Flint Group India Pvt. Limited

Flipkart Pvt. Limited

Ferrero India Pvt. Ltd.

Godrej Consumer Products Limited

EMINENT REGULAR RECRUITER

The success continues with a number of eminent recruiters are listed here.

Haldirams Foods International Pvt. Ltd.

Hawkins Cookers Limited

Heinz India Limited

Himalaya Drug Co. Limited

Hindustan Unilever Limited

Hersheys

Integrated Plastics Packaging Inc.

IPCA Limited

ITC Limited

Signode India Limited

Impel Services P Ltd

Indofil Industries Ltd

J K Files & Engineering Ltd (Raymonds)

Kansai Nerolac Limited

Kraft Foods Pvt. Limited

Kris Flexipacks Limited

Kimberly-Clark India Pvt. Ltd.

Kris Flexipack

L'Oreal India Pvt. Limited

Larsen & Toubro Limited

Lupin Limited

Manjushree Extrusion Limited

Manohar Packaging Pvt. Limited

Mapro Foods Limited

Marico Limited

Maruti India Pvt. Limited

Mondelez India Foods Pvt. Limited

Mersheys India Pvt. Limited

Mylan Laboratories

Mahindra & Mahindra

Mars Wrigleys

Moglix

Mother Dairy Fruit & Vegetable Pvt. Ltd.

Nestle India Limited

Nivea (Beiersdorf India Service Pvt. Ltd.)

Packfora LLP

Reifenhäuser India Marketing Pvt. Ltd.

Reliance Retail Ltd

Safepack Industries Ltd.

Schaeffler India Limited

Seedlings India Pvt. Ltd.

Signode India Ltd.

Strides Specialities Pvt. Limited

Stylo Graphic Imaging Pvt. Limited

Surface Graphics Pvt. Limited

Switz Foods Pvt. Limited

Tata Global Beverages Limited

Tulsian Group of Inds. Limited

TVS Motor Company

Uflex Limited

United Phosphorus Limited

VE Commercial Vehicles Ltd.

Walmart India Limited

Weikfield Food Pvt. Ltd

Wipro Consumer Care & Lighting

Wockhardt Limited

Zobele India Pvt. Ltd.

Zydus Life Sciences Ltd.



THE INSTITUTE'S FACULTY

Mr. R. K. Mishra, IRS Director, Indian Institute of Packaging

Mumbai

Dr. Babu Rao Guduri, Joint Director & HOD, T&E

Dr. Badal Dewangan, Joint Director & HOD, R&D

Mr. T. M. Mallik, Deputy Director

Mr. S. K. Juikar, Deputy Director

Mr. P. G. Meshram, Deputy Director

Dr. Hemlata Raikwar, Deputy Director

Mr. Subhash Dalvi, Assistant Director

Mrs. Shweta Shetty, Assistant Director

Mr. Anil Moule, Assistant Director

Mrs. Poonam Ved Prakash, Assistant Director

Mrs. Vaishali Ravandale, Assistant Director

Mr. Nitin Raibole, Technical Assistant

Mr. Swapnil R. Dhopte, Technical Assistant

Mr. Sachin P. Adakane, Technical Assistant

Delhi

Dr. Tanweer Alam, Professor (Adhoc) & Regional Officer

Mr. Rahul Tirpude, Deputy Director

Mr. Rishu Gautam, Deputy Director

Mr. Tushar K. Bandopadhyay, Assistant Director

Dr. Atul Jadhav, Assistant Director

Mr. Dinkar Joshi, Technical Assistant

Mr. Saurabh Tripathi, Technical Assistant

Mr. Jeetendra Upadhyay, Technical Assistant

Mr. Sourabh Ghosh, Technical Assistant

Chennai

Mr. Pon Kumar R., Deputy Director & Regional Officer

Mr. Irmia Katamgiri, Technical Officer

Mr. Harshad M., Technical Assistant

Mr. V. Premraj, Technical Assistant

Kolkata

Mr. Bidhan Das, Deputy Director & Regional Officer

Dr. Nilay Kanti Pramanik, Deputy Director

Mr. Alok Basak, Assistant Director

Mr. Rahul Maheshwari, Technical Assistant

Hyderabad

Mr. N. Natraj, Deputy Director & Regional Officer

Mr. Manipati Madan Mohan, Assistant Director

Mr. S. V. Ramesh, Technical Assistant

Mr. Nallavalli Nandakishore, Technical Assistant

Mr. Balakishan D., Technical Assistant

Ahmedabad

Dr. Amit Singla, Joint Director & Regional Officer

Mrs. Foram A. Badani, Assistant Director

Mr. R. G. Butani, Technical Officer

Mr. Arpit Badani, Technical Officer

Mr. Jaysukh G. Chandpa, Technical Assistant

THE GUEST FACULTY

The guest faculty are invited from reputed institutes. Some of them are as highlighted below.

Mumbai

Indian Institute of Technology (IIT)

Usha Gandhi Pravin College of Management

Shri Vile Parle Kelavani Mandal Education Institute

V. K. Krishna Menon College of Commerce & Economics

D.J. Sanghavi College of Engineering

Datta Megha College of Engineering

M.K.S. College of Commerce & Economics

MPSTME - Mukesh Patel School of Technology /

Management & Engineering

Delhi

Dehi University

Netaji Subhash Institute of Technology

Delhi Engineering College

Indian Institute of Technology (IIT)

Hyderabad

Osmania University

Jawaharlal Nehru Technical University

Institute of MSME

Institute of Chemical Technology

Kolkata

Calcutta University

Jadavpur University

Bidhanchandra Krishi Vishwavidyalaya

Indian Institute of Technology (IIT-KGP)



PROSPECTUS

About the Institute

The Indian Institute of Packaging (IIP), an autonomous body, is a National Institute set up in the year 1966 under the administrative control of the Ministry of Commerce, Government of India, with the active support of the Indian industries. Its headquarters and principal laboratories are located on a sprawling campus in Mumbai and its regional centres are located at Chennai, Delhi, Kolkata, Hyderabad and Ahmedabad. Activities of IIP, today, are in line with those of premier packaging institutes the world over. These are Training & Education, Consultancy & Projects, R&D, Package Testing & Quality Evaluation among others.

IIP works in close association with various International organisations. IIP is a founder member of Asian Packaging Federation (APF) and World Packaging Organisation (WPO).

Course Objective

In recent times, with the globalisation of markets and trade, the role of packaging has assumed greater importance in marketing and distribution of agricultural produce, value added products, industrial products and mass-produced consumer goods. As a result, there is now a demand for technically qualified cadre of people who can undertake design, development, production, quality control as well as make effective use of modern packaging technology.

There are over 7,000 organised industrial units and nearly 4,50,000 small industries in India who use or produce packaging materials and require qualified technical personnel. IIP works in close association with International organisations. IIP is a founder member of Asian Packaging Federation (APF) and World Packaging Organisation (WPO).

The Indian Institute of Packaging has, therefore, to bridge the gap, developed a full time Post Graduate Diploma in Packaging (PGDP) Programme of two year duration, which has become popular in industries since 1987.

In the year 2021 IIP has started two-year full-time Master in Packaging Technology (M.S) and one year online programme on Certified Packaging Engineers (CPE) course.

Curriculum

The curriculum is so designed that the successful candidates would be well-equipped in all major facets of packaging activities and will be easily employable in a package manufacturing, packaging machinery manufacturing or user industries like food, pharmaceuticals, cosmetics and others. With experience, they can also aspire to be self-employed professionals / entrepreneurs in their field.

In order to provide sound technical knowledge and at the same time, acquaint them with industrial practices, the theory sessions have been kept at 70 per cent of the curriculum and the balance 30 per cent is allotted for practical sessions. The theory section includes classroom sessions and library reference work. The practical side includes laboratory exercise, industrial visits, project work and industrial training. Involvement in R&D Activities of the Institute will form an important part of the curriculum.

Title

The two-years programmes leads to a Post Graduate Diploma in Packaging (PGDP), Master in Packaging Technology (M.S.) and one year online programme Certified Packaging Engineers (CPE) Course.

Eligibility: Maximum Age 30 years as on 31/05/2024

(Age relaxation: 3 years for OBC & 5 years for SC/ST)

wFor M.S. & PGDP maximum age 30 years as on 31/05/2024 (Age relaxation: 3 years for OBC & 5 years for SC/ST)

新or CPE no age limit

PGDP

A candidate should have passed the full time (not by correspondence or part time) Graduate degree examination in Science (12th + 3 years degree entire 5 years in science only) with Physics / Chemistry / Mathematics Microbiology or Biochemistry as the main subject or one of them as second subject in the three year degree or Agriculture / Food Science/ Polymer Science or Engineering / Technology degree of a AICTE/ recognised University with minimum second class. The candidate needs to have consistently high academic performance and sound general knowledge.

M.S.

A candidate should have passed the full time (not by correspondence or part time) Graduate degree in Engineering & Technology or graduate in 4 years integrated science.

CPE

A candidate should have passed the full time (not by correspondence or part time) Graduate degree in Engineering & Technology.

Those with equivalent overseas qualification would also be eligible for admission. The candidate needs to have consistently high academic performance and sound general knowledge. Those with equivalent overseas qualification would also be eligible for admission.

Candidates appearing in the final year of the qualifying examinations can also apply, however, they must submit their results/ provisional results (as given by University) latest on the day of the personal interview and selection, as without their degree result, student are not eligible to appearing for personal interview and will be eliminated from the admission process.

Admission/Selection Procedure:

The admission for M.S. & PGDP Programmes will be done according to the following two steps:

- (i) Written examination
- (ii) Personal Interview

Selection Procedure:

STEP 1: Written Examination

A candidate seeking admission to the M.S. and PGDP Course will be required to appear in the written Entrance Examination which will comprise of multiple-choice questions. The syllabus for the written test is at the graduate level and the subjects include Physics, Chemistry, Mathematics and Engineering. The candidate has the option to choose questions, provided the number of questions does not exceed a fixed limit. The entrance examination for M.S. & PGDP will be conducted on 28/07/2024 at Mumbai, Kolkata, Delhi, Chennai, Ahmedabad, Bengaluru and Hyderabad centers of the Institute. The Institute has the discretion to fix minimum qualifying marks for the examination and short list the candidates who will be eligible for further consideration for admission.

Application for admission to the course needs to be submitted on or before 25/07/2024 along with attested copies of mark sheets and other credentials. Application form, Prospectus and Syllabus can be obtained from 1st March, 2024 from any center by paying Rs. 500 in cash or by Demand Draft in favour of Indian Institute of Packaging payable at Mumbai or Kolkata or Delhi or Chennai or Hyderabad or Ahmedabad. The forms can also be downloaded from the IIP website. However, such forms should be accompanied with Rs. 500 Demand Draft in favour of Indian Institute of Packaging payable at Mumbai or Kolkata or Delhi or Chennai or Hyderabad or Ahmedabad.

STEP 2: Personal Interview

Candidates, who clear the written examination as above, will be called for Personal Interview which will be held at the Ahmedabad, Hyderabad, Kolkata and Mumbai centers of the Institute.

The Institute has the discretion to fix minimum qualifying marks for Personal Interview which will make a candidate eligible for further consideration for admission. The final selection of candidates for admission to the course will be done in the order of their merit which will be based on the aggregate of marks calculated in each case according to the following weightage:



For M.S. & PGDP

(i) Marks obtained in 10th Class/Matriculation: 10%
(ii) Marks obtained in 12th Class/Sr. Secondary: 10%
(iii) Marks obtained in Graduation level: 30%
(iv) Marks obtained in the Entrance Examination: 30%

(v) Marks obtained in Personal Interview: 20%

Display of 1st list will be based on the 1st round cut-off. The 2nd list display is on the basis of 2nd round cut-off. Further lists will be displayed on the availability of seats when necessary.

Note: For CPE, no entrance. Candidates may submit application forms directly or online mode.

Fees Payment

Fees for the subsequent semester should be paid as

follows for M.S., and PGDP.

2nd Semester: 16th Dec. 2024 to 8th Jan., 2025 3nd Semester: 26th June to 13th July, 2025 4th Semester: 15th to 31st Dec., 2025

Tuition Fee and Other Fee

Fee Structure for PGDP and M.S.

Note: The fees for the Semester II & III
have to be paid prior to the
commencement of the Semesters.
Appropriate late fee of Rs. 100/- per week
will be charged. All fees are to be paid by
DD (in favour of Indian Institute of
Packaging). Semester (2 nd , 3 rd & 4 th) fees
once paid will not be refunded under any
circumstances.

Cancellation of admission & Refund of fees

- * Cancellation on/before commencement of the course 10% deduction, balance will be refunded.
- * After commencement of the course, with in 15 days 25% of fee deduction
- ₩ Within 1 month 50% of fee deduction
- * After 1 Month No refund of fees

A.	One Time fee (payable at the time of admission)	Rs. 55,000*			
В.	Fees per Semester (Tuition Fee + Exam Fee)	Rs. 70,000*			
C.	Refundable Deposit (payable at the time of admission)	Rs. 3,000			
D.	Hostel Fees` (optional) only in Mumbai				
	1)Payable at the time of admission (Registration fees (Rs. 1000) + Deposit (Refundable Rs. 1000)	Rs. 2,000			
	2)Fee per Semester	Rs. 25,000			
E.	Fees for application form/syllabus/prospectus/ set of previous year's question papers	Rs. 500			
	Fees for foreign students = US\$2000 per semester (not included hostel, food & other charges)				

^{*}Fees + GST as applicable

Total fees payable at the admission = A+B+C+D (optional)

Fees Structure for CPE

S. No.	Details	Amount (Rs.)	GST 18% (Rs.)	Total (Rs.)	Due Date	
	Registration Fee	500/-	90/-	590/-	During Registration	
	Fee for I-Semester (incl. one time Admission fee of Rs. 10,000/-)	30,000/-	5,400/-	35,400/-	Before commencement of the course (31st May, 2024)	
	Fees for II-Semester	20,000/-	3,600/-	23,600/-	Before 15th Nov. 2024	
	Fees for III-Semester	20,000/-	3,600/-	23,600/-	Before 15th March, 2025	
			Total Fees	83,190/-		
	Fees for foreign students = US\$1500 per semester (including Form Fee and Service Tax)					

Hostel

The programme is non-residential. However, separate hostel accommodation for boys and girls on a twin sharing basis (with mess facility) is available only in Mumbai. There are limited rooms and is provided on first-come reserved basis, for only the students residing outside Mumbai.

Seats

The seats for every academic year as follow:

Mumbai (PGDP) - 280 Kolkata (PGDP) - 80 Ahemdabad (PGDP) - 60 Hyderabad (M.S.) - 40

Chennai - 60 (CPE reservation may not

be applicable)

Seat reservation is as per the Government norms as below.

OBC - 27.0% SC - 15.0% ST - 7.5%

Semester Examination

A candidate for the M.S., PGDP and CPE is required to pass three semester examinations and successfully complete the last semester devoted to industrial training and project work. Candidate with minimum 75% attendance in each subject will be allowed to appear for the Semester Exam.

Passing Criteria

For eligibility of M.S., PGDP and CPE, a candidate must obtain at least 40 per cent marks in each paper and practicals. In addition, the candidate must obtain at least 50 percent in the aggregate.

Provision for ATKT

A student will be given an ATKT provide his/her overall performance is good and he / she is not falling in more than two subjects.

Re-examination for PGDP and CPE

A re-examination will be conducted for students who have cleared Sem1 and Sem 2 and failed to clear Sem 3, Sem 3 Re-examination will be conducted before the convocation of that batch for PGDP and CPE.

Grade

A - 70% and above First Class with Distinction

B - 60% and above First Class but less than 70%

C - 50% and above Second Class but less than 60%

Academic Calendar

Admission Open:1st March 2024Last Date of Form Submission:25th July, 2024Entrance Exam (IIPCET - 2024):28th July, 2024

Semester I : August to December, 2024
Semester I - Diwali Break : 28th to 9th November, 2024

Semester I - Examination : December, 2024

Semester Break : 15th to 31st January, 2024

Semester II : February to June 2025

Semester II - Examination : June, 2025

Semester - Break : 15th to 31st July, 2025
Semester III : August to December, 2025
Semester III - Diwali Break : 15th to 25th October, 2025

Semester III - Examination : December, 2025

Semester III - Break : 15th to 31st January, 2026 Semester IV : February to July, 2026

Semester IV - Presentation and Viva : July, 2026



Code of Conduct

Following is the Code of Conduct which all the students enrolled for any of the courses organised by IIP need to follow:

Any violation of the code will attract disciplinary action. The disciplinary action will be entirely decided by the management of the Institute, and which may amount to removal of the student(s) from the course.

- * All the students will be punctual in their attendance in the classroom and will be seated before the session starts as per the time-table.
- * Students will behave properly in the classroom and within the campus of the Institute and will maintain the decorum.
- ★ Decent dress code to be followed by the students.

Following conduct / acts will be considered as violation of the code of conduct and is required to be followed by all the students:

- * Entering the classroom after the session / lecture has started /commenced.
- * Leaving the classroom, before the lecture/session is completed without the permission of the faculty .
- * Speaking loudly and among each other, during the progress of the lecture/session.
- * Any kind of teasing, abusing, using bad words, unparliamentary language with any of the students staff of students, staff of
- * IIP, faculty, visitors or any other person within the campus of the Institute.
- * Consumption of alcoholic drinks, smoking, consuming any undesirable products within the campus.
- * Humiliating, insulting in any manner with the staff of the institute, faculty or any guest, within the campus.
- * Misplacing, stealing of any items or property, belonging to any of the students, staff, faculty or the Institute.
- * Misbehaviour in any manner with any of the students, staff, faculty or visitor in the Institute.
- * Bringing in the campus, any undesirable person, product, pet, without prior authorization.
- * Talking with other students, copying, exchanging material, papers during the examination.
- * Littering with wrappers, paper etc. in the classroom, campus etc.
- * Mishandling/misusing learning aids/books/instruments of the Institute.
- * Ragging in any manner with any student in the campus.
- * Eating in classroom, making noise in the corridor etc.
- * Using mobile phones / its accessories in the classroom / laboratory.
- * Copying presentations, lecture notes from laptops without prior permission of the respective faculty.
- * Roaming in the office premises, campus without any reason.
- * Destroying plants / greenery in the campus.
- * Internet surfing in the classroom other than the time slot time slot allotted, specifically for the purpose.
- * Any act not mentioned above, but undesirable in the academic field.

Dissertation / Library Reference Work

The student is expected to submit a typed report at the end of each semester as dissertation on library reference work, for evaluation. The subject for dissertation would be prescribed by the Institute.

Industrial Visits

Number of industrial visits are organised for the students during Semester I and II with a view to expose them to actual industrial processes and give an opportunity to acquire practical experience on packaging and non-packaging related subjects.

Additional Topics

To improve the skill of the students, new topics and additional lectures will be introduced.

Practical Examination

The methodology of practical examinations is detailed by the faculty. Normally, students will be required to plan work, perform experiments, report results and give interpretation of the same.

During practical examinations, emphasis is laid on the methods of working and accuracy of results, rather than on information that is asked during the theory examinations.

The practical examinations are held in Packaging Technology and other related subjects only.





Industrial Training

During the 4th semester, candidates are assigned to Industrial Training for 5 Months Each candidate is required to submit a typed report (2 copies) as 'Project Work' providing methodology, fndings etc. in detail as a part of industrial training.

Performance during industrial exposure, provided in the industrial unit, is evaluated based on the report to be submitted by each candidate and necessary assessment / certificate as may be obtained by the Institute from the concerned unit. 300 marks are assigned for industrial training and project work and 300 marks for overall performance of the candidate in all four semesters.

Marks are based on regularity in attendance (minimum 75%), conduct and progress as reported by the industrial supervisor, quality of report and viva-voce examination, besides behaviour etc.





Post Graduate Diploma in Packaging (PGDP)

Teaching Scheme - Semester I

Sr. No.	Name of the Subject	Theory No. of Credits	Practicals	Examination Duration	Marks
1.	Mathematics I	18	-	2 hrs	50
2.	Science (Chemistry and Physics)	18	-	2 hrs	50
3.	Electrical Technology	18	-	2 hrs	50
4.	Applied Mechanics I	36	-	3 hrs	100
5.	Mechanical Technology	18	-	2 hrs	50
6.	Engineering Mechanisms	18	-	2 hrs	50
7.	Introduction to Principles of Packaging	18	-	2 hrs	50
8.	Paper and Paperboard	18	-	2 hrs	50
9.	Glass Technology	18	-	2 hrs	50
10.	Introduction to Plastics and Polymers	18	-	2 hrs	50
11.	Project Work	-	-	2 hrs	50*
12.	Engineering Drawing	18\$	-	2 hrs	50
13	Industrial / Field Visit	85	-	NA	G#
14.	Practical's (Packaging Technology)	-	54	2 hrs	50##
	Tota	l 301	54		700

Marks assigned on the basis of Seminar, Report, Submission, Presentation and Viva-voce.

One Credit Hour is 1hr. 15 mins.

Theory Syllabus -Semester I **Mathematics I**

Matrices, Differential Calculus, Instruments. Differential Theorems, Integral Calculus and Differential Equations, Algebra, Engineering Mechanisms Polynomials, Business Mathematics.

Science (Chemistry and Physics)

Chemical Bonds, Thermodynamics, Electro Chemistry, Gas Laws, Viscosity, Velocity and Acceleration, Force, Laws of Introduction to Principles of Motion, Energy.

Electrical Technology

Distribution.

Applied Mechanics I

Scalers and Vectors, Centre of Gravity, Cellulosic Materials, Processes in Friction, Moment of Inertia, Stress-Strain Cellulose Industries, Paper and Board Theory, Load Distribution, Bending Deflections, Torsion Analysis, Columns, Joints.

Mechanical Technology

Appraisal, Hand Tools, Measuring Cartons, Multiwall Paper Sacks,

Kinematics, Mechanical Drives, Gear Trains, Clutches and Brakes, Bearings, Cams, Dynamometer.

Packaging

Introduction, Components, Permeability, Applications, Polymer Composites, Mechanisms of Spoilage, Corrosion and Polymer Blends, Additives for Plastics, Circuits, Generators, Motors, Prevention of Corrosion, Package Testing & Evaluation. Transformers, Measuring Instruments, Evaluation, Ecological Aspects, Barcoding Applications in Packaging.

Paper & Paper Board

Manufacture,

Testing of Cellulose and Paper Workshop Processes and their Materials, Speciality Papers, Folding Composite Containers.

Glass Technology

Glass Containers: Manufacture, Properties, Fabrication Operation, Quality Control, Leaching, Applications and Testing.

Introduction to Plastics & Polymers

Polymeric Material, Properties,

Engineering Drawing

Drawing exercises to be completed on drawing sheets for submission.

Practical's

Experiments based on Paper & Paperboard and Glass Containers.

^{** 50%} Marks assigned on the basis of submitted work (drawing sheets ## with exercises) & 50 based on exam

G means grade assigned on the basis of attendance, conduct and report submitted by the students.

Marks assigned on the basis of tests and viva-voce

^{\$} For practical exercises, additional 18 hrs.

Post Graduate Diploma in Packaging (PGDP)

Teaching Scheme - Semester II

Sr. No.	Name of the Subject	Theory	Practicals	Examination Duration	Marks
1.	Economics	18	-	2 hrs	50
2.	Principles of management	18	-	2 hrs	50
3.	Mathematics II	18	-	2 hrs	50
4.	Applied Mechanics II	36	-	3 hrs	100
5.	Industrial Electronics	18	-	2 hrs	50
6.	Fluid Mechanics and Machinery	18	-	2 hrs	50
7.	Introduction to Plastic Processing	36	-	3 hrs	100
8.	Rigid packaging Material (Non-Plastic – CFB, Composites, Metal, Wood etc)	36	-	3 hrs	100
9.	Ancillary and other packaging material	18	-	2 hrs	50
10.	Package Printing Technology	18	-	2 hrs	50
11.	Machine Drawing	18\$	-	2 hrs	50**
12.	Industrial / Field Visit	180	-	-	G#
13.	Project Work	-	-	-	50##
14.	Practical's (Packaging Technology)	54	54	2 hrs	50^
	Total	486	54		800

\$ For practical exercises, additional 18 hrs.

- $^{\sharp}$ G means grade assigned on the basis of attendance, conduct and report submitted by the students
- *** Marks assigned on the basis of report submission, presentation and viva-voce.

^ Marks assigned on the basis of tests, journal and viva-voce

Theory Syllabus - Semester - II

Economics

Study of Demand and Supply, Market Structure, Nature of Production, Distribution, National Income and Money.

Principles of Management

Definition, objective, function etc.

Mathematics - II

Introduction to Statistics, Application of Statistics in Packaging, Normal Distribution, Dimensional Analysis, Measures of Central Tendency, Measures of Dispersion Coefficient of Variations, Skewness, Simple Correlations and Regressions, Multiple Regression, Multiple and Partial Correlation and Variability, Design aof Experiments for Packaging Applications, Statistical Quality control.

Applied Mechanics - II

Torsion, Columns and Struts.

Industrial Electronics

Electronic Devices: Tubes, Transistors, ICs, Rectifiers, Amplifiers, Oscillators, Analogue and Digital Measurements in Packaging.

Fluid Mechanics and Machinery

Hydraulic and Pneumatic Machines, Rotary Pumps, Centrifugal Pumps, Constant and variable Delivery Pumps.

Introduction to Plastic Processing

Injection moulding, Extrusion & Blow moulding, Calendaring, Thermoforming, Rotational moulding, Foam Plastics, FRP Process, Coatings, Wax and lamination Processing Research Activities Technics.

Rigid Packaging Material (Non-Plastic - CFB, Composites, Metal, Wood etc.)

Fibreboard Containers, Drums, Tin, Simple Stress-Strain Theory, Theory of Aluminium Cans / Containers, Aluminium Foils, Steel Drums, Wooden Containers / Crates.

Ancillary and other Packaging Material

One Credit Hour is 1 hrs. 15 min.

Cushioning, Textile Bags, Technics of sealing Process, Adhesive, Reinforcement, Twines and cards, Clips, and Controls, Application of Computer Hooks, Stitching Methods, Seals & Closures.

Package Printing Technology

Process of Communication, Printing Processes and Methods, Layout & Pasteup, Composition for Printing, Theory of Full Colour Graphic Arts, Photography, Printing Image, Carriers, Printing Presses, Paper and other Printing Stocks, Printing Inks.

Machine Drawing

Submission of drawings based on exercises given.

Exposure to various research activities with laboratory assignments, analytical work as part of research projects by the Institute and also be entrusted with research projects after the completion of the Semester-II Examinations.

Practicals

Plastics Technology - Experiments connected with Plastics. Experiments on Seals, Coating, Laminates, Reinforcements.

^{**50%} Marks assigned on the basis of submitted work



Post Graduate Diploma in Packaging (PGDP)

Teaching Scheme - Semester III

Sr. No.	Name of the Subject	Theory	Practicals	Examination Duration	Marks
1.	Production Management	36	-	3 hrs	100
2.	Financial Management	27	-	2⅓ hrs	75
3.	Principles of Entrepreneurship	18	-	2 hrs	50
4.	Marketing Management	18	-	2 hrs	50
5.	Materials Management	18	-	2 hrs	50
6.	Product Packaging Food/Pharmaceuticals / Cosmetics/ Chemicals etc)	36	-	3 hrs	100
7.	Packaging Machinery	36	-	3 hrs	100
8.	Packaging Laws and Regulation	18	-	2 hrs	50
9.	Tooling and Design of Moulds for Packaging	36	-	3 hrs	100
10.	Introduction to Packaging Design Concepts	18	-	2 hrs	50
11.	Application of Computers in Packaging Design	18**	-	2 hrs	50
12.	Communication Skills	18	-	-	-
13.	Practical's (Packaging Technology)	54	54	2 hrs	50
	Total	351	54		825

^{**}For practical exercises, additional 18 hrs One Credit Hour 1hr. 15 mins.

Theory Syllabus - Semester - III

Production Management

Industrial Engineering, Operations Introduction to Food Preservation / dimensional Design, Study of Visual Planning and Control.

Financial Management

Cost Accounting and Financial Management.

Principles of Entrepreneurship

Definition, Objective, Function etc

Marketing Management

Structure, Models, Market Research, Packaging Laws & Regulations Demand curves, Market Share Standards and Standardisation, Quality Auto CADestimation, Sale Models, New Product Development, Distributions Strategy, Market Research.

Material Management

Concept & Objective for Material Packaging Function, Purchasing System, Injection Moulds, Blow Moulds, Experiments connected with Metal Inventory, Costing, Demand for Casting, Extrusion Dies, Product Design, transportation, Evaluation Material

Product Packaging (Food / Pharmaceuticals / Cosmetics / Chemicals etc.)

Research, Quality Control, Production, Packaging Technology, Method of Elements, Principles of Typography, Storage, Packaging of Food, Introduction to visual ergonomics, Pharmaceuticals, Cosmetics, Chemicals understanding the relationship and other products.

Packaging Machinery

Filling of Carbonated Liquids and other Packaging Design Packaging Techniques, Cartoning, Labelling, Thermoforming.

Standard, Eco Regulations, FSSAI Rules Practice Session and Regulations etc.

Tooling and Design of Moulds for

Designing for Packaging Application.

Introduction to Packaging Design Concepts

Introduction to design, 2D&3D between consumer & communication Design.

Filling of Dry and Liquid Products, Application of Computers in

Commands and systems variables, to co-ordinate a system, creating objects, editing methods, Layers and object properties, Creating 3D objects etc.

Communication Skills

Techniques and practices

Practicals (Packaging Technology)

Containers. Experiments connected with Permeability, Shelf-life Studies of Food, Cosmetics and Pharmaceutical Products

Post Graduate Diploma in Packaging (PGDP) Teaching Scheme - Semester IV

Sr. No.	Name of the Subject	Duration	No. Credit Hrs	Marks
1.	Industrial Training & Report	5 months	480	500*
2.	Overall Performance		-	100**

^{*}To submit typed report as Project work based on training and viva-voce.

TOTAL CREDIT HOURS

1.	SEMESTER - I	355
2.	SEMESTER - II	486
3.	SEMESTER - III	351
4.	SEMESTER - IV	480

CAMPUS PLACEMENTS

At the end of the Semester IV campus placement is arranged, wherein, students have the opportunity to face interviews arranged with a number of interested companies including from abroad. Campus placement interviews will be conducted at Mumbai & Kolkata centre.

Assistance in Placement will be provided by the Institute only to the Students who have 90% attendance in all the semesters in all the subjects. Student with less than 90% attendance will not be allowed to appear in the Campus Placement Procedure.



^{**}Marks will be assigned on the basis of regularity in attendance, conduct and progress.



(Affiliated by Jawaharlal Nehru Technological University, Hyderabad) **Teaching Scheme - Semester I**

Subject Code	Name of the Subject	Theory	Practicals	Total Credits
PTC - 101	Packaging Materials & Characterization – I	04	-	04
PTC - 102	Product Package Development	04	-	04
PTC - 103	Package Printing Technology	04	-	04
PTC - 104	Ancillary Packaging Materials	03	-	03
PTC - 105	Communication Skill & Report Writing	02	-	02
PTL - 101	Material Testing Laboratory-I	-	04	02
PTL - 102	Package Design Laboratory-I	-	04	02
	Elective – I	03	-	03
	Total	20	08	24
	Elective - I			
➤ PTE1011	Plastics Processing & Conversion Technologies			
➤ PTE1012	Packaging Distribution & Logistics			

Note: 1. Student may select one of the elective subject 2. One credit equal to two hours teaching session

Packaging Materials & Characterizations

Paper & Paper Board, Raw Materials, Manufacturing, Types of papers, Speciality papers, Cartons, Designs, Applications, Corrugated Fibreboard, Composite containers, Fibre drums, Plastic Materials, Thermoset, Properties and Applications in packaging.

Product Package Development

Packaging and Modern Merchandising, Marketing equirements, Brand Management, Product Life cycle, Managing the Packaging Function, Project Scope, Consumer Research, the features of a package.

Package Printing Technology

Process, applications of the process, Identification, Stencil Systems-Screen Automatic screen printing machinery, Screen Printing Technique.

Ancillary Materials in Packaging

Cushioning, theory of adhesion, types of adhesives, applications of adhesives, Caps, Closures, Dispensers,

new generation Dispensing Closures, Labels, types of labels smart and intelligent Labels, Security Labels, other Ancillary materials.

Communication Skill & Report

Communication Introduction, Thermoplastic, Engineering Plastics, Definition, Nature and Scope of Communication, Importance and Purpose of Communication; Oral Communication Exercises- Written Communication Exercises.

Plastics Processing & Technologies **Conversion**

Extrusion-Basic Principle of Extrusion, Extruder Parts, Types of Extruder, Process, Injection Moulding-Principle, Machine, Processing, Process Variables, Mould Cycle, Types of Injection Mould, Introduction to Screen Printing Rotational Moulding-Principle Machine.

Packaging Distribution & Logistics

Introduction to Logistics -Elements of Logistics - Supply Chain Management & Distribution; Classification of Pallets-Standards- Constructions-Pallet Treatment Techniques; Concept of Containerization.

Material Testing Laboratory - I

Testing of paper and paperboard such as grammage, thickness, cobb, treating resistance, tensile, compression, burst strength, burst factor, RCT, crush test, stiffness, scuff resistance, gloss, haze, moisture.

Packaging Design Laboratory

Create 2D drawings in CAD software using Different basic shapes; Create Isometric views of different objects/packages; Create a 3D design; By manipulating 2 D vector graphics; Design an art work / graphics for a corrugated fibre board box.

Elective - I

- Plastic Processing & **Conversion Technologies**
- Packaging Distribution & Logistics.

(Affiliated by Jawaharlal Nehru Technological University, Hyderabad) **Teaching Scheme - Semester II**

Subject Code	Name of the Subject	Theory	Practicals	Total Credits
PTC - 201	Packaging Materials & Characterization – II	04	-	04
PTC - 202	Package Finishing Operations	03	-	03
PTC - 203	Packaging Economics	04	-	04
PTC - 204	Pharmaceutical & Medical Device Packaging	04	-	04
PTC - 205	Material Testing Laboratory-II	-	-	04
PTL - 206	Packaging Design Laboratory-II	-	04	04
PTP - 207	Seminar - I	02	04	02
	Elective – I	03	-	03
	Total	20	08	28
	Elective - II			
➤ PTE2011	Plastics Processing & Conversion Technologies			
➤ PTE2012	Packaging Distribution & Logistics			

Note: 1. Student may select one of the elective subject

2. One credit equal to two hours teaching session

3. Seminar-I, individual project work and industrial visits

Packaging Materials and **Characterization-II**

Metals in Packaging & their properties, Steel based: Stainless & Galvanized Steel - Coated steels like Tinplate, Tin free Steel - Polymer applications, Metal Cans - Two piece, Glass production, Basic processes of glass making, Quality control & testing.

Package Finishing Operations

Technical & Commercial Considerations, Functional Basics of Decoration, Consumer Attributes, Functions and Limitations-Deception, linking various printing processes to package design formats, Designing, Manufacturing, Direct Printing Techniques on Packaging Substrates.

Packaging Economics

Introduction - Introduction to Economics - Law of supply and demand, Economic Analysis -Installation and running cost of services, Break-even analysis,

Cash ow analysis, Risk Analysis and Industrial Products Packaging Management Practice, Basic demand Industrial Products Classification, supply analysis -Market analysis, Difference between consumer and Packaging Economics -Basic economics, industrial products packaging needs, Cost Effective Packaging - Guidelines.

Packaging

Characteristics of Pharmaceuticals & of cushion and cushion design, Drugs, Pharmaceutical Product - Wood-Packaging material, Other Definition of Drug Characteristics - packaging materials & forms. Stability-Chemical change / Reactions, Seminar-1 Packaging of Drugs & Pharmaceuticals, Aseptic Packaging - Types &systems Individual Project work and -Injectable and orals/ointments, Industrial Visits Medical Device - Medical Devices Material Testing Laboratory - II Plastics, Regulatory System and Packaging Woven Sack, Barrier Properties, Optical standards (EU & US)

Plastic Mould & Die Design

Introduction - Plastic Product Design Packaging Design Laboratory-II Criteria, Moulding Considerations, Create 2 D & 3 D Modelling, create 2D & Materials for Mould -Types of Ferrous 3D Modelling and Package Performance and Non-Ferrous Materials, Machining Simulation for bottles, Create 2 D & 3 D Methods/ Tools/ Machines, Injection Modelling and Package Performance Mould-Mould Dimension Calculation, Simulation for CFB Mould Components, Extrusion Die Types of Dies, Design Consideration.

Susceptibility to corrosion, Theory of corrosion, Corrosion inhibitors coated - properties & their Pharmaceutical & Medical Device (VCI/VPI) - types / varieties / properties, ProtectiveMeasures, Theory

Properties and Extractability test for plastics

Elective - II

- Plastic Mould & Die Design
- **Industrial Products Packaging**



(Affiliated by Jawaharlal Nehru Technological University, Hyderabad) **Teaching Scheme - Semester III**

Subject Code	Name of the Subject	Theory	Practicals	Total Credits
PTC - 301	Specialty & Innovative Packaging Technology	04	-	04
PTC - 302	Packaging Laws and Regulations	03	-	04
PTC - 303	Packaging Machinery	04	-	04
PTC - 304	Entrepreneurship Evolution & Management	04	-	03
PTC - 305	Transport Simulation Laboratory	-	-	04
PTL - 306	Packaging Design Laboratory-III	-	04	04
	Seminar - II	02	04	02
	Elective – III	03	-	03
	Total	20	08	28
	Elective - III			
➤ PTE3011	Plastics Processing & Conversion Technologies			
➤ PTE3012	Industrial Products Packaging			

Note: 1. Student may select one of the elective subject 2. One credit équal to two hours teaching session 3. Seminar-I, individual project work and industrial visits

Specialty & Innovative Packaging Packaging Machinery

Specialty Packaging, Retort and Aseptic Classification & Application, Packaging Concept of Sustainability - Principles & absorbers-antimicrobial system - etc, Equipment's, Other Equipment's. Smart and Intelligent packaging, Time-Biosensors, Technology of canning - Management New development in flexible packaging Entrepreneurship Development for foods.

Packaging Laws and Regulations

Standards, Bureau of Indian standard, standardization, Quality standards Legal Meteorology Act, FDA/ AGMARK rules and regulations, Eco-regulations, eco labelling, Pollution control related to packaging, IMDG, ICAO, Life Cycle Analysis, Export Regulations, recent FSSAI act, RFID, Barcode Markings & Labelling on Transport packaging.

Elective - III

- Food Packaging Technology
- Sustainability & Circular **Economy in Packaging**

Packaging Machinery Types / Packaging

Definition, Need, Qualities required, Environment, Production Management Seminar - II - Introduction, definition of products, Individual Project work Transport production, Productivity- Definition, Simulation Laboratory Importance, Benefits of increased productivity, Materials Management.

Food Packaging Technology

Introduction to Food Packaging Technology: Principles of Food Preservation, Food processing techniques and practices, Recent development in food packaging technology: Aseptic Packaging, MAP/CAP, Retort packaging, Vacuum Packaging, Packaging of milk and milk products; Fresh & Process Foods, Bakery products, confectionery.

Sustainability & Circular Economy in

packaging, Active Packaging, Food Machineries - Conversion, Packaging Concepts, Design Guidelines for Additives - Preservatives - Sachets & Machineries-for Line Operations and Sustainable Packaging, Concept of pads - Oxygen scavengers - Flavour Systems Ancillary Machinery & Compostable, Biodegradable & Bio based Packaging Materials, Source Reduction - Various Waste Disposing Temperature indicators (TTI) - Entrepreneurship Evolution & Techniques, Environmental policies of India, Case Studies of Life Cycle Assessment in Packaging.

Compression (Different Types of Materials), Inclined Impact, Drop, Vibration, Rolling, Stack load, pray / Rain, Hydraulic pressure, Leakage test.

Packaging Design Laboratory-III

Use any one of the Solid Modelling Packages cited below and generate a solid model for a different 3D Packaging Samples Container UNIGRAPHICS / CATIA/PROE/IC3D/ETC.

(Affiliated by Jawaharlal Nehru Technological University, Hyderabad) Teaching Scheme - Semester IV

Sr. No.	Subject	Duration	Total Credits
1	Industrial Training & Report		18

Note: 1. To Sumit hard book binding report as Project based on training and Viva-Voce.

- 2. Marks will be assigned on the basis of regularity in attendance, conduct and Progress
- 3. *To submit typed report as Project work based on training and viva-voce.
- 4. **Marks will be assigned on the basis of regularity in attendance, conduct and progress.
- 5. One Credit Hour is 1hr 15 mins.

Summary Sheet

Subject	Credit Hours				
	Theory Subjects	Practical	Seminar	Projects/Dissertation	No. of Credits
Semester - I	6	2	-	-	24
Semester - II	5	2	1	-	28
Semester - III	5	2	1	-	28
Semester - IV	-	-	1	5	18
G. Total	16	6	3	5	98

CAMPUS PLACEMENTS

At the end of the Semester IV campus placement is arranged, wherein, students have the opportunity to face interviews arranged with a number of interested companies including from abroad. Campus placement interviews will be conducted at Hyderabad centre.

Assistance in Placement will be provided by the Institute only to the Students who have 90% attendance in all the semesters in all the subjects. Student with less than 90% attendance will not be allowed to appear in the Campus Placement Procedure.





Certified Packaging Engineer (CPE) Course

Teaching Scheme - Semester I

	Name of the Subject	No. of Credit Hours	Exam Duration	Marks
1.	Packaging Technology – 1	20	2 hrs	50
2.	Packaging Technology – 2	20	2 hrs	50
3.	Packaging Technology – 3	20	2 hrs	50
4.	Packaging Technology – 4	20	2 hrs	50
5.	Practical's – I	20	2 hrs	50
		100		250
# 1 Credit Hour - 90 Minutes				

Theory Syllabus - Semester - I

Packaging Technology - 1:

Status of Packaging Industry, India and International and Export Packaging, Principles, Functions, Concept and Modern Role of Packaging, Concept of Packaging Design and Sustainable Package Design C on cept and Advanced Processing of Glass Packaging Concept and Advancement in Metal Packaging.

Packaging Technology - 2:

Concept and Advanced Processing of Paper and Paperboard Packaging, Concept and Automation in Corrugated Fibre Board Boxes Packaging, Wooden based Packaging, Pallet and Palletization, Ancillary and other Packaging Material, Data Analysis of Packaging Industry.

Packaging Technology - 3:

Introduction to Plastic Processing and Packaging, Concept and Advanced Processing of Plastics and Polymer Packaging, Advances in Flexible Packaging Material, Mould Design and its Application in Packaging, Advances in Tooling & Design of Moulds for Packaging.

Packaging Technology - 4:

Basic Concept of Printing on Packaging, Advances in Printing on Packaging with special reference to the Digital Printing, Various Types of Packaging Machinery, Packaging Standards, Laws and Regulation, Role of BIS, FSSAI, MoFI and NABL, IATA, ILAC, IMDG, ASTM, IMDG with reference to the Packaging Industry.





Certified Packaging Engineer (CPE) Course

Teaching Scheme - Semester II

Sr. No.	Name of the Subject	No. of Credit Hours	Exam Duration	Marks
1.	Packaging Technology – 5	20	2 hrs	50
2.	Packaging Technology – 6	20	2 hrs	50
3.	Packaging Technology – 7	20	2 hrs	50
4.	Management Studies	20	2 hrs	50
5.	Practical's – II	20	2 hrs	50
		100		250
# 1 Credit Hour - 90 Minutes				

Theory Syllabus - Semester - II

Packaging Technology - 5: Basic

Packaging, Basic Concept and Advancement in Between Machinery & Automation, Packaging Automobile Packaging, Basic Concept and 4.0, Role of Master Batch in Plastic Processing Advancement in Pharmaceutical Packaging, Basic and Packaging, Application of Robotics in Concept and Advancement in Cosmetics, Basic Packaging Concept and Advancement in Industrial Packaging

Packaging Technology - 6:

Sustainable Packaging, No Touch and reference to the Packaging Industry, Materials Antiviral/Antimicrobial Packaging, Nano Management with reference to the Logistics. Packaging System, Biodegradable and Biocompatible Packaging

Packaging Technology - 7:

Application of Computers in Packaging Design & CAD Application, Automation and End Line Basic Concept and Advancement in Food Solution in Packaging industry, Interaction

Management Studies:

Production Management with reference to the Regulation related to Hazardous Packaging, Packaging, Marketing Management with



Lecture by Prof Pierre Pienaar - President of World Packaging Organisation (WPO).



Lecture by Mr. Niranjan - Professor of Reading University, UK



Certified Packaging Engineer (CPE) Course

Teaching Scheme - Semester III

Sr. No.	Name of the Subject	No. of Credit Hours	Exam Duration	Marks
1.	Industrial Training & Report	-	-	100*
2.	Dissertation, Presentation & Viva – Voce	-	-	100**
				200
# 1 Credit Hour - 90 Minutes				

- \$ It may vary depending upon the company where the candidate will do the Industrial Training.
- * Marks will be assigned based on the regularity in Attendance, Conduct and Progress
- ** Based on the typed report submitted on the Industrial Training, Dissertation, Presentation & Viva Voce.

Important Dates:

Admissions Open: 01^{st} April, 2024 Closing Date: 31^{st} May, 2024

Commencement of the Course: 01st July, 2024

Academic Calendar:

One Year (Three Semesters) online programme

Sr. No.	SEMESTER	SEMESTER	DURATION
1.	SEMESTER - I	July 2023- October 2023	4 months
2.	SEMESTER - II	November 2023 - February 2024	4 months
3.	SEMESTER - III	March 2024 – June 2024	4 months

The online classes will be conducted in the Evening and / or Weekends to make it convenient for both working and Job seekers in the field of packaging.

Note: The fees for the Semester II & III has to be paid prior to the commencement of the Semesters. Appropriate late fee of Rs. 100/- per week will be charged. Candidates will be allowed to attend in the next Semester on payment of fees. All fees are to be paid as per details provided in this Prospectus-2024.



Lecture by Mr. AVPS - Global Ambassador, World Packaging Organization (WPO)





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