# Pharmaceutical Packaging Technologies Training Course

Professional Development Training Course Outline

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| **Category** | General Training | **Duration** | 5 Days |
| **Base Fee** | $1,500 USD | **Delivery Mode** | Online / On-site Hybrid |

## Course Introduction

The Pharmaceutical Packaging Technologies Training Course is program designed to equip professionals with advanced knowledge of pharma packaging innovation, regulatory compliance, serialization, and smart packaging systems. With the rapid evolution of the pharmaceutical industry, packaging has become a critical component in ensuring drug safety, product integrity, anti-counterfeiting, and patient adherence. This training provides deep insights into modern packaging materials, cutting-edge technologies, and global compliance frameworks such as GMP, FDA, EMA, and ISO standards, enabling participants to stay competitive in a highly regulated environment.

In today's era of digital transformation, track-and-trace systems, and sustainable packaging solutions, pharmaceutical companies are increasingly adopting intelligent packaging technologies such as RFID, blockchain-based serialization, tamper-evident packaging, and eco-friendly materials. This course bridges the gap between traditional packaging practices and next-generation innovations, empowering learners to optimize supply chain efficiency, regulatory traceability, product authentication, and lifecycle management. Participants will gain practical, hands-on exposure to real-world pharmaceutical packaging challenges through case studies from leading global pharma manufacturers.

## Programme Curriculum

**Pharmaceutical Packaging Technologies Training Course**

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**Course Duration**

5 days

**Training Objectives**

1. Understand pharmaceutical packaging lifecycle and material science
2. Master GMP, FDA, EMA regulatory compliance for packaging systems
3. Learn serialization, aggregation, and track & trace technologies
4. Apply anti-counterfeiting and tamper-evident packaging solutions
5. Explore smart packaging and IoT-enabled pharma packaging systems
6. Evaluate primary, secondary, and tertiary packaging technologies
7. Understand blister packaging, vial, ampoule, and bottle systems
8. Implement sustainable and eco-friendly packaging innovations
9. Develop knowledge of labeling regulations and barcode standards
10. Analyze cold chain packaging for biologics and vaccines
11. Integrate quality assurance and validation in packaging lines
12. Optimize pharmaceutical supply chain packaging efficiency
13. Study global case studies of packaging failures and improvements

**Target Audience**

1. Pharmaceutical packaging engineers
2. Quality assurance and quality control professionals
3. Regulatory affairs specialists
4. Production and manufacturing managers
5. Supply chain and logistics professionals
6. Pharmaceutical R&D scientists
7. Medical device packaging professionals
8. Fresh graduates entering pharma manufacturing industry

**Course Modules**

**Module 1: Pharmaceutical Packaging Fundamentals**

- Overview of pharma packaging systems
- Types of packaging-primary, secondary, tertiary
- Material selection-glass, plastics, aluminum
- Barrier properties and drug stability

- Case Study: Packaging failure in moisture-sensitive drugs

**Module 2: Regulatory Compliance & Global Standards**

- GMP guidelines for packaging operations
- FDA & EMA packaging compliance requirements
- ISO standards in pharma packaging
- Documentation and validation processes
- Case Study: Regulatory recall due to labeling non-compliance

**Module 3: Serialization & Track and Trace Systems**

- Global serialization requirements
- Barcoding, QR codes, DataMatrix systems
- Aggregation and supply chain visibility
- Anti-counterfeiting technologies
- Case Study: EU FMD compliance implementation success

**Module 4: Smart & Intelligent Packaging Technologies**

- RFID and NFC-enabled packaging
- IoT integration in pharma packaging
- Real-time monitoring systems
- Digital authentication technologies
- Case Study: Smart packaging in vaccine distribution

**Module 5: Blister, Vial & Bottle Packaging Systems**

- Blister pack design and thermoforming
- Ampoule and vial packaging technologies
- Bottle filling and sealing systems
- Leak testing and integrity checks
- Case Study: Sterile injectable packaging optimization

**Module 6: Cold Chain & Biopharmaceutical Packaging**

- Temperature-controlled packaging systems
- Dry ice and gel pack technologies
- Biologics and vaccine logistics
- Stability and thermal mapping
- Case Study: COVID-19 vaccine cold chain distribution

**Module 7: Sustainable & Eco-Friendly Packaging**

- Biodegradable packaging materials
- Recycling and circular economy in pharma
- Green packaging innovations
- Carbon footprint reduction strategies
- Case Study: Sustainable packaging transformation in EU pharma firms

**Module 8: Packaging Line Automation & Quality Control**

- Automated packaging line systems

- Vision inspection and defect detection
- Validation and calibration processes
- Lean manufacturing in packaging operations
- Case Study: AI-based defect detection in high-speed packaging lines

### Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

**Register as a group from 3 participants for a Discount**

**Send us an email: info@fineskilltrainingcenter.org or call** *+254769199797*

***Certification***

*Upon successful completion of this training, participants will be issued with a globally- recognized certificate.*

***Tailor-Made Course***

*We also offer tailor-made courses based on your needs.*

**Key Notes**

**a.** The participant must be conversant with English.

**b.** Upon completion of training the participant will be issued with an Authorized Training Certificate

**c.** Course duration is flexible and the contents can be modified to fit any number of days.

**d.** The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

**e.** One-year post-training support Consultation and Coaching provided after the course.

**f.** Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

## Upcoming Scheduled Sessions

| Start Date | End Date | Location | Price |
|---|---|---|---|

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| **23 Nov 2026** | 27 Nov 2026 | Online | $1,000 |
| **23 Nov 2026** | 27 Nov 2026 | Physical | $1,500 |
| **23 Nov 2026** | 27 Nov 2026 | Physical | $3,000 |
| **23 Nov 2026** | 27 Nov 2026 | Physical | $3,000 |
| **23 Nov 2026** | 27 Nov 2026 | Physical | $6,000 |
| **23 Nov 2026** | 27 Nov 2026 | Physical | $4,500 |
| **23 Nov 2026** | 27 Nov 2026 | Physical | $6,000 |
| **23 Nov 2026** | 27 Nov 2026 | Physical | $6,000 |

Ready to enroll or request a customized program? Book online or contact us:

**Register Online Now**

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com