Better Process Control School (BPCS) Certification Training

Professional Development Training Course Outline

Category	Food processing and Technology	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Better Process Control School (BPCS) Certification Training Course is a globally recognized program designed to enhance food safety, regulatory compliance, and quality assurance across food processing industries. This specialized training focuses on equipping professionals with advanced knowledge of thermal processing, acidified food production, and packaging integrity while ensuring alignment with FDA and USDA standards. With rising demand for safe, high-quality packaged foods, the BPCS course has become essential for companies aiming to maintain international competitiveness and consumer trust.

This course is carefully structured to deliver in-depth learning through theoretical modules, real-world case studies, and interactive practice sessions. Participants will gain the technical competence needed to minimize risks, improve production efficiency, and guarantee compliance with global food safety regulations. By providing a comprehensive understanding of process control, the BPCS Certification ensures that food processors are prepared to meet market challenges while promoting sustainable and reliable manufacturing practices.

Programme Curriculum

Better Process Control School (BPCS) Certification Training

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Course Objectives

1. Strengthen knowledge of food safety compliance and process validation.
2. Develop advanced thermal processing and acidified foods expertise.
3. Enhance regulatory compliance with FDA and USDA guidelines.
4. Improve HACCP and GMP-based risk management strategies.
5. Master aseptic processing and packaging technologies.
6. Apply digital food safety monitoring systems for quality control.
7. Understand microbiological hazards in low-acid and acidified foods.
8. Improve shelf-life management and product stability.
9. Optimize energy efficiency in process control systems.
10. Strengthen traceability and supply chain food safety protocols.
11. Leverage automation and smart manufacturing tools for food safety.
12. Implement real-world case studies for practical application.
13. Achieve professional certification to enhance career advancement.

Organizational Benefits

1. Enhanced compliance with international food safety standards.
2. Reduced risk of foodborne illness and product recalls.
3. Increased efficiency in production and process control.
4. Strengthened brand reputation through safe food practices.
5. Improved product shelf-life and packaging reliability.
6. Reduced operational costs through optimized processing.
7. Increased workforce competence and industry credibility.
8. Streamlined audits and regulatory inspections.
9. Enhanced global market access and export opportunities.
10. Better customer trust and long-term business growth.

Target Audiences

1. Food safety managers and quality assurance professionals
2. Food technologists and processing engineers
3. Regulatory and compliance officers
4. Production supervisors and plant managers
5. Packaging technologists and supply chain experts
6. HACCP team leaders and auditors
7. Food entrepreneurs and business owners
8. Research and development specialists

Course Duration: 10 days

Course Modules

Module 1: Introduction to BPCS and Food Safety Regulations

- Overview of BPCS Certification and industry relevance
- FDA and USDA regulations for food processing industries
- Introduction to HACCP and GMP integration
- Understanding low-acid and acidified foods
- Compliance challenges in global markets
- Case study: FDA enforcement actions in acidified foods

Module 2: Principles of Thermal Processing

- Thermal processing fundamentals and heat transfer
- Microbial inactivation and spore destruction
- Retort systems and validation processes
- Establishing critical limits and process schedules
- Monitoring and controlling temperature profiles
- Case study: Botulism prevention in canned foods

Module 3: Acidified Foods Processing

- Characteristics of acidified foods and classification
- Role of pH in product safety and stability
- Acidification procedures and monitoring techniques
- Packaging concerns in acidified food production
- Regulatory approval for acidified food products
- Case study: Product recall due to incorrect pH control

Module 4: Microbiology of Low-Acid and Acidified Foods

- Spoilage organisms and pathogens of concern
- Factors influencing microbial growth in processed foods
- Sterility testing and microbiological validation
- Importance of water activity in product safety
- Risk assessment in microbiological hazards
- Case study: Outbreak linked to insufficient sterilization

Module 5: Retort Systems and Operations

- Types of retort equipment and operations
- Batch vs. continuous retort processing
- Process deviation handling and corrective actions
- Monitoring retort performance and calibration
- Retort operator responsibilities and certification
- Case study: Process deviation handling in a retort system

Module 6: Packaging Integrity and Aseptic Systems

- Importance of packaging in food safety assurance
- Types of food packaging materials and their safety roles
- Leak detection and integrity testing methods
- Aseptic packaging and sterilization procedures
- Packaging validation for regulatory compliance

- Case study: Packaging failure leading to contamination

Module 7: Process Control Instrumentation

- Role of instrumentation in thermal processing
- Sensors, controllers, and data acquisition systems
- Automation in food processing plants
- Critical process monitoring and alarms
- Calibration and maintenance of control instruments
- Case study: Instrumentation failure in process monitoring

Module 8: HACCP Integration in Food Processing

- Principles of HACCP and its relevance to BPCS
- Identifying critical control points in food processing
- Hazard analysis and risk prioritization
- Verification and validation of HACCP plans
- Record keeping and documentation practices
- Case study: HACCP failure in canned food industry

Module 9: Good Manufacturing Practices (GMPs)

- Principles of GMP compliance in food facilities
- Personnel hygiene and contamination control
- Facility design and maintenance requirements
- Equipment cleaning and sanitation practices
- GMP audits and corrective actions
- Case study: GMP violations in a processing plant

Module 10: Shelf-Life and Product Stability

- Factors influencing food shelf-life
- Testing methods for product stability
- Packaging design for extended shelf-life
- Temperature and humidity effects on stability
- Regulatory guidelines for shelf-life labeling
- Case study: Shelf-life mislabeling and recalls

Module 11: Digitalization in Food Safety Monitoring

- Introduction to digital food safety tools
- Data-driven decision-making in process control
- Blockchain applications in traceability systems
- AI and IoT in predictive food safety monitoring
- Benefits of cloud-based compliance tracking
- Case study: Blockchain use in food traceability

Module 12: Energy Efficiency in Process Control

- Role of energy management in processing industries
- Energy-saving technologies for food safety operations
- Integration of sustainable practices in BPCS

- Cost-benefit analysis of energy-efficient systems
- Green certifications and compliance standards
- Case study: Sustainable energy practices in food plants

Module 13: Supply Chain and Traceability

- Importance of supply chain management in food safety
- Tracking raw materials and finished goods
- Supplier auditing and compliance monitoring
- Role of traceability in recalls and crisis management
- International supply chain food safety standards
- Case study: Supply chain gaps leading to recalls

Module 14: Audits and Regulatory Inspections

- Preparing for regulatory audits and inspections
- Common audit findings in BPCS facilities
- Corrective and preventive action (CAPA) plans
- Documentation and record-keeping essentials
- Strategies for successful FDA/USDA inspections
- Case study: Regulatory audit findings in a food plant

Module 15: Final Assessment and Certification

- Review of all course modules and knowledge checks
- Hands-on practice in process control simulations
- Industry expert panel discussions
- Certification examination preparation
- Issuance of BPCS Certification upon completion
- Case study: Real-world success story of BPCS-certified companies

Training Methodology

- Instructor-led sessions with industry experts
- Interactive lectures supported by visual presentations
- Practical demonstrations and group workshops
- Real-world case studies for applied learning
- Hands-on exercises with process control equipment
- Mock audits and regulatory compliance simulations

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
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

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