CAMBRIDGE
Expert Training Forum©

EXPERT MBA

BIOTECH AND DRUG DISCOVERY MANAGEMENT

5 Months
Online (Part-Time)

TABLE OF CONTENTS

OVERVIEW

The Expert MBA Certificate in Biotech and Drug Discovery Management is an intensive, multidisciplinary 5-month programme designed to prepare the next generation of managers, practitioners, and innovators in biotechnology and drug development.

The MBA Certificate Programme in Biotechnology and Drug Discovery is a professionally designed course that bridges advanced scientific practices with core business and management principles. Tailored for aspiring biotech professionals, laboratory managers, and early-career scientists, this programme equips participants with the operational, regulatory, and leadership skills required to thrive in modern life sciences environments.

With a strong emphasis on Laboratory Standard Operating Procedures (SOPs), risk assessment, and quality-driven processes, the programme prepares candidates to manage complex laboratory operations while aligning with global compliance standards. It also integrates essential MBA competencies such as project management, team leadership, and customer relationship management, ensuring graduates can operate effectively at the intersection of science and business.

THE VISION BEHIND THE PROGRAMME

The MBA Certificate Programme in Biotechnology and Drug Discovery is built on a clear and forward-looking vision: to cultivate a new generation of professionals who can seamlessly integrate scientific excellence with strategic business leadership in the life sciences sector.

In today's rapidly evolving biotechnology landscape, innovation alone is not sufficient. The vision of this programme is to address this critical gap by developing professionals who are not only technically proficient but also capable of managing the complexities of modern laboratory and business environments.

At its core, the programme envisions transforming traditional laboratory professionals into holistic leaders who understand the full lifecycle of biotechnology operations—from research and development to quality assurance, risk management, and client delivery. By embedding principles such as Standard Operating Procedures (SOPs), risk assessment, and quality control into a broader management framework, the programme ensures that participants can uphold the highest standards of safety, reliability, and compliance while driving innovation.

Another key pillar of the vision is to strengthen the operational backbone of biotech organizations. Laboratories are no longer isolated scientific spaces; they are integral components of complex, multidisciplinary enterprises.

PROGRAMME CONTENT

UNIT 1: LABORATORY MANAGEMENT

This Unit will provide you with the essential skills and experience you need to work in a laboratory environment. It will equip you with the expertise and understanding of Standard Operating Procedures (SOPs), laboratory health and safety, project management, team management issues, managing risk assessments, and maintaining laboratory stocks.

To get a senior laboratory-related role, you need specific work-based skills and relevant experience to work in an international research environment. The aim of Unit 1 is to develop these specific skills.

Part 1: Laboratory SOPs and risk assessment

In this part, you will learn and gain experience in following SOPs and risk assessment. You will work on tasks to enhance your understanding of laboratory risk assessment. The tasks include learning guidelines and laboratory SOPs and working on risk assessment procedures. It will help you in your laboratory-related role.

Part 2: Maintain laboratory stocks and record keeping

You will gain skills in maintaining laboratory stock and record-keeping through given tasks. You will also understand the challenges and issues that may

PROGRAMME CONTENT

occur in your future laboratory work.

UNIT 2: DRUG DEVELOPMENT MANAGEMENT

This Unit will provide you with the essential skills and experience you need to work in the pharmaceutical industry. It will equip you with the expertise and understanding of operational issues of clinical trials, clinical project management, managing team, and quality control processes of drug development.

Part 1: Operational issues

You will gain skills in solving operational issues related to clinical trials and/or drug development. You will also understand operational issues and challenges that may occur in your future work.

Part 2: Quality control processes

In this part, you will gain experience in quality control processes in clinical trials and/or drug development. You will be provided with tasks and learning material to enhance your knowledge and understanding of quality control assessment.

UNIT 3: RESEARCH MANAGEMENT

This training will provide you with the essential skills and experience you need to work in the scientific research environment. It will equip you with the expertise and understanding of developing funding proposals, project management, managing team, and customer relationships.

PROGRAMME CONTENT

Part 1: Funding proposal

In this part, you will gain skills and experience in preparing funding proposals. You will work on preparing a funding proposal through interesting tasks. You will also gain an understanding of the challenges in preparing a funding proposal.

Part 2: Project management

You will learn about managing your projects through challenging tasks. You will also gain experience in understanding project management principles and applying them to your project.

Part 3: Team management

In this part, you will gain skills and experience in team management and communication. You will solve team management issues through challenging tasks. You will also gain experience in understanding relationships and responding to team management issues.

Part 4: Customer relationship

You will learn about customer relationships and solve issues through challenging tasks. You will also gain experience in understanding customer requirements and responding to customer queries.

UNIT 4: LABORATORY SKILLS IN BIOSCIENCE

Learn the essentials of cell culture techniques, covering cell lines, aseptic practices, and the use of different culture systems. You'll gain the essential knowledge and skills required to work in a laboratory setting. This course aims to provide

PROGRAMME CONTENT

knowledge of laboratory techniques and cell imaging methods to participate in bioscience research.

Part 1: Basic laboratory health and safety

Understand the importance of laboratory safety in scientific research. Explore the basics of risk assessment and hazard identification. Learn about the selection, proper use, and maintenance of personal protective equipment. Understand how PPE contributes to minimizing exposure to hazardous materials. Familiarize yourself with common laboratory hazards and safe handling procedures. Learn about the health and safety issues and requirements to work in a bioscience laboratory.

Part 2: Cell culture techniques

Cell culture refers to the removal of cells from a living subject and their subsequent growth in an artificial environment. Gain insight into the various types of cells used in culture and their applications. Understand the composition and selection of appropriate cell culture media. You will study cell culture methods and the morphology of cells in culture. Learn to prepare and optimize culture solutions for specific cell types. Learn techniques for initiating and establishing cell lines. Explore strategies for routine maintenance. Gain insights into specialized culture techniques for specific cell types.

PROGRAMME CONTENT

Part 3: Enzyme-Linked Immunosorbent Assay (ELISA) and Flow Cytometry Techniques

This part will provide a comprehensive exploration of two powerful techniques – Enzyme-Linked Immunosorbent Assay (ELISA) and Flow Cytometry. You will gain a deep understanding of these critical tools in the realms of diagnostics, immunology, and cellular analysis. Understand the principles of ELISA and its applications in quantitative and qualitative analysis of proteins. Understand the principles of flow cytometry and its applications in single-cell analysis. Explore the components of a flow cytometer and their functions.

Part 4: Fluorescence microscopy

This part provides a comprehensive journey into the principles, techniques, and applications of fluorescence microscopy. Explore the fundamental principles of fluorescence and how it is harnessed in microscopy. Understand the advantages of fluorescence microscopy in visualizing live cells and subcellular structures. Understand the components of a fluorescence microscope and their roles in image formation. You will learn the principle of fluorescence microscopy technique, an in-depth review of cell imaging, confocal microscope, and super-resolution microscope.

LEARNING OBJECTIVES

1

Understand Biotech & Drug Discovery Processes

Gain foundational and applied knowledge of drug development workflows and laboratory environments

2

Master Laboratory SOPs & Compliance

Learn to design, implement, and follow Standard Operating Procedures aligned with regulatory standards

3

Develop Risk Assessment Skills

Identify potential hazards and apply effective risk mitigation strategies in laboratory settings

LEARNING OBJECTIVES

4

Strengthen Operational Expertise

Understand laboratory operations, resource management, and workflow optimization

---

5

Enhance Project Management Skills

Plan, execute, and monitor biotech projects with a focus on timelines, budgets, and outcomes

---

6

Build Leadership & Team Management Capabilities

Develop skills to lead teams, manage performance, and foster collaboration

CAREER OUTCOMES

Whether you aim to climb the corporate ladder, transition into management, or explore entrepreneurial ventures in life sciences, this programme equips you with the tools to lead, innovate, and excel.

Laboratory Operations & Management:

- Oversee daily laboratory functions with a focus on efficiency, compliance, and SOP adherence
- Manage resources, workflows, and high-performing lab teams

Quality Control & Assurance Specialist:

- Ensure product safety, consistency, and regulatory compliance
- Handle audits, documentation, and quality systems (QA/QC processes)

Biotech Project Manager:

- Plan, execute, and deliver drug discovery and biotech projects
- Manage timelines, budgets, and risk assessment strategies

Team Leader & Scientific Manager:

- Lead multidisciplinary scientific teams
- Drive performance, collaboration, and innovation in research environments

Client & Customer Relationship Executive:

- Act as a bridge between scientific teams and clients
- Manage stakeholder communication and build long-term partnerships

CAREER OUTCOMES

Your Competitive Edge

Industry-Ready Expertise:
Strong blend of laboratory skills and business management knowledge

Leadership Advantage:
Prepared to take on supervisory and managerial roles early in your career

Global Industry Alignment:
Knowledge aligned with international biotech and pharmaceutical standards

Cross-Functional Versatility:
Ability to work across operations, quality, R&D, and client-facing roles

Long-Term Career Growth Opportunities

- Transition into senior management and leadership roles
- Explore opportunities in global biotech and pharmaceutical companies
- Build a pathway toward entrepreneurship in life sciences
- Become a strategic decision-maker in innovation-driven environments

DESIGN AND DELIVERY

This online programme is delivered on our internationally recognised virtual learning platform (Moodle). The programme is self-paced, and it can be completed on your schedule within the programme's duration. The programme includes recorded lectures, templates, learning material, ebooks, real-life scenarios, and practice tasks.

This programme is designed in collaboration with our partner institute, the **Cambridge Centre for Innovation and Development**, **UK**.

DUAL CERTIFICATION

---

1 After completing (passing) all the parts of this programme, you will be provided with an e-certificate of completion for the Expert MBA programme at the **Cambridge Expert Training Forum.**

---

2 You will also receive an additional e-certificate (free of cost) for completing the Professional Certificate by our partner institute, the **Cambridge Centre for Innovation and Development, UK**.

CONTACT US

Jessica Smith
admin@camexpertforum.com
www.camexpertforum.com