

Graduate Business School



MBA Life Sciences Leadership

Module Outlines

Féidearthachtaí as Cuimse
Infinite Possibilities

TU Dublin MBA Life Sciences Leadership

TU Dublin's Graduate Business School, in partnership with the School of Chemical and Pharmaceutical Sciences delivers Ireland's first Executive MBA in Life Sciences Leadership which has been designed to enhance leadership capability in one of Ireland's fastest growing sectors.

MBA Life Sciences Leadership - Jan Entry			MBA Life Sciences Leadership - Sept Entry		
Semester 1 Jan - May	<ul style="list-style-type: none">▪ Analytics & Emerging Technologies▪ Marketing▪ Economics for Strategic Managers▪ Financial Analysis & Reporting	Leadership Development Programme (LDP)	Semester 1 Sept - Dec	<ul style="list-style-type: none">▪ Organisation Behaviour & Theory▪ Corporate Finance▪ Management Control and Decision Making▪ Leadership in Sustainability for Life Sciences	Leadership Development Programme (LDP)
Semester 2 Jan - May	<ul style="list-style-type: none">▪ Organisation Behaviour & Theory▪ Corporate Finance▪ Management Control and Decision Making▪ Leadership in Sustainability for Life Sciences		Semester 2 Sept - Dec	<ul style="list-style-type: none">▪ Strategic Management I▪ Strategic HR Management▪ Innovation and Commercialisation▪ Operational Excellence in the Manufacture of Life Science Products	
Semester 3 Jan - May	<ul style="list-style-type: none">▪ Strategic Management I▪ Strategic HR Management▪ Innovation and Commercialisation▪ Operational Excellence in the Manufacture of Life Science Products		Semester 3 Sept - Dec	<ul style="list-style-type: none">▪ Strategic Management II▪ Aspects of Regulatory Science for the Life Sciences Sector▪ Quality Risk Management for Life Sciences	
Semester 4 Jan - May	<ul style="list-style-type: none">▪ Strategic Management II▪ Aspects of Regulatory Science for the Life Sciences Sector▪ Quality Risk Management for Life Sciences		Semester 4 Sept - Dec	<ul style="list-style-type: none">▪ Analytics & Emerging Technologies▪ Marketing▪ Economics for Strategic Managers▪ Financial Analysis & Reporting	
Consultancy Project			Consultancy Project		

Yearly Schedule:

Two 12-week semesters with combination of core and elective modules + the LDP;
Autumn/Winter – Sept to Dec; Winter/Spring – Jan to May

* This curriculum is subject to change.



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Analytics and Emerging Technologies

Analytics have become one of the most powerful tools available to decision makers and are vital in managing and leveraging Big Data. Develop an understanding of a variety of predictive techniques using industry-standard (but highly accessible) purpose-designed software, geared to the special nature of 'Big Data'. Develop skills in the use of data and models to support decision making in business. Explore underlying statistical/probability theory in a practical and user-friendly lab environment. The module also exposes students to emerging technologies and their application to business through a six-week Emerging Technologies and Digital Transformation Seminar Series.

Aspects of Regulatory Science for the Life Science Sector

Develop a broad understanding of the newly emerging tools, standards and approaches by Life Science companies (Medicinal, MedTech and Diagnostics) and their regulators to ensure the safety, efficacy, quality and performance of medicinal/therapeutic/diagnostics products, with emphasis on the Manufacturing/Commercial phase of the lifecycle. This module brings together the component parts of QRM and Knowledge Management.

Corporate Finance

Understand the financing and investment decisions made by the management of companies in pursuit of corporate goals, and the importance of finance in company decision making and its place in the broader business mix. Acquire practical tools to enable informed financial management decision making, and an understanding of the theoretical concepts underpinning the financial markets. Develop an understanding of financial markets and their influence on decision making.

Economics for Strategic Managers

Consider the strength and limitation of the market paradigm. Understand and apply economic concepts to your business. Learn methods of measuring economic activity and appraise macroeconomic information. Develop ways of thinking about economics and the economy, and analyse how a company or sector is affected by the operation of local, regional and national markets. The economics paradigm and its interactions with other areas of management knowledge and impact on the wider world are considered.

Financial Analysis and Reporting

Understand the application of core accounting standards to financial transactions and events. Begin to critically analyse and appraise status and content of the narrative elements of an annual report. Oral and written communication skills, group working and the exercise of judgement in making decisions based on narrative and financial information are developed throughout.

Innovation and Commercialisation

Understand the strategic and managerial aspects of innovation spanning strategic integration and organisational alignment through to commercial execution. Develop an understanding of innovation as a business process. Learn to distinguish approaches in innovation in small and large organisations. Theoretical models and practical tools provide an integrated view of innovation in different operating contexts. Gain a solid grounding in key frameworks and best and next practices supporting innovation and commercialisation across organisations.

Leadership Development Programme

This course runs throughout the two-year Executive MBA, and provides opportunities for participants to enhance specific skills and their personal and professional leadership competencies.

Leadership in Sustainability for Life Sciences

Explore the managerial aspects to addressing the future sustainability of the Life Science sector through the Sustainable, Human-Centric and Resilient framework. Develop an understanding of environmental sustainability in the planetary boundaries, finite resources and the impacts of the Pharmaceutical, MedTech and Diagnostic sectors on the safe operating space of the earth's socio-ecological systems. In addition, through inquiry-based and evidence-based approaches, the module will explore the role of the Life Science sector in meeting the needs of patients globally and economically while minimising their environmental footprint. This module focuses on addressing the emerging drivers for the industry of the future and integrating sustainability into long-term business planning within a holistic framework informed by the Sustainable, Human-Centric and Resilient framework.

Management Control and Decision Making

Understand the role of management accounting within the decision and control contexts of organisations. Acquire a sound understanding of the fundamental concepts, principles, and techniques which underpin management accounting information. Develop an awareness of ethical issues that may arise. Learn to use management accounting information and fundamental

accounting techniques in managerial planning, control and decision making. Critically evaluate the design and implementation of management control systems and decision models.

Marketing

Introduction to marketing as a business philosophy, management process, and set of practices. Understand the role of marketing in the successful operation and leadership of a business. Develop a critical awareness of current issues in traditional and digital marketing. Cultivate team skills in analysis, strategy and effective presenting. Marketing applications are considered throughout in the context of an international and/or global landscape.

Operational Excellence in the Manufacture of Life Science Products

Develops the concepts of Operational Excellence in the supply and manufacture of Medicinal, MedTech and Diagnostic products, putting the patient at the centre of the process. Additionally, explore the developing concept of quality metrics, and the regulatory drivers underpinning this.

Organisation Behaviour and Theory

Build, integrate and extend knowledge and understanding of organising; move beyond understanding organisations in limited ways so as to increase ways to see, analyse, understand and take action in organisations. Understand management as a process of thinking, analysing and acting. Interrogate organisations as a political system by examining interests, conflict and power. Develop organising and management skills. Learn how to accomplish change within an organisation, and exercise skills of selectivity, analysis, interpretation and communication.

Quality Risk Management for Life Sciences

Acquire a comprehensive understanding of the application of Risk Management Principles to support a scientific and practical approach to decision-making throughout the lifecycle of a medicinal, medtech or diagnostic product.

Strategic Human Resource Management

Examine the rhetoric and reality of HRM strategies from the senior management, line management and employee perspective. Develop conflict resolution capabilities and negotiation skills. Understand how to manage change relating to HR issues of mergers and acquisitions and internationalisation. Examine the relationship between HRM and corporate social responsibility, ethics and sustainability. Explore challenges faced by contemporary organisations and an assessment of the implications of the choices taken and decisions made.

Strategic Management in International Contexts

Strategic Management in International Contexts is a holistic capstone module that seeks to integrate cumulative learning in the programme, so that students have a deepened competence to think analytically and to think in creative, transcendental modes that lead to positional superiority for the firm. The module is largely driven by case study work.

Building on the core business disciplines within the MBA programme, the module introduces students to the broader challenge of doing business internationally, and considers a range of approaches to strategy formulation and implementation under international complexity.

Consultancy Project

The MBA Consultancy Project provides the opportunity to shape a major piece of research which will yield actionable recommendations. This project reflects the applied nature of the TU Dublin Executive MBA course, providing participants with an opportunity to apply their learning to a live company challenge and to hone their consultancy skills. Participants select a challenge facing their own organisation, industry or a particular area of interest to them and utilise the skills they have acquired to suggest recommendations.

Participants are given extensive support in research and consultancy skills, enabling them to conduct quality research and to provide a detailed set of recommendations in the form of a management report. Past students have used the concepts and frameworks covered throughout the course to successfully compile recommendations on a pertinent business issue or to devise a plan for a new product or service.