Proposed Modules; Higher Diploma in Business Information Systems

Semester 1
MS405 Final Year Project (Digital Transformation Company Project) – 10 credits [core]
MS873: Management Information Systems I – 5 credits [core]
AY5123: Accounting and Financial Analysis – 5 credits [optional]
MG524: Management – 5 credits [optional]
MK204: Marketing Principles – 5 credits [optional]
AY872: Financial Management I – 5 credits [optional]
EC871: Economics 1 – 5 credits [optional]
MS111: Business Application Development [optional]
MS222: Decision Modelling and Analytics

Semester 2
SBE3001: Innovation: Creativity and Enterprise - 5 credits [core]
MS2100: Cybersecurity – 5 credits [optional]
MS4101: Implementing Digital Innovation – 5 credits [optional]
MS319: Enterprise Systems – 5 credits [optional]
MS112: Business Application 2 – 5 credits
MS412: Information Systems Innovation – 5 credits [optional]
MS219: Business Data Communications – 5 credits [optional]
MSXXX: Managing Digital Transformations – 5 credits [optional]

Semester 1 & 2
MS405 Digital Transformation Company Project – 10 credits [core]

MS405 Digital Transformation Company Project. The Digital Transformation Project (DTP) is the capstone element for the Diploma. It accounts for 10 credits. Working with client companies such as Accenture, Hewlett Packard, Dell EMC, and Boston Scientific, each student group will be given a particular issue facing a client, which has to be addressed using the knowledge and skills gained on the BIS Diploma. The DTP gives students the opportunity to apply the learning from the course around themes such as team-work, communication skills, decision making, technology management, and IS development.

MS873: Management Information Systems. The objective of the module is to provide students with a broad understanding of the fundamental, and strategic importance of information systems in the operations and management of contemporary organisations. On completing this module, students should be able to detail the role of information systems in supporting and enabling the various functional areas of a business; outline how

organisations can use digital technology to gain competitive advantage, and; demonstrate an understanding of technical and business issues related to digital innovation.

AY5123: Accounting and Financial Analysis. This course is intended to develop in students the skills necessary to prepare, interpret and use accounting and financial information in a business context. It is designed for students who have not previously taken accounting. The course will provide a good basic foundation in Financial Accounting for students not intending to specialise in Accounting. On course completion, students will be expected to be capable of preparing and interpreting financial statements and have achieved an understanding of 'decision making' processes in a business context.

MG524: Management. The module is designed as an introduction to the role of management in organisational structures. Students will locate the history and foundations of management thought in dimensions of modern organisations; explain and discuss the role, functions and skills of effective management; derive a view on how management principles are applied in a range of organisational settings to explain the role of planned change through strategy, technology and innovative process, and; apply management concepts across a wide range of business settings.

MK204: Marketing Principles. The object of this course is to introduce students to the key marketing concepts and their application in both an Irish and international context. On completing this course, students should understand the fundamentals of marketing theory and how they are practiced and applied by market leaders globally; recognise the importance of effective market research; critique the impact of external influences on the marketplace; demonstrate an insight into consumer buyer behaviour; and evaluate the effectiveness of marketing communication channels and tools.

AY872: Financial Management. The objective of this module is to develop the participants' understanding of the theory and practice of financial management, and to develop their skills in financial decision-making. On completing this course, students should be able to describe the role of the financial manager; explain the concept of shareholder wealth maximisation; apply time value of money techniques to calculate present values and future values of payments and receipts; assess implications of a firms capital structure and proposed changes to it; and evaluate the impact of credit and cash policies on working capital levels.

EC871: Economics. This introductory economics module will start with an introduction to Microeconomics and Macroeconomics, the two streams of Economics. Students will learn how demand and supply interact to determine market prices and how government intervention can affect market outcomes. Students will also learn how firms make production decisions and become familiar with different types of market structures, such as

monopoly and perfect competition. Macroeconomics is the study of the economy as a whole. In this course you will learn about measures used to measure an economy's performance and about short run fluctuations in the economy.

MS111: Business Application Development 1. The objective of this course is to initiate and develop the knowledge and skills required to develop business software applications. The focus is on individual skills development and competence in basic software application development. On completing this course, students will be able to plan, create, improve and deploy software applications using a number of development languages; demonstrate knowledge of business application development, and; manage self-directed work for software development.

MS222: Decision Modelling and Analytics. In today's complex environment, people across many disciplines need to solve a wide variety of business problems. Decision makers are very often faced with an abundance of unstructured and inherently complex data from a variety of sources. This course will enable students to become power users of decision supporting systems, such as MS Excel, so they can make better decisions and gain insight into the impact various factors have on those decisions. Students will also learn how to apply techniques from probability theory to analyse and critique information and facts they are provided with.

SBE3001: Innovation: Creativity and Enterprise. This course has an underlying theme of innovative practice and is designed to educate students to recognise and develop opportunities for innovation in response to organisational changes. Delivered using a blended learning approach the course combines large-class lectures, small group workshops and a group project. The course will highlight current thinking and practice with respect to innovation, creativity and enterprise. Students will learn to use skills and techniques to develop innovative solutions to real-world problems, and; present, in oral and written form, the implementation and usage of innovative practices.

MS2100: Cybersecurity. The ability to secure information within a modern enterprise is a growing strategic importance. This course provides the foundation for understanding the key issues associated with protecting information assets. This module provides participants with a comprehensive understanding of the field of cyber security, and the know how to develop the policies to implement information security controls. Topics covered include; the strategic importance of cybersecurity; emerging security technologies; digital forensics; the psychology of cybersecurity; conducting a security audit; and online ethics and privacy.

MS4101: Implementing Digital Innovation. For almost all organisations, continuous innovation is the key to long-term success and sustainability. This course will examine the role of digital technology in facilitating organisational innovation. The course is designed to

equip students with the skills to develop and lead new business models for existing and insurgent organisations. A specific emphasis is placed on understanding how digital technology can disrupt, enhance, and even stifle innovation activities. The course will also consider how emerging digital technology can impact important issues such as employee well-being and future employment.

MS319: Enterprise Systems. The objective of this course is to develop students' understanding of Enterprise Systems. It will look at Enterprise Systems from different perspectives – why they are used, how they are used, the sub-systems (Enterprise Resource Planning, Supply Chain Management, Customer Relationship Management) contained within Enterprise Systems. It will also deal with how these systems are designed, implemented and updated. Through this course, students will be exposed to the SAP enterprise software environment.

Business Application Development 2. Building directly upon Business Application Development 1, the objective of this course is to further develop, build and refine the knowledge and skills required to create business software applications. The focus is on team skills development and competence in application development. Students will learn to develop software efficiently using agile software development techniques.

MS412: Information Systems Innovation. The objective of this course is to provide a comprehensive understanding of the managerial issues involved in formulating and implementing a corporate IS innovation strategy. The successful development and introduction of IS innovations is critical to the success of most of today's growing businesses. The innovation process, however, must be properly organised and managed for maximum effect so that the innovative product (or service) has the best chance to succeed in the marketplace. In order to exploit the opportunities provided by changing technology, firms must recognise technology trends and formulate strategies that are consistent with them.

MS119: Business Data Communications. The objective of this course is to provide students with an introduction to the fundamentals of computer networks in a business context. The course covers the basic concepts of network computer networks & communications and focuses on how businesses use such systems. Topics may include: Basics of computer networks; Network topologies and functions; OSI reference model; Transmission media and error detection, LAN standards and technologies; Wireless technologies; WAN standards and technologies; Network and Internet connectivity; Client-server model, Cloud computing, emerging topics and issues.

MSXXX: Managing Digital Transformations. In this course, students will determine how digital solutions can transform business operations and critique their potential impact and

risks for existing enterprise systems and market trends. Digital transformation is a process that aims to improve an organisation by initiating significant changes through a combination of information, computing, communication, and connectivity technologies. Students will learn how to identify digital transformation opportunities by leveraging digital and analytical technologies to create new or modify business processes, culture, customer experiences, and workplaces to meet continuously evolving business and market requirements.