

FOB Curriculum

(Applicable from Intake 2025)



This Curriculum is approved by Faculty Board (07-08-2025), Senate Curriculum and Revision Committee (19-11-2025) and Senate (26-11-2025)

FORMAT OF THE MODULE OUTLINES

It was agreed to use the four digits format for module codes as follows when creating the module codes for the curriculum revision.

Department Code (English Letters) XX	Level of Study X	Type of Module X	Type of Module X	Revision Number X
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Department Code	DA – Modules offered by Department of Decision Sciences TM - Modules offered by Department of Management of Technology IM - Modules offered by Department of Industrial Management
Level of Study	1 – 1 st year modules 2 – 2 nd year modules 3 – 3 rd year modules 4 – 4 th year modules
Type of Module (1 st Digit)	Denotes offering semester of the level (1 or 2). However, 7 is used for the elective modules, 8 for the internship and 9 for the R & D project
Type of Module (2 nd Digit)	Denotes a numbering order by the department.
Revision Number	To denote the number of revision of the curriculum

Intake:	2025	Specialization		Business Analytics							Accreditation Requirements
Details of Curriculum		Stream									
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %		
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE	
Semester 1		Specialization requirement					0				
DA1112	Probability and Statistics for Business I	C	2	2	3		3		50	50	
DA1722	Mathematical Foundations for Business	E	2	2	3		3		50	50	
IM1112	Financial Accounting	E	2	2	3				50	50	
DA1142	Principles of Programming	C	2	2	3		3		50	50	
DA1152	Computing Fundamentals	C	2	2	3		3		50	50	
DB1112	Business Communication I	C	2		2		2		100	0	
		Total			17		14				

Semester 2		Specialization requirement					0				
DA1212	Probability and Statistics for Business - II	C	2	2	3		3		50	50	
DA1222	Business Calculus I	C	2	2	3		3		50	50	
DA1242	Data Structures and Algorithms	C	2	2	3		3		50	50	
DA1262	Introduction to Business Science	C	2		2		2		50	50	
IM1212	Financial Management	C	2	2	3		3		50	50	
DB1222	Business Communication II	C	2		2		2		100	0	
		Total			16		16				

Semester 3		Specialization requirement					0			
DA2112	Introduction to Econometrics	C	2		2		2		50	50
DA2122	Business Calculus II	C	1	2	2		2		50	50
DA2132	Linear Algebra	C	1	2	2		2		50	50
DA2142	Database Management	C	3		3		3		100	0
DA2162	Agile Business Analysis	C	2		2		2		50	50
DA2192	Technical and Scientific Writing	C		4	2		2		100	0
IM2312	Corporate Finance	C	2	2	3		3		50	50
		Total			16		16			

Semester 4		Specialization requirement					0			
DA2212	Statistical and Machine Learning	C	2	2	3		3		100	0
DA2222	Multivariate Methods in Business	C	3		3		3		50	50
DA2232	Introduction to Operations Research	C	3		3		3		50	50
DA2252	Data Management and Visualization	C		4	2		2		100	0
DA2272	Marketing Management	C	2		2		2		50	50
DA2282	Quantitative Economics	C	3		3		3		50	50
		Total			16		16			

Semester 5		Specialization requirement					0			
DA3142	Business Application Development	C	2	2	3		3		100	0
DA3162	Introduction to Geospatial Sciences	C	2	2	3		3		100	0
DA3172	Digital Transformation in Practice	C	3		3		3		100	0
DA3182	Operations and Supply Chain Management	C	3		3		3		50	50
DA3712	Innovation by Design Thinking	E	3		3		3		100	0
IM3512	Business Valuation and Analysis	E	2	2	3				100	0
Note: Select any of 1 out of 2 electives		Total			18		15			

Semester 6		Specialization requirement					0			
DA3212	Advanced Machine Learning Applications for Business	C	2	2	3		3		100	0
DA3222	Data Mining and Business Intelligence	C	2		2		2		50	50
DA3242	Systems Analysis and Design	C	2		2		2		50	50
DA3252	Enterprise Resource Planning (ERP) Systems I	C	2	2	3		3		100	0
DA3262	Business Workflow Automation	C		4	2		2		100	0
DA3722	Advanced Spatial Data Science	E		4	2		4		100	0
DA3732	Contemporary Developments in Digital Business	E	2		2				100	0
DA3742	Technical Analysis	E	2		2				100	0
DA3752	Investment and Portfolio Management	E	2		2				50	50
Note: Select any 2 out of 4 electives		Total			20		16			

Semester 7		Specialization requirement					0			
DA4112	Time Series Econometrics	C	3		3		3		50	50
DA4142	Data Privacy, Security and Ethics	C	2		2		2		100	0
DA4162	Project Management	C	2		2		2		50	50
DA4902	Analytics Practicum	C			5		5		100	0
DA4712	Enterprise Resource Planning (ERP) Systems II	E	2	2	3		3		100	0
DA4722	Financial Derivatives	E	3		3				50	50
Note: Select any 1 out of 2 electives		Total			18		15			

Semester 8		Specialization requirement					0				
DA4212	Advanced Operations Research	C	3		3		3		50	50	
DA4242	Advanced Database Management	C	3		3		3		100	0	
DA4262	Financial Risk Management	C	3		3		3		50	50	
DA4902	Analytics Practicum	C			7		7		100	0	
		Total			16		16				

Industrial Training		Specialization requirement					0				
DA4802	Industrial Training	C				6		6	100	0	
		Total				6		6			

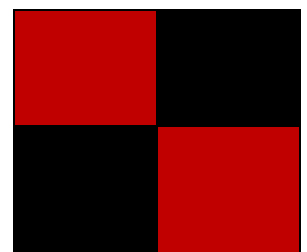
Grand Total	137	6	124	6
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Total credit requirement for the Specialization		130
Faculty/ Specialization Electives beyond the specialization requirements [refer faculty elective table]*		
TOTAL CREDIT REQUIREMENT FOR GRADUATION		130

Minor in Qualitative Finance

Intake:	2025	Specialization:	Business Analytics								
Module Code	Module Name		Category	Hours/Week		Credits		Evaluation		Semester	Credits Required
				Lecture	Lab/ Tute	GPA	NGPA	CA%	WE%		
Minor in Qualitative Finance											
Minor											
IM1212	Financial Management		C	2	2	3		50	50	2	
IM2312	Corporate Finance		C	2	2	3		50	50	3	
IM3512	Business Valuation and Analysis		E	2	2	3		100	0	5	
DA3742	Technical Analysis		E	2		2		100	0	6	
DA3752	Investment and Portfolio Management		E		4	2		50	50	6	
DA4112	Time Series Econometrics		C	3		3		50	50	7	
DA4142	Data Privacy, Security and Ethics		C	2		2		100	0	7	
DA4722	Financial Derivatives		E	2	2	3		50	50	7	
DA4262	Financial Risk Management		C	3		3		50	50	8	

B U S I N E S S A N A L Y T I C S



Business Analytics 2025

Business Analytics Specialization

The literature is not unanimous when defining the term business/data analytics. Analytics is “extensive use of data, statistical and quantitative analysis, exploratory and predictive models, and fact-based management to drive decisions and actions” (Davenport and Harris, 2007)¹. However, the Institute for Operations Research and the Management Sciences (INFORMS) recommends Boyd (2012) definition on analytics. “Analytics is the scientific process of transforming data into insight for making better decisions” (Boyd, 2012)². Analytics can be thought of as a set of processes that transform raw data into meaningful information to improve decision making (Wilder & Ozgur, 2015)³. The body of knowledge of analytics is generally discussed under four categories based on the level of advancement and complexity: descriptive analytics, diagnostic analytics predictive analytics and prescriptive analytics (Power et al, 2018)⁴.

Literature identifies essential skills to pursue analytics employment opportunities at three different levels and each level may lead to different career paths (Watson 2013)⁵. The first skill level applies for STEM graduates (broadly referred to as data scientists) with sound foundation in computer science and probability & statistics (Davenport & Patil, 2012)⁶. The second skill level refers to data specialists. The final skill level applies to interdisciplinary roles known as business analytics / analysts or “data-savvy managers” (Manyika et al., 2011)⁷. They must be able to:

- Identify and exploit business opportunities.
- Demonstrate sufficient functional expertise to frame business problems.
- Efficiently and effectively use analytics tools confidently and report implications.

Wilder & Ozgur (2015) and INFORMS (2018)⁸ propose essential knowledge areas for a typical Business Analytics bachelors programme: Data Management, Descriptive Analytics, Data Visualization, Predictive Analytics, Prescriptive Analytics, Data Mining, and Analytics Practicum. Later, ACM⁹, in their

¹ Davenport, T. H. (2006). Competing on analytics. Harvard business review, 84(1), 98.

² Boyd, A. E. (2012). Profit center: Revisiting ‘what is analytics’. Analytics Magazine.

³ Wilder, C. R., & Ozgur, C. O. (2015). Business analytics curriculum for undergraduate majors. INFORMS Transactions on Education, 15(2), 180-187.

⁴ Power, D. J., Heavin, C., McDermott, J., & Daly, M. (2018). Defining business analytics: an empirical approach. Journal of Business Analytics, 1(1), 40-53.

⁵ Watson, H. J. (2013). All about analytics. International Journal of Business Intelligence Research (IJBIR), 4(1), 13-28.

⁶ Davenport, T. H., & Patil, D. J. (2012). Data scientist. Harvard business review, 90(5), 70-76.

⁷ Manyika, J., Chui, M., Brown, B., Bughin, J., Dobbs, R., Roxburgh, C., & Hung Byers, A. (2011). Big data: The next frontier for innovation, competition, and productivity. McKinsey Global Institute.

⁸ Cochran, J. J. (Ed.). (2018). *Informatics analytics body of knowledge*. John Wiley & Sons.

⁹ <https://www.acm.org/binaries/content/assets/education/curricula-recommendations/is2020.pdf> (P106)

Business Analytics 2025

curriculum recommendations in 2020, identifies the following seven competencies a business analytics / data science graduate should be able to perform.

- Apply the principles of computational thinking (CT) to learning data science
- Analyze data science problems with a CT framework
- Express a business problem as a data problem
- Perform exploratory data analysis from inception to the value proposition
- Explain the core principles behind various analytics tasks
- Articulate the nature and potential of Big Data
- Demonstrate the use of big data tools on real world case-studies

Structure of Business Analytics Specialization

The Business Analytics 2025 curriculum contains 112 GPA credits and 8 NGPA credits¹⁰. Following the INFORMS Analytics Body of Knowledge published in 2018 and the ACM Data Science Task Force (2021) recommendations, the Business Analytics 2025 curriculum includes subject modules under four learning verticals: Mathematical Sciences, Computer Sciences, Physical Sciences and Business, Social Sciences & Linguistics following JACS 3.0 (2013)¹¹. Refer to the Qualification Structure shown in Figure 01¹².

A learning vertical progresses from Level 01 to Level 04 during a 4-year tenure. A level has two, 15-week long academic semesters and assessment periods. An undergraduate will be eligible for industrial training after completing all 8 academic semesters.

Minor in Quantitative Finance

Depending on the resource availability, candidates following the Business Analytics specialization may be offered a minor in Quantitative Finance. Quantitative Finance minor subjects are as follows:

- Semester 2: Financial Management
- Semester 3: Corporate Finance
- Semester 5: Business Valuation and Analysis
- Semester 6: Investment and Portfolio Management; Technical Analysis
- Semester 7: Financial Derivatives; Time Series Econometrics; Data Privacy, Security and Ethics
- Semester 8: Financial Risk Management

¹⁰ GPA and NGPA stand for Grade Point Average and Non-Grade Point Average. 1 Credits equals to 50 notional hours (SLQF, 2015).

¹¹ <https://www.hesa.ac.uk/support/documentation/jacs/jacs3-principal>

¹² For easy use, this document uses the colour scheme given for learning verticals throughout.

Business Analytics 2025

Figure 1. Qualification Structure

T	Industrial Training Placement			
S8	Advanced Operations Research	Advanced Database Management Analytics Practicum		Financial Risk Management
S7	Time Series Econometrics	Enterprise Resource Planning Systems II		Project Management
		Data Privacy, Security & Ethics		Financial Derivatives
		Analytics Practicum		
S6	Technical Analysis	Systems Analysis and Design	Advanced Spatial Data Science	Innovation by Design Thinking
		Data Mining and Business Intelligence		Investment & Portfolio Management
		Enterprise Resource Planning Systems - I		Contemporary Developments in Digital Business
		Advanced ML Applications for Business		
		Business Workflow Automation		
S5		Business Application Development	Introduction to Geospatial Sciences	Business Valuation and Analysis
		Digital Transformation in Practice		Operations & Supply Chain Management
				Innovation by Design Thinking
S4	Multivariate Methods in Business	Statistical & Machine Learning		Marketing Management
	Introduction to Operations Research	Data Management & Visualization		Quantitative Economics
S3	Linear Algebra	Database Management		Corporate Finance
	Business Calculus II	Agile Business Analysis		Technical & Scientific Writing
S2	Business Calculus I	Data Structures and Algorithms		Financial Management
	Probability & Statistics for Business - II	Introduction to Business Science		Business Communication Skills - II
S1	Mathematical Foundations for Business	Principles of Programming		Business Communication Skills - I
	Probability & Statistics for Business - I	Computing Fundamentals		Financial Accounting
Mathematical Sciences				Computer Sciences
				Physical Sciences
				Business, Social Studies & Linguistics

Business Analytics 2025

Semester offering details

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 1			14.0			
DA1112	Probability and Statistics for Business - I	C	3.0		50	50
DA1722	Mathematical Foundations for Business	E	3.0		50	50
IM1112	Financial Accounting	E			50	50
DA1142	Principles of Programming	C	3.0		50	50
DA1152	Computing Fundamentals	C	3.0		50	50
DB1112	Business Communication I	C	2.0		100	0
Total			14.0	0.0		

Note: DA1122 is compulsory for students who have not offered Combined Mathematics or Higher Mathematics at the G C E Advanced Level. IM1112 is compulsory for students who have not offered Accounting at the G C E Advanced Level.

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 2			16.0			
DA1212	Probability and Statistics for Business - II	C	3.0		50	50
DA1222	Business Calculus I	C	3.0		50	50
DA1242	Data Structures and Algorithms	C	3.0		50	50
DA1262	Introduction to Business Science	C	2.0		50	50
IM1212	Financial Management	C	3.0		50	50
DB1222	Business Communication II	C	2.0		100	0
Total			16.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 3			16.0			
DA2112	Introduction to Econometrics	C	2.0		50	50
DA2122	Business Calculus II	C	2.0		50	50
DA2132	Linear Algebra	C	2.0		50	50
DA2142	Database Management	C	3.0		100	0
DA2162	Agile Business Analysis	C	2.0		50	50
DA2192	Technical and Scientific Writing	C	2.0		100	0
IM2312	Corporate Finance	C	3.0		50	50
Total			16	0.0		

Business Analytics 2025

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 4			16.0			
DA2212	Statistical & Machine Learning	C	3.0		100	0
DA2222	Multivariate Methods in Business	C	3.0		50	50
DA2232	Introduction to Operations Research	C	3.0		50	50
DA2252	Data Management & Visualization	C	2.0		100	0
DA2272	Marketing Management	C	2.0		50	50
DA2282	Quantitative Economics	C	3.0		50	50
Total			16.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 5			15.0			
DA3142	Business Application Development	C	3.0		100	0
DA3162	Introduction to Geospatial Sciences	C	3.0		100	0
DA3172	Digital Transformation in Practice	C	3.0		100	0
DA3182	Operations and Supply Chain Management	C	3.0		50	50
DA3712	Innovation by Design Thinking	E	3.0 ^a		100	0
IM3512	Business Valuation and Analysis	E			100	0
Total			15.0	0.0		

^a One elective should be selected accounting for 3 credits.

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 6			16.0			
DA3212	Advanced Machine Learning Applications for Business	C	3.0		100	0
DA3222	Data Mining and Business Intelligence	C	2.0		50	50
DA3242	Systems Analysis and Design	C	2.0		50	50
DA3252	Enterprise Resource Planning (ERP) Systems I	C	3.0		100	0
DA3262	Business Workflow Automation	C	2.0		100	0
DA3722	Advanced Spatial Data Science	E	2.0 ^a		100	
DA3732	Contemporary Developments in Digital Business	E			100	0
DA3742	Technical Analysis	E			100	0
DA3752	Investment and Portfolio Management	E			50	50
Total			16.0	0.0		

^a Select any two electives to ensure four credits are covered.

Business Analytics 2025

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 7			15.0			
DA4112	Time Series Econometrics	C	3.0		50	50
DA4142	Data Privacy, Security and Ethics	C	2.0		100	0
DA4162	Project Management	C	2.0		50	50
DA4712	Enterprise Resource Planning (ERP) Systems II	E	3.0 ^a		100	0
DA4722	Financial Derivatives	E			50	50
DA4902	Analytics Practicum	C	5.0		100	0
Total			15.0	0.0		

^a One elective should be selected accounting for 2 credits.

Module Code	Module Name	Category/ C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 8			16.0			
DA4212	Advanced Operations Research	C	3.0		50	50
DA4242	Advanced Database Management	C	3.0		100	0
DA4262	Financial Risk Management	C	3.0		50	50
DA4902	Analytics Practicum	C	7.0		100	0
		Total	16.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Industrial Training			6.0			
DA4802	Industrial Training	C		6.0	100	

Total Credits			114	6		
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Business Analytics 2025

Minor Degree in Quantitative Finance

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Minor in Quantitative Finance						
IM1212	Financial Management	C	3.0		50	50
IM2312	Corporate Finance	C	3.0		50	50
IM3512	Business Valuation and Analysis	E	3.0		100	0
DA3742	Technical Analysis	E	2.0		100	0
DA3752	Investment and Portfolio Management	E	2.0		50	50
DA4112	Time Series Econometrics	C	3.0		50	50
DA4142	Data Privacy, Security and Ethics	C	2.0		100	0
DA4722	Financial Derivatives	E	3.0		50	50
DA4262	Financial Risk Management	C	3.0		50	50

Business Analytics 2025

Module Descriptors

Semester 1

*Self-Study hours are given for the semester.

Module Code	DA1112	Semester 1	Module Title			Probability and Statistics for Business – I					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		2	2	90*				50	50		
Module Aim:	This module aims to provide a basic knowledge of probability and statistics for solving business problems.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Apply fundamental probabilistic techniques to quantify the uncertainty of a random experiment										
LO-2	Analyze and evaluate data using fundamental descriptive statistical techniques										
LO-3	Apply rudimentary statistical techniques such as sampling, estimation and hypothesis testing in analyzing business scenarios and problems										
LO-4	Make use of statistical software (R, Python) for statistical data analysis										
Syllabus Outline										Learning Outcomes	
1	Introduction to set theory and basic probability <i>Counting and sets, basics of combinatorics and permutations, basics of probability, conditional probability, Bayes’ Theorem</i>									LO-1	
2	Random variables and probability distributions <i>Introduction to random variables, discrete and continuous distributions, moments of random variables, moment generating functions, Binomial, Poisson and normal distributions</i>									LO-1	
3	Descriptive statistics and exploratory data analysis <i>Types of data, organizing and visualizing data, measures of central tendency and dispersion, correlation analysis</i>									LO-2, LO-4	
4	Sampling, estimations & distributions <i>Sampling methods, sampling distribution of the mean and proportion, the Central Limit Theorem</i>									LO-1, LO-3	
5	Confidence interval estimation <i>Confidence interval estimation for the mean and proportion, determining sample size</i>									LO-3, LO-4	
6	Fundamentals of hypothesis testing <i>Null and alternative hypothesis, critical value, errors in testing, power of a statistical test, one-sample tests</i>									LO-1, LO-3, LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							50%		LO-1, LO-2, LO-3		

Business Analytics 2025

Module Code	DA1722	Semester 1	Module Title			Mathematical Foundations for Business						
Credits	3	Hours/Week				C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None		
		2	2	90*				50	50			
Module Aim:	The primary aim of this course is to provide an understanding of business calculus and apply basic calculus to solve applications in business and economics											
Learning Outcomes												
After completing this module, the students should be able to:												
LO-1	Apply algebraic techniques including quadratic, exponential and logarithmic functions solve mathematical problems.											
LO-2	Analyze and interpret functions and their graphs to model and solve real-world applications.											
LO-3	Solve exponential and logarithmic functions and apply their techniques to solve problems related to growth, decay, and financial applications.											
LO-4	Utilize trigonometric functions and identities to analyze periodic behavior and solve practical problems.											
Syllabus Outline										Learning Outcomes		
1	Fundamentals of Algebra <i>Real numbers, polynomials, factoring polynomials, rational expressions, integral exponents and radicals, quadratic equations, inequalities and absolute value.</i>										LO -1	
2	Functions and their graphs <i>Cartesian coordinate system, equations of lines, functions and their graphs, algebra of functions, linear functions, cost, revenue & profit functions, quadratic functions, market equilibrium, demand & supply curves</i>										LO-1, LO-2	
3	Exponential and Logarithmic Functions <i>Introduction to exponential functions and its inverse, the logarithmic function and their applications.</i>										LO-1, LO-3	
4	Topics in Trigonometry <i>Trig functions and their graphs, Trig identities</i>										LO-2, LO-4	
Assessments												
Assessment							Weight			Learning outcomes		
Continuous Assessments (CA)							50%			LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							50%			LO-1, LO-2, LO-3, LO-4		

Business Analytics 2025

Module Code	DA1142	Semester 1	Module Title		Principles of Programming					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	2	90*				50	50	
Module Aim:	The aim of this course is to build students’ confidence in their ability to learn programming and problem-solving skills.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1		Analyze simple computing problems								
LO-2		Apply procedural statements — assignments, conditional statements, loops, method calls and arrays								
LO-3		Develop small programs in a selected programming language (e.g. Python) that meet the expressed requirements								
Syllabus Outline										Learning Outcomes
1	Concepts of Programming <i>Programming languages, problem definition, flow charts, pseudo codes</i>									LO-1
2	Elementary Programming <i>Expressions, variables, operators</i>									LO-1, LO-2
3	Programming Structures <i>Conditions, Loops, Procedures and Functions</i>									LO-2, LO-3
4	Advanced Concepts in Programming <i>Lists, recursions, algorithms for problem solving</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2	

Business Analytics 2025

Module Code	DA1152	Semester 1	Module Title		Computing Fundamentals					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	2	90*				50	50	
Module Aim:	This course aims to introduce the fundamental principles which computer systems are based on.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 Describe how a program is executed in a computer										
LO-2 Design Boolean circuits for simple logical problems										
LO-3 Apply knowledge about operating system behavior to develop efficient programs										
LO-4 Explain the basic models of computation										
Syllabus Outline										Learning Outcomes
1	Boolean logics <i>Boolean algebra, Truth tables, Logic gates and circuits</i>									LO -2
2	System architecture <i>von Neumann architecture, Memory hierarchy, Instruction sets and I/O Techniques</i>									LO-1
3	Basics of operating systems <i>Process model, threads, scheduling, deadlocks</i>									LO-1, LO-3
4	Computing models <i>Basic models of computation, finite automata and Turing machines</i>									LO-1, LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4	
Written examination (WE)							50%		LO-1, LO-2, LO-3, LO-4	

Business Analytics 2025

Module Code	IM1112	Semester 1	Module Title			Financial Accounting					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	2	90*				50	50		
Module Aim:	This module aims to provide an introductory knowledge on accounting principles, standards and policies relating to the preparation of financial reports to facilitate sound decision making.										
Learning Outcomes											
After completing this module, the students should be able to: LO-1 explain fundamental accounting concepts. LO-2 prepare and interpret financial statements for a profit-oriented organization LO-3 apply accounting standards in business contexts.											
Syllabus Outline										Learning Outcomes	
1	Overview of financial accounting and reporting <i>Financial accounting and its importance, users of information, regulatory framework</i>									LO-1	
2	Conceptual framework of financial reporting and its importance <i>Objectives and purpose, qualitative characteristics, elements and recognition</i>									LO-2	
3	Understanding general purpose financial statements and it components <i>Presentation of FS, Purpose, Components, General Features</i>									LO-1, LO-2	
4	Preparation of financial statements applying accounting standards <i>Accounting Standards for Inventory, Cash flow Statement, PPE, Revenue, Leases, Deferred Tax</i>									LO-2, LO-3	
5	Financial statement analysis <i>Horizontal, Vertical and Ratio Analysis</i>									LO-2, LO-3	
6	Use of accounting software in financial reporting <i>Introduction to Accounting Software, Practical Application</i>									LO2, LO-3	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50%		LO-1, LO-2, LO-3		

Business Analytics 2025

Module Code	DB1112	Semester 1	Module Title			Business Communication I				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	-	70*				100	0	
Module Aim:	This is an introductory course which provides students with the basic communication skills required in a business environment.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	demonstrate the effective use of English grammar and writing skills									
LO-2	demonstrate professional communication etiquette required in business environments									
LO-3	demonstrate the overall understanding of making business presentations including the use of relevant software applications									
Syllabus Outline										Learning Outcomes
1	Business English for Professionals <i>Revisit key elements of English Grammar, Vocabulary, Reading Skills</i>									LO-1
2	Essentials of Business Writing Sentence building, Letter writing, General Punctuation Review, Summarizing, Paraphrasing									LO-1
3	Professional Communication Etiquette Telephone etiquette, E-mail etiquette, Meeting etiquette (virtual & physical), Making appointments, Minute taking, Formatting texts, Common business abbreviations and phrases									LO-2
4	Making Effective Business Presentations <i>Analyzing Audience, preparing for presentations, delivering presentations, shaping a presentation, software applications (i.e. PowerPoint, Keynote, Prezi)</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	
Written examination (WE)							0%			

Business Analytics 2025

Semester 2

Module Code	DA1212	Semester 2	Module Title			Probability and Statistics for Business – II				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1112
		2	2	90*				50	50	
Module Aim:	This module aims to provide knowledge of inferential statistics for solving business problems									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Formulate hypotheses based on different scenarios and apply appropriate parametric and non-parametric hypothesis testing techniques									
LO-2	Explain the concept of regression and use regression techniques to assist in decision making									
LO-3	Make use of statistical software to carry out analyses based on the above topics									
Syllabus Outline										Learning Outcomes
1	Two-sample tests <i>Comparing two means from independent populations, paired t-test, F-test for ratio of two variances, z-test for difference in proportions</i>									LO-1, LO-3
2	ANOVA <i>One-way ANOVA, two-way ANOVA, introduction to design-of-experiments</i>									LO-1, LO-3
3	Categorical data analysis <i>Probability structure for contingency tables, relative risk and odds-ratios, Chi-square test for differences in proportions, tests of independence</i>									LO-1, LO-3
4	Non-parametric tests <i>Wilcoxon rank sum test, Kruskal Wallis rank test, and other non-parametric tests</i>									LO1, LO3
5	Introduction to simple linear regression <i>Ordinary least squares, measures of variation, linear regression assumptions</i>									LO2, LO-3
6	Multiple linear regression and model building <i>Extending the simple bivariate model, testing portions of the model, dummy variables and interaction terms, modelling non-linearities</i>									LO1, LO2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2	

Business Analytics 2025

Module Code	DA1222	Semester 2	Module Title		Business Calculus I						
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutes	Self-study				CA	WE		
		2	2	90*				50	50		
Module Aim:	This module aims to provide knowledge on advanced business calculus and its applications in business and finance.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Apply fundamental concepts of limits, continuity, and differentiation to analyze and solve problems involving rates of change, marginal functions, and optimization.										
LO-2	Use integration techniques to compute antiderivatives, definite and improper integrals, and apply them in business-related problems.										
LO-3	Demonstrate a conceptual understanding of the Fundamental Theorem of Calculus and its role in linking differentiation and integration for problem-solving.										
Syllabus Outline										Learning Outcomes	
1	Calculus of one variable <i>Limits, continuity, derivatives, Marginal functions, applications of the derivative, optimization, Implicit differentiation</i>										LO-1, LO3
2	Integration <i>Antiderivatives and rules of integration, area and the definite integral, the fundamental theorem of calculus, application of the definite integral to business, integration techniques, improper integrals</i>										LO-2, LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50%		LO-1, LO-2, LO-3		

Business Analytics 2025

Module Code	DA1242	Semester 2	Module Title			Data Structures and Algorithms				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1142
		2	2	90*				50	50	
Module Aim:	The aim of this module is to introduce database and program development techniques to the participants.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 Construct common data structures										
LO-2 Design appropriate data structures and algorithms for a given situation business problem										
LO-3 Analyse the complexity/performance of basic algorithms										
Syllabus Outline										Learning Outcomes
1	Basic data structures and operations <i>Arrays, Linked lists, Queues, Stacks and hash tables</i>									LO-1
2	Basic algorithms <i>Recursions, searching and sorting</i>									LO-3
3	Basic algorithm design techniques <i>Divide-and-conquer, greedy approach, dynamic programming</i>									LO-2, LO-3
4	Complexity analysis of algorithms <i>Big O, Big Omega, and Big Theta analysis</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2 LO-3	

Business Analytics 2025

Module Code	DA1262	Semester 2	Module Title			Introduction to Business Science				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				50	50	
Module Aim:	The purpose of this module is to provide an understanding of the scope and structure of Business Science and applications									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Demonstrate an understanding of business analysis, business process sciences, and business analytics.									
LO-2	Discuss real-world applications of business analysis, business process sciences, and business analytics.									
Syllabus Outline										Learning Outcomes
1	Business Analysis Business change lifecycle, Internal & external environment analysis, Situational analysis, Market & competitor analysis, Critical success factors, Key performance indicators, Performance target, Balance scorecard approach, Stakeholder analysis									LO-1, LO-2
2	Business Process Science <i>Business process identification & discovery, Business process modelling methods</i>									LO-1, LO-2
3	Business Analytics <i>Industry 4.0, Descriptive data analytics, Predictive data analytics, Prescriptive data analytics</i>									LO-1, LO-2
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2	
Written examination (WE)							50%		LO-1, LO-2	

Business Analytics 2025

Module Code	IM1212	Semester 2	Module Title			Financial Management					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutes	Self - study				CA	WE		
		2	2	90*				50	50		
Module Aim:	The purpose of this unit is to provide an understanding of how organizations can be managed more effectively through efficient financial management.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	define and explain the decision-making role and tasks of a financial manager.										
LO-2	describe the importance of the concepts of time value of money, risk and return in making financial decisions										
LO-3	apply finance principles to the main categories of corporate financial decisions										
Syllabus Outline									Learning Outcomes		
1	Introduction to finance and financial environment <i>Introduction to finance, financial system, Role of a finance manager, Objectives of profit and not-for-profit organizations, Stakeholder analysis and agency theory, Investment, financing and dividend decisions of a financial manager in the Sri Lankan financial market</i>									LO-1	
2	Time Value of Money <i>Introduction, Present value, Future value, Annuities, Perpetuities, Amortization schedules</i>									LO-2	
3	Risk and return <i>Historical Risk and Returns, Expected Risk and Returns, Selection of assets, Investor behaviour, Introduction to two asset portfolio risk and returns, Systematic and Unsystematic risk</i>									LO-2	
4	Valuation of Securities <i>Develop mathematical formulas for bond and stock valuation methods. The concept of yield to maturity</i>									LO-2, LO-3	
5	Capital Budgeting <i>Apply mathematical formulas for investment appraisal techniques (NPV, IRR, Payback period, Capital rationing). Incremental cash flow analysis, Further issues in capital budgeting, Risk analysis.</i>									LO-3	
6	Cost of Capital <i>Measurement of gearing. Cost of equity/debt/preference shares, WACC</i>									LO-3	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO2, LO-3		
Written examination (WE)							50%		LO-1, LO-2, LO-3		

Business Analytics 2025

Module Code	DB1222	Semester 2		Module Title	Business Communication II						
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutes	Self-study				CA	WE	None	
		2	-	70*				100	0		
Module Aim:	This course aims to develop in students the communication and inter-personal skills required in a business environment.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	explain the use of nonverbal communication methods and essential communication skills required in handling business negotiations and managing conflicts										
LO-2	develop business proposals, reports, and correspondence										
LO-3	develop academic reports and case study analysis										
LO-4	design of personal brands and professional resumes.										
Syllabus Outline									Learning Outcomes		
1	Effective use of Nonverbal communication <i>Body Language, Emotional intelligence</i>									LO-1	
2	Handling Business Negotiations and Conflict management <i>Assertiveness, Negotiation techniques</i>									LO-1	
3	Preparing Business Proposals, Reports and Correspondence <i>Format, Style and Content, Writing Disclaimers, Use of Graphs and illustrations, Summarizing</i>									LO-2	
4	Introduction to Academic writing <i>Structure of a Report, Academic Referencing (APA) – Use of referencing applications (e.g. Mendeley)</i>									LO-3	
5	Case Study Analysis <i>Analysis of critical elements, summarizing</i>									LO-3	
6	Personal Branding <i>Preparing a compelling resume, cover letters and personal branding Use of social media platforms like LinkedIn</i>									LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							0%				

Business Analytics 2025

Semester 3

Module Code	DA2112	Semester 3	Module Title			Introduction to Econometrics					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self- study				CA	WE	DA1212	
		2	-	70*				50	50		
Module Aim:	This module aims to provide the knowledge required for econometric modelling.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Describe the properties of regression estimators and how to address violations of regression assumptions										
LO-2	Distinguish between cross-sectional, time series and panel data and describe the challenges associated with modelling these types of data										
LO-3	Interpret reported regression results										
LO-4	Examine relationships between variables using appropriate econometric models and diagnostic tests using statistical software										
Syllabus Outline										Learning Outcomes	
1	Properties of regression estimators <i>Deriving OLS estimates, properties of the OLS estimators, violations of regression assumptions</i>										LO-1, LO-2, LO-3, LO-4
2	Violations of regression assumptions <i>Multicollinearity, heteroscedasticity, model misspecification, data-related errors</i>										LO1, LO-3, LO4
3	Qualitative response models <i>Introduction to maximum likelihood estimation, Linear Probability Model, Logit, Probit, Multinomial Logit</i>										LO-2, LO-3, LO-4
4	Introduction to panel data <i>Pooling independent cross sections, differences in differences, fixed effects and random effects models</i>										LO-2, LO-3, LO-4
5	Introduction to time series data <i>Identifying trends and seasonality, dynamic models, serial correlation</i>										LO-2, LO-3, LO-4
6	Simultaneous Equation Models <i>Simultaneous equation bias, identification problem, IV estimation and 2SLS</i>										LO-1, LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							50%		LO-1, LO-2 LO-3		

Business Analytics 2025

Module Code	DA2122	Semester 3	Module Title			Business Calculus II					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1222	
		1	2	55*				50	50		
Module Aim:	This module aims to provide knowledge on advanced business calculus and its applications in business and finance.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Solve and apply first-order differential equations in real-world and business contexts.										
LO-2	Analyze functions of several variables										
LO-3	Apply multivariable calculus techniques to solve real-world optimization problems in economics, engineering and business										
LO-4	Apply concepts of infinite sequences and series in mathematical modeling.										
Syllabus Outline										Learning Outcomes	
1	Differential Equations <i>Differential equations, separable equations, Logistic differential equations, first order linear equations, Applications to business</i>									LO -1	
2	Calculus of Several Variables <i>Functions of several variables, limits and continuity, partial derivatives, chain rule, implicit differentiation, maxima and minima of functions of several variables, Lagrange Multipliers</i>									LO -2, LO -3	
3	Infinite Sequences and Series <i>Infinite sequences, infinite series, ratio test & power series, Taylor and Maclaurin series and their applications</i>									LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							50%		LO-1, LO-2, LO-3, LO-4		

Business Analytics 2025

Module Code	DA2132	Semester 3	Module Title			Linear Algebra					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1222	
		1	2	55*				50	50		
Module Aim:	This course aims to provide knowledge on multivariable calculus and linear algebra to solve business applications. It is intended to give the appropriate conceptual and computational mathematical background for future study in business.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Apply the fundamentals of vectors and vector functions to solve geometric and physical problems										
LO-2	Solve systems of linear equations and apply these techniques in business and economic modeling.										
LO-3	Utilize matrix methods to perform Leontief Input-Output analysis and solve real-world problems using mathematical software.										
LO-4	Analyze the eigenvalue problem by calculating eigenvalues and eigenvectors to solve matrix problems in various fields										
Syllabus Outline										Learning Outcomes	
1	Introduction to vectors <i>Introduction to vectors and vector functions, dot product</i>									LO -1	
2	Systems of Linear equations and Matrices <i>Systems of linear equations, matrix arithmetic, Gauss-Jordan elimination, Gaussian elimination, LU factorization, error in solving linear systems, iteration methods, Leontief Input-Output analysis, Solving linear systems using mathematical software</i>									LO -2, LO -3	
3	The Eigenvalue Problem <i>Characteristic polynomial, determining eigenvalues and eigenvectors, QR algorithm, Singular value decomposition</i>									LO-1, LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							50%		LO-1, LO-2, LO-3, LO-4		

Business Analytics 2025

Module Code	DA2142	Semester 3	Module Title		Database Management						
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		3	-	105*				100	0		
Module Aim:	This module provides students with theoretical knowledge and practical skills required to design and work with databases.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Make use of database processing concepts to solve the information requirements of organizations										
LO-2	Apply database theory to the design and implementation of relational databases										
LO-3	Apply SQL queries										
Syllabus Outline										Learning Outcomes	
1	Introduction <i>Definition of a database, database management systems and their importance to business organizations</i>										LO-1
2	Database Design Process <i>Entities and relationships, ER diagrams</i>										LO-1, LO-2
3	Relational Model <i>Relational database model, tables, integrity constraints and foreign keys</i>										LO-1, LO-2
4	Normalization <i>Boyce-Codd Normal forms, database optimization</i>										LO-2
5	SQL <i>Querying databases, selection, insertion, updates, joins, groups and constructing complex queries to retrieve data</i>										LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	DA2162	Semester 3	Module Title			Agile Business Analysis					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE		
		2	-	70*				50	50		
Module Aim:		This course aims to show how agile values can affect the traditional business analysis approach.									
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Develop skills and competencies to analyze and manage day-to-day enterprise requirements										
LO-2	Discuss performing business analysis tasks in a dynamic enterprise environment and various domains.										
LO-3	Discuss the agile approach and its relevance to business analysis.										
LO-4	Develop effective communication skills and other competencies to handle business analysis responsibilities in the industry successfully										
Syllabus Outline									Learning Outcomes		
1	Requirement analysis and management <i>Requirement types, Advanced requirement elicitation methods, Requirement analysis methods and tools, Requirement specification methods, Requirement validation, Requirement management</i>									LO-1, LO-2	
2	Change Management <i>CR process, Impact Analysis, Requirements in life cycle management (trace, maintain, prioritize, assess, and approve) Product change case study</i>									LO-1, LO-2	
3	Business Analysis with Agile Principles <i>Introduction to Agile methodology, principles, and frameworks. Applying agile principles to business analysis, the roles and activities of a business analyst in Agile.</i>									LO -3. LO-4	
4	Software Product Management <i>Product Management, Minimum Viable Product, Minimum Lovable Product</i>									LO-2	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50%		LO-1, LO-2, LO-4		

Business Analytics 2025

Module Code	DA2192	Semester 3	Module Title			Technical & Scientific Writing					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		-	4	40*				100	-		
Module Aim:	This course is designed to develop skills that will enable to produce clear and effective scientific and technical documents										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Identify online and other sources and methods of research and documentation on business and technology areas.										
LO-2	Demonstrate the understanding of writing and editing process and be able to produce a variety of technical documents in an acceptable level of Standard British / American English.										
LO-3	Discuss ethical considerations in technical and scientific writing.										
Syllabus Outline										Learning Outcomes	
1	Activity Studio <i>Writing process, Analyzing audiences, Types and purposes of technical documents</i> <i>Writing technical/scientific documents, Word processing tools (MS Word, LaTeX),</i> <i>Basics of technical communications</i>										LO -1, LO-2, LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	IM2312	Semester 3	Module Title			Corporate Finance				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutes	Self-study				CA	WE	IM1212
		2	2	90*				50	50	
Module Aim:	The purpose of this module is to provide a broader understanding on how corporate financial decision making is facilitated.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	demonstrate and understanding of finance strategy in creating shareholder value.									
LO-2	apply corporate finance theories.									
LO-3	discuss advanced asset valuation techniques in corporate decision making.									
Syllabus Outline										Learning Outcomes
1	Shareholder value and corporate governance <i>Financial goals and strategy, shareholder value creation, corporate governance, behavioral issues.</i>									LO-1
2	Risk and return <i>Types of risk and return, Measuring and analysing risk and return, Risk diversification, Capital Asset Pricing Model, Markowitz Portfolio Theory</i>									LO-2, LO -3
3	Advanced capital budgeting techniques. <i>Decision tree analysis in finance, types of real options, option value calculations, capital budgeting risk analysis techniques</i>									LO-1, LO-2, LO -3
4	Capital structure theories <i>The Modigliani – Miller theory, the static trade – off theory, the under-investment problem, asymmetric information, the risk – shifting problem, free cash – flow arguments, the pecking order theory, debt overhang.</i>									LO-2
5	Dividend theories <i>Objectives of dividend policy, practical considerations in dividends, stability of dividends, target payout ratio and dividend smoothing, Forms of dividends, Share buybacks, Chronology of dividend dates, Cum – dividend vs Ex – dividend prices., Dividend relevance (Walter’s model), dividend relevance (Gordon’s model), dividend and uncertainty, dividend irrelevance (Miller & Modigliani), Market imperfections and dividends, information content of dividends, taxes.</i>									LO -2
6	Working Capital <i>Networking capital, operating cycle, working capital cycle, determining working capital, estimating working capital needs, Receivables management, Inventory management, Cash management, Working capital finance.</i>									LO - 3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2, LO-3	

Business Analytics 2025

Semester 4

Module Code	DA2212	Semester 4	Module Title			Statistical & Machine Learning						
Credits	3	Hours/Week				C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1212, DA2112		
		2	2	90*				100	-			
Module Aim:	This course aims to provide theoretical and practical aspects of statistical and machine learning techniques for business analytics.											
Learning Outcomes												
After completing this module, the students should be able to:												
LO-1	Describe the fundamental concepts in problem-solving with intelligent systems											
LO-2	Explain the mathematical basis for the techniques used in statistical and machine learning											
LO-3	Apply the appropriate computational intelligence techniques for a given problem											
LO-4	Make use of machine learning tools in software to solve business-related problems											
Syllabus Outline										Learning Outcomes		
1	Introduction to Statistical Machine Learning Empirical Risk Minimization, Bayes Optimal classifier, PAC learnability, Uniform Convergence, VC dimensions										LO-1, LO-2	
2	Supervised Learning Algorithms I: Regression Algorithms <i>Review of Linear Regression, Model Selection and Regularization (Subset Selection, Stepwise Selection, Ridge Regression, LASSO), Model Comparisons</i>										LO-1, LO-3, LO-4	
3	Supervised Learning Algorithms II: Classification <i>Logistic Regression (Binary, Multi-Class), Naive Bayes, KNN, Linear and Quadratic Discriminant Analysis, Decision Trees, Support Vector Machine</i>										LO-1, LO-3, LO-4	
4	Supervised Learning Algorithms III: Ensemble Techniques <i>Bagging (Random Forests), Boosting (Gradient Tree Boosting, ADA Boost)</i>										LO-1, LO-3, LO-4	
5	Model Testing, Evaluation and Validation <i>Overfitting and Underfitting, Bias-Variance Trade-off, Errors in Estimation (Training vs Test MSE, Mean Absolute Error, Root Mean Squared Error), Confusion Matrix, Sensitivity and Specificity, ROC Curve, Validation test Split, Cross validation</i>										LO-1, LO-2, LO-3	
6	Unsupervised Learning Algorithms <i>Clustering, Dimensionality Reduction, Principal Component Analysis, Singular Value Decomposition</i>										LO-1, LO-3, LO-4	
Assessments												
Assessment								Weight		Learning outcomes		
Continuous Assessments (CA)								100%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)								0%				

Business Analytics 2025

Module Code	DA2222	Semester 4	Module Title			Multivariate Methods in Business					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1212	
		3	-	105*				50	50		
Module Aim:	The aim of this module is to introduce common statistical methods for analyzing data with multiple variables per observation.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Explain the use of multivariate data in business applications										
LO-2	Apply different techniques to visualise multivariate data and derive summary statistics										
LO-3	Select and apply appropriate multivariate techniques to real datasets in view of obtaining insights from the data										
LO-4	Discuss the limitations and assumptions underlying the analyses										
Syllabus Outline										Learning Outcomes	
1	Aspects of multivariate analysis <i>Organization of data, data displays, distance</i>										LO-1
2	Sample geometry and random sampling <i>Geometry of the sample, random samples and expected values of the sample mean and covariance matrix, generalized variance, linear combinations of variables</i>										LO-2
3	Multivariate normal distribution <i>Multivariate normal density, sampling from a multivariate normal distribution, sampling distribution and large sample properties, detecting outliers</i>										LO-2
4	Comparisons of several multivariate means <i>Paired comparisons, one-way MANOVA, two-way MANOVA, profile analysis, repeated measures designs</i>										LO-3, LO-4
5	Multivariate linear regression <i>Least squares estimation, inference, model checking, comparing two formulations</i>										LO-3, LO-4
6	Principle components and factor analysis <i>Population principal components, summarizing sample variation, graphing principal components, orthogonal factor model</i>										LO-3, LO-4
7	Discriminant analysis <i>The discriminant function and tests of significance for two groups</i>										LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50%		LO-1, LO-2, LO-4		

Business Analytics 2025

Module Code	DA2232	Semester 4	Module Title		Introduction to Operations Research					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1222
		3	-	105*				50	50	
Module Aim:	This course aims to introduce fundamentals of operations research concepts.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Identify the importance of operations research for business decisions									
LO-2	Explain operations research theories and models and their applications									
LO-3	Apply software and mathematical methods to obtain optimal solutions									
Syllabus Outline										Learning Outcomes
1	Introduction <i>Origins of OR, Defining the problem, Formulate a mathematical model, Deriving solutions, Model testing and Application</i>									LO -1
2	Linear Programming <i>Introduction, Simplex method, Duality theory and Sensitivity analysis, Other LP solution algorithms and Transportation & Assignment problems</i>									LO -2, LO -3
3	Integer Programming <i>Use of binary variables in model formulation, Solutions methods of Integer Programming Problems, Branch-bound technique and Mixed Integer Programming</i>									LO -2, LO -3
4	Network Optimization Models <i>Shortest-path problem, Minimum spanning tree problem, Maximum flow problem, Minimum cost flow problem and Network simplex problem</i>									LO-2, LO-3
5	Dynamic Programming <i>Overview, Deterministic DP, and Stochastic DP</i>									LO-2, LO-3
6	Replacement Analysis Individual replacement policy, Group replacement policy									LO-2, LO-3
7	Management Science Applications for Economics <i>Demand and supply curves, Oligopolistic market modeling (Best response functions, Nash Equilibrium. Cournot and Bertrand Models),</i>									LO-2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2	

Business Analytics 2025

Module Code	DA2252	Semester 4	Module Title		Data Management & Visualization						
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		-	4	40*				100	-		
Module Aim:	This course aims to help students to articulate ideas/stories behind big data and communicate findings in visual, oral and written contexts appropriate for various applications.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Explain the need for data visualization and the data visualization process										
LO-2	Develop appropriate visualizations for given data										
LO-3	Develop business performance dashboards using data visualization software										
Syllabus Outline										Learning Outcomes	
1	Data search and acquisition										LO -1
2	Data analysis using software tools <i>Static charts, Reshaping data, Measure names and values</i>										LO -2, LO -3
3	Chart types and Chart selection										LO -2, LO -3
4	Annotations and Maps										LO-2, LO-3
5	Data stories and Interactive dashboards										LO-2, LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	DA2272	Semester 4	Module Title			Marketing Management					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		2	-	70*				50	50		
Module Aim:	This course aims to provide an introduction to basic marketing concepts to understand factors that influence marketing decisions in the global market.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Demonstrate an understanding of marketing concepts and marketing orientations										
LO-2	explain consumer behaviour and its application in different contexts										
LO-3	explain the process of product development, brand management										
LO-4	discuss the role of pricing in the firm’s decision-making process and common pricing practices and evaluate common models of distribution and retailing										
LO-5	analyse different marketing communication tactics										
Syllabus Outline									Learning Outcomes		
1	Principles of marketing management <i>Basic concepts of marketing management and its applications</i>									LO-1, LO-3	
2	Paradigms of marketing <i>History and philosophies of marketing management</i>									LO-2	
3	Environment scanning & marketing planning <i>Marketing audit, opportunity identification and strategic planning for marketing</i>									LO-2, LO-3	
4	Customer-driven marketing strategy (STP) <i>Segmenting bases, Segmenting, Targeting, Differentiating and positioning the opportunities</i>									LO-1, LO-2	
5	Marketing research <i>The importance of information, How to analyse and distribute information for marketing decision making</i>									LO-3	
6	Dynamics of consumer behaviour <i>Identify consumer market, Influencing factors, Buyer decision behaviour, Application of the concepts in Sri Lankan and global markets</i>									LO-2	
7	Marketing mix strategies <i>Product and brand strategies, Pricing strategies, Marketing communication strategies and distribution strategies</i>									LO-4, LO-5	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4, LO-5		
Written examination (WE)							50%		LO-1, LO-2, LO-3, LO-4, LO-5		

Business Analytics 2025

Module Code	DA2282	Semester 4	Module Title			Quantitative Economics				
Credits	3	Hours/Week			C	E	O	Evaluation %		Pre-requisites
GPA/NGPA	GPA	Lectures	Lab / Tutes	Self-study				CA	WE	None
		3	-	105*				50	50	
Module Aim:	This course gives students an understanding of the economics applications of mathematics principles which guide optimal decision-making through mathematical modelling.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Use and explain the underlying principles, terminology, methods, techniques, and conventions used in the subject.									
LO-2	Solve economic problems using mathematical methods.									
LO-3	Discuss implications of different market failures and government interventions using economics models.									
Syllabus Outline										Learning Outcomes
1	Key economic concepts <i>Opportunity cost, marginal analysis, scarcity and choice, levels of analysis</i>									LO-1
2	Consumer theory <i>Consumer choice theory, constrained optimization, demand elasticities, welfare analysis, income and substitution effects, consumer choice under uncertainty</i>									LO-1, LO-2
3	Costs, revenue and profits maximization <i>Supply curve, producer surplus, cost minimization, profit maximization</i>									LO-1, LO-2
4	Market structures <i>Characteristics of market structures, perfect competition, monopoly, monopolistic competition, oligopoly and oligopolistic models</i>									LO-1, LO-2
5	Market failures <i>Market failures, public goods, government interventions, inequality, information asymmetry</i>									LO-1, LO-2, LO-3
6	Macroeconomics <i>National accounting, aggregate demand and supply, inflation and unemployment, exchange rates and balance of payments, growth models</i>									LO-1, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2, LO-3	

Business Analytics 2025

Semester 5

Module Code	DA3142	Semester 5	Module Title			Business Application Development					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1142	
		2	2	90*				100	-		
Module Aim:	The aim of this course is to introduce the concepts of object-oriented programming for business application development.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Demonstrate Integrated Development Environments for efficient programming										
LO-2	Demonstrate an understanding of modern web technologies										
LO-3	Apply version controlling for development projects										
LO-4	Develop web applications with database access and GUI										
Syllabus Outline										Learning Outcomes	
1	Integrated Development Environments										LO-1
2	Web Applications <i>Web servers, application frameworks, Web APIs, HTML and CSS</i>										LO-2, LO-4
3	Version Controlling <i>Version control systems, Git, GitHub</i>										LO-3
4	Modern Trends <i>No code development, Single page applications, Progressive web applications</i>										LO-3, LO-4
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	DA3162	Semester 5	Module Title			Introduction to Geospatial Sciences				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	2	90*				100	-	
Module Aim:	This module aims to introduce spatial data applications in the decision science domain in conjunction with applied geoinformatics concepts such as geo-statistics and modelling, geospatial data supply for geographic information systems: digital maps, digitizing, basic satellite remote sensing, and thematic classification of raster and vector data.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Explain the basics of geographic information systems (GIS) and remote sensing									
LO-2	Select and acquire both primary and secondary spatial data for use in GIS									
LO-3	Analyze digital data in raster and vector formats to derive informed decisions									
Syllabus Outline										Learning Outcomes
1	Introduction <i>Components of a GIS, Raster and Vector Data, GIS software Platforms</i>									LO-1
2	Remote Sensing and Acquisition of Spatial Data <i>Introduction to Space Technology, Public Domain Satellite Imagery, GPS Applications</i>									LO-2, LO-3
3	Spatial Analysis and Modelling <i>Vector Operations, Spatial Optimization Techniques, Spatial Data Models, Spatiotemporal Processes, Spatial Correlation, Proximity Analysis</i>									LO-2, LO-3
4	Digital Image Processing in GIS <i>Raster Analysis, Image Classification Algorithms, Statistical and Machine Learning for spatial Analysis</i>									LO-2, LO-3
5	Business Applications of GIS Technologies <i>Location-based Business, Spatial Planning and Policy Analysis, Consumer Analysis using GIS</i>									LO-2, LO-3
6	Spatial Big Data <i>Overview, Types of Spatial and Spatiotemporal Big Data, Spatial Decision Support Systems</i>									LO-2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	
Written examination (WE)							0%			

Business Analytics 2025

Module Code	DA3172	Semester 5	Module Title			Digital Transformation in Practice					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		3	-	105*				100			
Module Aim:	This course aims to provide students with an overview of key aspects of Digital Transformation in an organization, how to measure the digital maturity of an organization as well as explore use cases and key considerations in Digital Transformation Program implementation in a business environment.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Identify the key aspects that organizations consider in their digital transformation journey										
LO-2	Explain key dimensions considered in digital maturity and the business impacts of achieving a higher digital maturity.										
LO-3	Describe basic principles and common misconceptions related to developing a digital transformation strategy and a roadmap.										
LO-4	Evaluate the benefits and challenges of achieving a successful digital transformation programme										
LO-5	Develop digital skills and competencies for today’s digital era										
Syllabus Outline										Learning Outcomes	
1	Introduction to digital transformation										LO-1
2	Digital maturity <i>Assessing the digital maturity of an organization and different digital maturity models used in assessing organization</i>										LO-2, LO-5
3	Key dimensions used in digital maturity models										LO-2, LO-5
4	Developing a digital strategy and digital transformation roadmap										LO-3, LO-5
5	Phases of implementing a digital transformation programme, key challenges and how to overcome them										LO-3, LO-5
6	Sustaining a successful digital transformation programme implementation – principles of change management										LO-3, LO-4, LO-5
7	Case studies of successful digital transformation programmes										LO-2, LO-3, LO-4, LO-5
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3, LO-4, LO-5		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	DA3182	Semester 5	Module Title			Operations & Supply Chain Management					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		3	-	105*				50	50		
Module Aim:											
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Discuss the main elements of operations and supply chain management and strategy formulation to improve the productivity and quality aspects.										
LO-2	Discuss models for integrative logistics and supply chain in a theoretical framework										
LO-3	Design and provide a practical approach to support the business' decision making within the context of operations and supply chain management and the real world										
Syllabus Outline										Learning Outcomes	
1	Introduction to Operations and Supply Chain Management									LO-1	
2	Process and Service Design Capacity Management									LO-2	
3	Operations and Process Analysis									LO-2, LO-3	
4	Scheduling Model Analysis and Demand Forecasting									LO-2, LO-3	
5	Process and Inventory Management									LO-2, LO-3	
6	Facility Analysis – Location and Layout Planning									LO-2, LO-3	
7	Supply Chain Distribution and Logistics									LO-2, LO-3	
8	Supply Chain Integration and Digital Supply Chain									LO-2, LO-3	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1 LO-2, LO-3		
Written examination (WE)							50%		LO-1, LO-2, LO-3		

Business Analytics 2025

Module Code	DA3712	Semester 5	Module Title			Innovation by Design Thinking					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		3	-	105*				100			
Module Aim:	This module aims to impart creativity and innovation skills for problem solving using design thinking approaches										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Demonstrate the understanding of the needs of a group of stakeholders using ethnographic and other methods.										
LO-2	Define innovation challenges by directing questions to relevant individuals and groups										
LO-3	Develop multiple creative ideas following structured approaches.										
LO-4	Develop simple rapid prototypes to make their ideas into a reality.										
Syllabus Outline									Learning Outcomes		
1	Listening									LO-1	
2	Problem Setting									LO – 1, LO-2	
3	Ideating									LO-3	
4	Iterating									LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1 LO-2, LO-3, LO-4		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	IM3512	Semester 5	Module Title			Business Valuation and Analysis				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	IM2312
		2	2	90*				100		
Module Aim:	This module aims to help students develop business valuation and financial analysis skills.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	make use of financial information to analyse firms									
LO-2	develop valuation models based on discounted cash flow method									
LO-3	discuss valuations using alternative business valuation approaches									
Syllabus Outline										Learning Outcomes
1	Introduction and Financial Statement Analysis <i>Financial ratio analysis, Risk analysis including Dupont analysis, Analysis of growth potential. Comparative analysis of ratio, Industry analysis, Cost drivers and revenue drivers’ identification, Convert accounting statements, cost of capital calculation</i>									LO-1
2	Forecasting and Valuation of Free Cash Flows <i>Free cash flows, Enterprise valuation, Continuation value. Cash flow to equity valuation.</i>									LO-2
3	Relative Valuation <i>Equity multiples, Options strategies and pay-offs, Equity/debt valuation, Real option valuation.</i>									LO-2
4	Mergers, Acquisitions, Buyouts and Restructuring <i>Mergers & acquisitions, Offer structures, and Leveraged buyouts.</i>									LO-3
5	Develop financial model for business valuation <i>Use excel model</i>									LO-2
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	
Written examination (WE)							0%			

Business Analytics 2025

Semester 6

Module Code	DA3212	Semester 6	Module Title		Advanced ML Applications for Business					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA2112
		2	2	90*				100	-	
Module Aim:	This course aims to give hands-on experiences to students in deep learning and reinforcement learning which are most revolutionary advances in machine learning.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Identify the principles of deep learning neural networks									
LO-2	Explain common methods for deep learning									
LO-3	Demonstrate the understanding of reinforcement learning									
Syllabus Outline										Learning Outcomes
1	Introduction to Neural Networks <i>Overview/Recap of Machine Learning, A Brief History of Neural Networks, The Basic Idea and layered architecture, Applications of DL, Challenges of DL</i>									LO -1
2	Training Neural Networks <i>Multilayer perceptron, Regularization, Parameter Norm Penalties, Weight Decay, Early Stopping, Dropout, Data-set Augmentation and Artificial Noise</i>									LO -1
3	Optimization of Neural Networks <i>Gradient Descent and Stochastic Gradient Descent, Chain rule and Computational graphs, Back-propagation, Cost functions</i>									LO -1
4	Convolutional Neural Networks (CNNs) <i>Convolutional operator, Convolution layer, CNN Architecture, Implementation</i>									LO -2
5	Applications of CNN <i>Classification using CNN, Neuro-style transfer, Siamese networks, Computer vision</i>									LO -2
6	Recurrent Neural Networks (RNNs) <i>Motivation and idea for RNNs, RNN Architecture, Long Short-Term Memory (LSTM), Exponential Smoothing RNN (ES-RNN)</i>									LO -2
7	Applications of RNN <i>Classification and Prediction, Language Modelling and Generating Text, Machine Translation. Speech Recognition, Word/Sentence embedding</i>									LO -2
8	Advanced topics in Deep Learning <i>Unsupervised deep learning (Autoencoders, Generative Adversarial Networks), Deep Reinforcement Learning algorithms, Deep Q learning, Transfer learning, Explainability</i>									LO -2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	
Written examination (WE)							0%			

Business Analytics 2025

Module Code	DA3222	Semester 6	Module Title		Data Mining & Business Intelligence					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	-	70*				50	50	
Module Aim:	This course aims to provide both theoretical and practical knowledge on finding useful patterns for business applications in large databases. It also equips learners with the skills to transform process-oriented data to actionable insights.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Describe the fundamental concepts involved in the process of discovering useful, possibly unexpected, patterns in large data sets									
LO-2	Explain the various stages involved in the data mining and information retrieval process and extract useful patterns and information from a data set									
LO-3	Utilize machine learning and BI tools for decision making									
Syllabus Outline										Learning Outcomes
1	Introduction to Data Mining & BI <i>Role of BI in decision-making, How data mining helps in Business Intelligence, Descriptive, Predictive and Prescriptive models, Data categorization</i>									LO-1
2	ETL and Data Preprocessing <i>Introduction to Extract, Transform, Load (ETL) concepts, Missing value handling, Data cleaning, Data integration and transformation, Data reduction, Data discretization and concept hierarchy generation</i>									LO-2
3	Exploratory Data Analysis & feature Engineering <i>Data visualization (Matplotlib, Seaborn, Plotly), Data normalization, Feature extraction and selection</i>									LO-2
4	Mining Frequent Patterns, Associations, and Correlations <i>Apriori algorithm: Finding frequent item sets using candidate generation, Generating association rules from frequent item sets, FP Growth Algorithm: Mining frequent item sets without candidate generation</i>									LO-2
5	Clustering <i>Similarity measures, hierarchical clustering, non-hierarchical clustering, clustering based on statistical models</i>									LO-2
6	Data Mining Applications & BI Tools <i>Affinity, Churn, Market Basket Analysis</i>									LO-2
7	Text Analytics <i>What is NLP, Regular Expressions, Basic Text Processing, Semantics, Topic Modelling, POS tagging, named entity recognition, machine translation</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-2, LO-3	
Written Examination (WE)							50%		LO-1, LO-2, LO-3	

Business Analytics 2025

Module Code	DA3242	Semester 6	Module Title			Systems Analysis & Design					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		2	-	70*				50	50		
Module Aim:	The course aims to provide an understanding of each stage of the software development life cycle and equip students with the skills to analyze business processes within an organization to effectively model an information system.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Be able to analyze the business situation and specify the requirements of a system										
LO-2	Demonstrate the business functions and processes using UML										
LO-3	Appraise design decisions depending on business scenarios										
LO-4	Propose appropriate strategies for system implementation, project management, and deployment										
Syllabus Outline										Learning Outcomes	
1	System planning <i>SDLC life, Analyze the business case, Manage system projects</i>									LO-1	
2	Analyze the requirements and model the system <i>Determine the functional and non-functional requirements. Functional, structural, and behavioral modeling of requirements.</i>									LO-1, LO-2	
3	Design <i>Databases, human-computer interactions and physical architecture designs</i>									LO-3	
4	Construction <i>Implementation, testing, deployment</i>									LO-3, LO-4	
5	Support and Maintenance <i>Operations, backups, configurations, user support</i>									LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50%		LO-1, LO-2, LO-3, LO4		

Business Analytics 2025

Module Code	DA3252	Semester 6	Module Title			Enterprise Resource Planning (ERP) Systems - I				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	2	90*				100	0	
Module Aim:	The aim of this course is to gain an understanding of how to store, manipulate, and visualize enterprise data with ERP systems and conduct a range of analysis techniques on organizational data to gain insight and to make informed decisions									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	To understand how the data warehouse is integrated with the ERP application.									
LO-2	Be able to pre-process and manipulate enterprise data collected from ERP systems.									
LO-3	Master the data visualization features offered by the ERP applications.									
Syllabus Outline										Learning Outcomes
1	Introduction to ERP Data Architecture <i>Introduction to ERP Application and its data architecture, Case study: Background, an overview of strategy, and operations of a global manufacturing organization.</i>									LO-1, LO-2, LO3
2	Data Mining Integrated with Enterprise Data <i>Predictive analysis</i>									LO-1, LO-2
3	Geospatial <i>Accessing and Manipulating Spatial Data</i>									LO-1, LO-2
4	Text Analytics with ERP <i>Sentimental analysis on social network data,</i>									LO-1, LO-2, LO3
5	Graph Processing <i>Manipulate graph data from the graph engine</i>									LO-1, LO-2, LO3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	
Written examination (WE)							0%			

Business Analytics 2025

Module Code	DA3262	Semester 6	Module Title			Business Workflow Automation					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		-	4	40*				100	-		
Module Aim:	This course aims to impart some foundation knowledge and skills on Business Process Analysis, Re-design, Automation and relevant IoT applications.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Explain an as-is model of a business process using process analysis techniques and develop a process re-design										
LO-2	Appraise theoretical concepts in developing IoT applications and demonstrate the use of components, devices and data management in IoT										
LO-3	Construct business process models into executable workflows.										
Syllabus Outline										Learning Outcomes	
1	The Concept of Process Approach <i>BPM lifecycle, Pocess modeling, Descriptions & representations, Modeling standards & notations such as BPMN, UML, IDEF</i>										LO -1
2	Process Analysis <i>Decomposition, reuse, rework and repetition, events & exceptions handling</i>										LO -1
3	IoT and Edge Computing Fundamentals <i>IoT hardware & software, IoT programming, Data analytics in IoT, IoT commercial platforms / environments</i>										LO -2
4	Automation <i>Workflow patterns, Process automation environments such as MS Power Platform</i>										LO-1, LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	DA3722	Semester 6	Module Title			Advanced Spatial Data Science				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA3162
		-	4	40*				100	-	
Module Aim:	This module aims to introduce geospatial data science concepts with practical introduction to cloud based geoinformatics.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1		Explain the basics of spatial data science								
LO-2		Examine geospatial data using data science approaches and cloud-based GIS services								
LO-3		Develop decision making intelligence using geospatial data								
Syllabus Outline										Learning Outcomes
1	Introduction <i>Data science vs spatial data science, Python spatial data science ecosystem</i>									LO-1
2	Geospatial data science <i>Machine learning in geospatial data science, Open-source GIS software, GeoPandas</i>									LO-2, LO-3
3	Cloud-based GIS services <i>Web GIS technology, Google earth engine, Map visualization</i>									LO-2, LO-3
4	Spatial databases <i>PostGIS, Spatial SQL</i>									LO-2, LO-3
5	Automated GIS analysis <i>Custom SQL functions, Deploying spatial databases</i>									LO-2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	
Written examination (WE)							0%			

Business Analytics 2025

Module Code	DA3732	Semester 6	Module Title			Contemporary Developments in Digital Business					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		2	-	70*				100			
Module Aim:	This module aims to discuss how different cutting-edge digital technologies can be integrated within businesses.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	assess interaction with digital technologies used in different sectors and functions										
LO-2	demonstrate the understanding of development and operation of online digital platforms										
LO-3	discuss how banking and finance sector applies technology to improve and make financial services more accessible to the public.										
Syllabus Outline									Learning Outcomes		
1	Digital Business Strategy <i>Embedding digital technologies in “new” and “traditional” businesses, Competitive advantage through digital transformation, Digital entrepreneurship</i>									LO-1	
2	Digital Business Models <i>Platform as business models, Digital economy (internet & telecom economics) and value creation, Competitive advantage of digital business, Prototyping business models.</i>									LO-3	
3	Digital Business & Human-Computer Interaction <i>Introduction, Design & usability, Engagement & experience, Issues of HCI</i>									LO-2	
4	Digital Consumer <i>Digital marketing, e-commerce & social media challenge.</i>									LO-2	
5	Digital Finance <i>Fintech Foundations, Digital Innovations in Financial Markets such as blockchain</i>									LO-2, LO-3	
6	Digital Transformation & Business Value <i>Impact of Generative AI, Cybersecurity, Cloud technology, Augmented reality and Quantum computing</i>									LO-1, LO-2, LO-3	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	DA3742	Semester 6	Module Title			Technical Analysis				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	-	70*				100	0	
Module Aim:	This course provides the principles of technical analysis and its applications.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 Describe various tools and techniques in Technical Analysis										
LO-2 Apply Technical Analysis when making trading decisions										
Syllabus Outline										Learning Outcomes
1	Principles of Technical Analysis and Basics of Trend <i>Primary, secondary, short-term and intraday trends, uptrend, downward trend, support & resistance</i>									LO -1
2	Concept of Moving Averages <i>Simple, Exponential</i>									LO -1, LO -2
3	Patterns <i>Reversals & short-term patterns, common candlestick patterns and how to use interpret them within a trend,</i>									LO -1, LO -2
4	Wave Principle <i>Basic operation of the Wave principle, Label waves using standard Elliot Wave notation</i>									LO -1, LO -2
5	Conformation <i>Major indexes & oscillators designed to use volume as a confirmation, concept of momentum in price action, application of indexes & oscillators such as MACD, RSI and stochastics</i>									LO -1, LO -2
6	Fibonacci Relationships for Stock Trading <i>Fibonacci ratio, Golden ratio and Phi can be used for stock price pattern analysis</i>									LO -1, LO -2
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2	
Written examination (WE)							0%			

Business Analytics 2025

Module Code	DA3752	Semester 6	Module Title		Investment and Portfolio Management						
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		2	-	70*				50	50		
Module Aim:	This course aims to impart knowledge, skills and techniques required to analyze investments and manage financial asset portfolios.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	demonstrate an understanding of asset pricing theory.										
LO-2	explain different portfolio theories.										
LO-3	propose performance measures for portfolio constructions.										
Syllabus Outline									Learning Outcomes		
1	Introduction and overview <i>Statistical and theoretical background of portfolio management.</i>									LO-1	
2	Portfolio theory <i>Risk aversion, discrete versus continuous compounding, Asset allocation across risky and risk-free portfolios, Diversification, Optimal portfolios, Black Litterman Model</i>									LO-1, LO-2	
3	Informational efficiency <i>Definitions, theory, empirical evidence with relevance to funds management, Behavioural issues.</i>									LO-1, LO-2	
4	Asset pricing theory and practice <i>Capital Asset Pricing Model, Arbitrage Pricing Theory and Factor models</i>									LO-1, LO-2, LO-3	
5	Equity portfolio management <i>Index investment, Active management, Investment strategies (strategic, tactical, statistical arbitrage etc.)</i>									LO-1, LO-2, LO-3	
6	Performance measurement <i>Jensen, Sharpe, Treynor Indices; Information ratio, Portfolio Performance Index (PPI). Extrapolation issuers</i>									LO-3	
7	Portfolio Construction (Extensions), Derivatives and Portfolio Management <i>Alternative objectives and portfolio construction criteria: Risk management. The role of derivatives.</i>									LO-3	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50%		LO-1, LO-2, LO-3		

Business Analytics 2025

Semester 7

Module Code	DA4112	Semester 7	Module Title			Time Series Econometrics				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA2112
		3	-	105*				50	50	
Module Aim:	This course aims to familiarize the student with the time-series econometrics models.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Explain the concepts and properties of stationary and integrated univariate time series									
LO-2	Describe the properties of different time series models and identify appropriate univariate and multivariate time series models based on the data									
LO-3	Experiment with parametric variance models									
LO-4	Apply the basic methodology of identification, estimation, diagnostic checking and model selection to time series model building									
Syllabus Outline										Learning Outcomes
1	Introduction <i>Components of time series, basic time series models, ACF and correlogram, tests of serial correlation</i>									LO-1
2	Stationary processes <i>AR, MA, ARMA, Box-Jenkins methodology</i>									LO-2, LO-4
3	Non-stationary processes <i>Tests of stationarity, ARIMA models, cointegration and error correction models</i>									LO-2, LO-4
4	Multivariate models <i>Simultaneous equation bias, triangular systems, VAR models</i>									LO-2, LO-4
5	Modelling volatility <i>ARCH, GARCH models</i>									LO-3, LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4	
Written examination (WE)							50%		LO-1, LO-2, LO-4	

Business Analytics 2025

Module Code	DA4142	Semester 7	Module Title		Data Privacy, Security & Ethics					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	-	70*				100		
Module Aim:	This module aims to provide a holistic approach incorporating good practices and ethics in business. Further, it explains security related threats in a technology-driven world.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Describe the concepts of ethics and professionalism & analyze ethical frameworks									
LO-2	Demonstrate the understanding of vulnerability in a computer system									
LO-3	Demonstrate the knowledge of fundamentals of computer and data security									
LO-4	Apply information security principles to protect security of data									
Syllabus Outline										Learning Outcomes
1	Why Ethics for Business Analytics Professionals <i>Moral theory and ethical principles, Moral and philosophical claims, Risk management, Contemporary ethical issues in the business environment & solutions</i>									LO-1
2	Ethics & Technology									LO-1
3	Review CFA Code of Conduct									LO-1
4	Threats and Attacks <i>Viruses, Spyware, Phishing, Spoofing, Social engineering, Denial of service attacks</i>									LO-2
5	Information Security <i>What is Information Security, Goals of information security, CIA triad</i>									LO-3
6	Introduction to Cryptography <i>Ciphers, Symmetric and asymmetric key algorithms, One way hash functions, Public-Private key encryption, Digital signatures</i>									LO-3, LO-4
7	Cryptanalysis <i>Brute force attacks, Dictionary attacks, Side-channel attacks</i>									LO-3, LO-4
8	Quantum Attacks on Cryptography <i>Grover's Algorithm and Shorr's Algorithm</i>									LO-3, LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3, LO-4	
Written examination (WE)							0%			

Business Analytics 2025

Module Code	DA4162	Semester 7	Module Title			Project Management					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None	
		2	-	70*				50	50		
Module Aim:	The module aims to develop skills of the participants to enable them to contribute to key decisions in project management in an organization.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Recognize the project management process.										
LO-2	Outline the key challenges faced by project managers.										
LO-3	Demonstrate skills on a range of project management tasks including planning for risks, estimating time & costs, procurement and overall quality.										
Syllabus Outline										Learning Outcomes	
1	Development of Project Management as a Discipline <i>Basic Principles, the Project ‘Life Cycle’, Project Management Terminology</i>										LO-1
2	Project Initiation & Planning <i>Strategic and Operations Planning Frameworks, Establishing Project Goals and Objectives, Deliverables, Process Models, Scoping, Basic Feasibility Models, Resourcing, Costing, Scheduling, Presentation and Outcomes, Work Breakdown Structures, Gantt charts, Project Management Software</i>										LO-1, LO-2
3	Monitoring & Control <i>Project control life cycle, Progress evaluation, Reporting and Corrective actions</i>										LO-2, LO-3
4	Communication & Organization										LO-2
5	Quality <i>Quality control & assurance, quality measurements & procedures, Quality management systems,</i>										LO-3
6	Estimating & Risk <i>Overestimates/underestimates, Estimates & targets, Estimating methods, Risk categorization, Identifying and prioritizing risk, Assessment of risk exposure, Risk response strategies</i>										LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50%		LO-1, LO-2		

Business Analytics 2025

Module Code	DA4712	Semester 7	Module Title			Enterprise Resource Planning (ERP) Systems – II					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA3252	
		2	2	90*				100			
Module Aim:	This course aims to impart technical know-how to students for applying ERP in a business context.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	To demonstrate an understanding of the basic concepts of an ERP solution.										
LO-2	To describe the overview of the strategy and operations of a global, cross-functional, process-centric manufacturing company.										
LO-3	To implement end-to-end business processes of sales and distribution, material management, production planning and execution, and financial accounting.										
LO-4	To demonstrate an understanding of how ERP improves business operations.										
Syllabus Outline									Learning Outcomes		
1	Introduction <i>Introduction to ERP Applications and their benefits, Case study: Background, an overview of strategy, and operations of a global manufacturing organization.</i>									LO-1, LO-2, LO4	
2	Sales and Distribution <i>Sales Support, Sales, Shipping and Transportation, Billing, Credit Management, Foreign Trade</i>									LO-3, LO-4	
3	Material Management <i>Inventory Management, Purchasing, MRP, Physical Inventory, Valuation, Service Master, Invoice Verification, Product Catalogs</i>									LO-3, LO-4	
4	Production Planning and Execution <i>Production Planning, Manufacturing Execution, Discrete Manufacturing, Repetitive Manufacturing</i>									LO-3, LO-4	
5	Warehouse Management <i>Goods Receipt, Goods Issue, Picking, Packing, Shipping, Physical Inventory</i>									LO-3, LO-4	
6	Financial Accounting <i>Accounts payable, Accounts receivable</i>									LO-3, LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	DA4722	Semester 7	Module Title			Financial Derivatives				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		3	-	105*				50	50	
Module Aim:	This course aims to impart fundamental understanding of tradable financial derivatives.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	Demonstrate knowledge of how different types of derivatives operate, and how they are applied and priced in the markets									
LO-2	Explain the attributes of main financial derivatives									
LO-3	Decide the type of security to be used for hedging and speculative purposes									
Syllabus Outline										Learning Outcomes
1	Derivative markets and Securities <i>Structure of Forward, Futures and Option markets, Basic payoff diagrams, Relationship between Forward and Option contracts, Derivative portfolio management</i>									LO-1
2	Forward and Futures contracts <i>Contract mechanisms, hedging, valuation and strategies</i>									LO-1, LO-2
3	Option contracts <i>Option markets, valuation and trading strategies</i>									LO-1, LO-2, LO-3
4	Swap and other derivatives <i>Swap contracts, warrants and convertible securities and other embedded derivatives</i>									LO-1, LO-2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2, LO-3	

Business Analytics 2025

Module Code	DA4902	Semester 7,8	Module Title		Analytics Practicum						
Credits	12	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutes	Self-study				CA	WE	None	
		-	-	1200*				100	-		
Module Aim:	This module requires students to demonstrate both theoretical and practical knowledge, analytical skills and personal characteristics at levels which are appropriate with professional business practice.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Formulate the business problem into a viable project proposal under individual supervision										
LO-2	Review relevant literature and critique the impact of the proposed project to evaluate the suitability of alternative research methods applicable to the chosen business problem										
LO-3	Recommend courses of action by debating the effectiveness of the proposed business solution										
LO-4	Defend project results to peers and supervisors										
Syllabus Outline										Learning Outcomes	
1	Problem identification & proposal development										LO -1
2	Research methodology and research design										LO -2
3	Analysis, discussion and recommendations										LO -2, LO -3
4	Project presentation										LO-4
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)		Proposal presentation					20%		LO-1		
		Publishable research paper / article					30%		LO-2, LO-3		
		Research Report, Oral presentation and viva					50%		LO-2, LO-3, LO-4		

Business Analytics 2025

Semester 8

Module Code	DA4212	Semester 8	Module Title			Advanced Operations Research				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA2232
		3	-	105*				50	50	
Module Aim:		This course aims to provide students with knowledge and skills in advanced optimization techniques.								
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1		Construct mathematical models for managerial decision problems								
LO-2		Evaluate limitations in mathematical programming models								
LO-3		Apply OR models to find acceptable solutions for real-life decision-making problems								
Syllabus Outline										Learning Outcomes
1	Introduction to Stochastic Programming <i>LP with Recourse</i>									LO - 1, LO -2
2	Nonlinear Programming <i>Graphical illustrations, One-variable unconstrained optimization, Multivariable unconstrained optimization, KKT conditions, Quadratic programming, Convex and Nonconvex Programming</i>									LO - 1, LO - 2, LO – 3
3	Multi-Criteria Decision Analysis <i>Delphi techniques, Analytic Hierarchy Process, Fuzzy Theory</i>									LO - 1, LO - 2, LO – 3
4	Genetic Algorithms <i>Concept of evolutionary algorithms, Selection, Crossover and Mutation</i>									LO - 2, LO - 3
5	Queuing Theory <i>Defining and properties of a queuing system, Arrival ration, birth and death process and utilization factor, Performance measures, Service models</i>									LO - 2, LO – 3
6	System Dynamics and Discrete Event Models <i>Causal loop diagram, Stock and flow diagram</i>									LO -1, LO - 2, LO – 3
7	Game Theory <i>Static games and dynamic games of complete information & incomplete information, Equilibrium concepts, Real world applications such as auctions, industrial organization and competition.</i>									LO – 3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2, LO-3	

Business Analytics 2025

Module Code	DA4242	Semester 8	Module Title		Advanced Database Management						
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutes	Self-study				CA	WE	DA2142	
		3	-	105*				100	-		
Module Aim:	This module aims to explore advanced database systems management and their role in a business organization.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Explain techniques to optimize databases and queries										
LO-2	Apply transaction management concepts for databases										
LO-3	Discuss the use of advanced data storage and manipulation techniques for complex business problems										
Syllabus Outline										Learning Outcomes	
1	Optimization <i>Database optimization, query optimization, indexing</i>										LO-1
2	Transaction Management in Databases <i>Database transactions, atomicity, consistency, isolation and durability</i>										LO-2
3	NoSQL Databases <i>Non-relational databases, object databases</i>										LO-3
4	Big data <i>Storage, analysis and processing of complex and large data sets</i>										LO-3, LO-3
5	Distributed Databases <i>Replication, transparency, consistency</i>										LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3		
Written examination (WE)							0%				

Business Analytics 2025

Module Code	DA4262	Semester 8	Module Title			Financial Risk Management					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutes	Self-study				CA	WE	None	
		3	-	105*				50	50		
Module Aim:	This course aims to provide the concepts, processes and techniques of risk management.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	Explain the nature of risk management practices in the world of business										
LO-2	Make use of tools and techniques required for financial risk assessment and evaluations										
LO-3	Formulate risk management reporting										
Syllabus Outline										Learning Outcomes	
1	Risk Finance Theory <i>Risk and types of risks, Risk management, risk management process & functions, Costs / benefits of risk management</i>										LO-1
2	Classification of Risks <i>Operational risk, Compliance risk & Investment risks</i>										LO-2
3	Risk Measures <i>Downside risk, Stochastic dominance, Value at Risk (VaR), Conditional Value at Risk (C-VaR), Filtered C-VaR</i>										LO-2, LO-3
4	Risks in Fixed income <i>Probability and loss severity as components of credit risk, credit scores and credit ratings, impact of interest rate risk</i>										LO-2, LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2		
Written examination (WE)							50%		LO-1, LO-2, LO-3		

Business Analytics 2025

Module Code	DA4802	Training Term	Module Title	Industrial Training					
Credits	6	Hours/Week		C	E	O	Evaluation %		Prerequisites
GPA/NGPA	NGPA	Lectures	Training				CA	WE	None
		-	600*				100	-	
Module Aim:	This module aims to enable the participants to acquire transferable skills in the area of business and finance analytics by offering them the chance to gain practical exposure. .								
Learning Outcomes									
After completing this module, the students should be able to:									
LO-1	Compare academic and industrial environments								
LO-2	Relate the knowledge gained via training to the R & D project								
LO-3	Appraise professional ethics and business practices								
LO-4	Discuss the findings in a training report								
Syllabus Outline									Learning Outcomes
1	Induction <i>This is an initial period to help the student in the transition from academic to industrial life. The students should meet his/her Mentor to discuss the contents and the objectives of training. He/She should also receive information about the training organization, its products or services and the terms and conditions of employment</i>								LO -1
2	General Training <i>In a large organization, this should include an introduction to the work done in a number of departments. Under these circumstances, the student may eventually be working as a member of a team in the organization. The student should be made aware of the management and administration sectors of the organization</i>								LO – 1, LO -2
3	Practical Skills <i>During this period, the student should receive instructions in the practical skills essential for his/her future employment. It should also include an appreciation of the business processes.</i>								LO -2, LO -3
4	Directed Objective Training <i>The major part of the training should have directed application to the activity which the student intends to follow after the training program (activities should be relevant to the specialisation in which the student will be graduating in). At this stage, the student should be encouraged to work on a real project and be given increasing responsibility for independent work to establish interest and confidence in his/her work</i>								LO – 3, LO-4
Assessments									
Assessment						Weight		Learning outcomes	
Continuous Assessments (CA)		Training report				50%		LO-1, LO-2, LO-3, LO-4	
		Final presentation and viva				50%			

Intake:	2025	Specialization		Business Process Management							Accreditation Requirements
Details of Curriculum		Stream		N/A							
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %		
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE	
	Semester 1	Specialization requirement					17				
TM1112	Business Process Management (BPM) Foundations	C	3	0	3		3		50	50	
TM1122	Foundations of Management	C	3	0	3		3		50	50	
TM1132	Mathematics for BPM	C	2	2	3		3		50	50	
TM1142	Business Statistics and Software Applications - I	C	2	2	3		3		50	50	
TM1152	Principles of Programming	C	2	2	3		3		100		
DB1112	Business Communication Skills - I	C	2	0	2		2		100		
		Total			17		17				

	Semester 2		Specialization requirement				17				
TM1212	Managing People and Markets	C	3	0	3		3		50	50	
TM1222	Business Process Modelling	C	2	2	3		3		100		
TM1232	Database Management	C	2	2	3		3		100		
TM1242	Business Statistics and Software Applications - II	C	2	2	3		3		50	50	
TM1252	Business Process Management in Practice	C	0	6	3		3		100		
DB1222	Business Communication Skills - II	C	2	0	2		2		100		
			Total		17		17				

	Semester 3	Specialization requirement					17			
TM2112	Enterprise Lean Six Sigma - I	C	2	2	3		3		50	50
TM2122	Business Process Architecture and Maturity Models	C	2	0	2		2		50	50
TM2132	Process Analysis and Diagnosis	C	2	2	3		3		100	
TM2142	Work Study and Ergonomics	C	2	2	3		3		50	50
TM2152	Operations Management	C	3	0	3		3		50	50
TM2162	Business Analysis	C	2	2	3		3		50	50
		Total			17		17			

	Semester 4	Specialization requirement					16			
TM2212	Supply Chain Management	C	3	0	3		3		50	50
TM2222	Customer Experience Management	C	2	0	2		2		50	50
TM2232	Workflow Management Systems	C	1	4	3		3		100	
TM2242	Enterprise Lean Six Sigma - II	C	2	2	3		3		50	50
TM2252	Value Stream Mapping	C	1	2	2		2		50	50
TM2262	Process Improvement Project	C	0	6	3		3		100	
		Total			16		16			

	Semester 5	Specialization requirement					16			
TM3112	BPM Change Management	C	2	0	2		2		50	50
TM3122	Project Management	C	2	2	3		3		50	50
TM3132	Quality Management	C	2	2	3		3		50	50
TM3142	ERP Systems and Applications	C	2	2	3		3		50	50
TM3152	Operations Research	C	2	2	3		3		50	50
TM3162	Industry 5.0 and The Future of BPM	C	2	0	2		2		100	
		Total			16		16			

	Semester 6	Specialization requirement					15			
TM3212	Business Process Simulation	C	2	2	3		3		100	
TM3222	Intelligent Process Automation	C	2	2	3		3		100	
TM3232	Process Mining	C	2	2	3		3		50	50
TM3242	Business Research Methods	C	3	0	3		3		100	
TM3712	ERP Best Business Practice Models	E	2	2	3		3		100	
TM3722	ISO Management Systems and Awards	E	2	2	3				100	
		Total			18		15			

	Semester 7	Specialization requirement					13			
TM4902	BPM Research Project	C	0	8	4		4		100	
TM4112	Business Strategy and Managing Performance	C	2	2	3		3		50	50
TM4712	Business Process Outsourcing and Shared Services	E	2	2	3		6		50	50
TM4722	Design Thinking	E	2	2	3				100	
TM4732	ERP Solutioning	E	2	2	3				100	
TM4742	Assuring Service Excellence in Organisations	E	2	2	3				50	50
		Total			19		13			

	Semester 8	Specialization requirement					13			
TM4902	BPM Research Project	C	0	8	4		4		100	
TM4212	Technology and Innovation Management	C	3	0	3		3		50	50
TM4222	Enterprise BPM	C	3	0	3		3		50	50
TM4752	Managing Processes in Software Companies	E	3	0	3		3		100	
TM4762	The ERP Implementation Process	E	2	2	3				100	
		Total			16		13			

	Industrial Training	Specialization requirement				6			
TM4802	Internship	C	0	0		6	6	100	
		Total				6	6		

Grand Total	136	6	124	6
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	Total credit requirement for the Specialization	130
	Faculty/ Specialization Electives beyond the specialization requirements [refer faculty elective table]*	0
	TOTAL CREDIT REQUIREMENT FOR GRADUATION	130

Minor Degree in ERP Systems

Intake:	2025	Specialization:	Business Process Management							
Module Code	Module Name	Category	Hours/Week		Credits		Evaluation		Semester	Credits Required
			Lecture	Lab/Tute	GPA	NGPA	CA%	WE%		

Minor in ERP Systems										
TM3142	ERP Systems and Applications	C	2	2	3		50	50	5	3
TM3712	ERP Best Business Practice Models	E	2	2	3		100		6	3
TM4732	ERP Solutioning	E	2	2	3		100		7	3
TM4762	The ERP Implementation Process	E	2	2	3		100		8	3

B U S I N E S S P R O C E S S M A N A G E M E N T



Introduction to the Business Process Management Specialization

The Business Process Management (BPM) specialization equips students with competencies encompassing knowledge, skills, and attitudes essential for effectively managing business processes in diverse industries, including manufacturing and services such as apparel, information technology, telecommunication, healthcare, food processing, finance, and more. The unique combination of the academic curriculum, exposure to industry, and skills/attitudes development sets the BPM specialization apart as a distinctive degree program. The department aims to produce competent graduates who can secure entry-level managerial positions soon after completing their degree and progress to higher positions within a few years.

The 2025 curriculum was developed based on the BPM lifecycle introduced by Dumas et al., (2018) and the Association of Business Process Management Professionals (ABPMP) International CBOK (2020). The subject structure is given in Table 1, which shows how modules are clustered as supporting and core modules under the above-mentioned pillars.

Table 1. Subject structure mapped to core BPM concepts

Semester	Focused Area	Core modules	Supporting modules
1	BPM lifecycle stage 1 - process identification, and BPM CBOK Knowledge Area 1 <i>Introducing Business Process Management</i>	• Business Process Management (BPM) Foundations	• Foundations of Management • Business Statistics and Software Applications – I • Mathematics for BPM • Principles of Programming
2	BPM lifecycle stage 2 - process discovery, and BPM CBOK Knowledge Area 2 <i>Introducing Business Process Modelling</i>	• Business Process Modelling • Business Process Management in Practice	• Managing People and Markets • Business Statistics and Software Applications – II • Database Management
3	BPM lifecycle stage 3 - process analysis, and BPM CBOK Knowledge Area 3 <i>Introducing Process Analysis</i>	• Enterprise Lean Six Sigma - I • Business Process Architecture and Maturity Models • Process Analysis and Diagnosis • Work Study and Ergonomics	• Operations Management • Business Analysis
4	BPM lifecycle stage 4 - process redesign, and BPM CBOK Knowledge Area 4	• Workflow Management Systems • Enterprise Lean Six Sigma - II • Value Stream Mapping	• Supply Chain Management • Customer Experience Management

Semester	Focused Area	Core modules	Supporting modules
5	<i>Introducing Process Design</i>	• Process Improvement Project	
	BPM lifecycle stages 5/6 - process implementation and process monitoring/controlling, and BPM CBOK Knowledge Areas 5 and 9	• BPM Change Management • Project Management • Industry 5.0 and The Future of BPM • ERP Systems and Applications [ERP Minor]	• Quality Management • Operations Research
6	<i>Introducing Process Performance Management</i>		
	<i>BPM Technologies</i>		
6	BPM CBOK Knowledge Area 6 and 9	• Business Process Simulation • Intelligent Process Automation • Process Mining • ERP Best Business Practice Models [E] [ERP Minor] • ISO Management Systems and Awards [E]	• Business Research Methods
	<i>Introducing Process Transformation</i>		
7	<i>BPM Technologies</i>		
	BPM CBOK Knowledge Area 7 and 9	• Business Process Outsourcing and Shared Services [E] • ERP Solutioning [E] [ERP Minor] • Assuring Service Excellence in Organisations [E]	• BPM Research Project • Business Strategy and Managing Performance • Design Thinking [E]
7	<i>Introducing Process Organization</i>		
	<i>BPM Technologies</i>		
8	BPM CBOK Knowledge Area 8 and 9	• Enterprise BPM • The ERP Implementation Process [E] [ERP Minor] • Managing Processes in Software Companies [E]	• BPM Research Project • Technology and Innovation Management
	<i>Introducing Enterprise Process Management</i>		
8	<i>BPM Technologies</i>		

Intake:	2025	Specialization	Business Process Management							
Semester 1		Specialization requirement					17			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM1112	Business Process Management (BPM) Foundations	C	3	0	3		3		50	50
TM1122	Foundations of Management	C	3	0	3		3		50	50
TM1132	Mathematics for BPM	C	2	2	3		3		50	50
TM1142	Business Statistics and Software Applications - I	C	2	2	3		3		50	50
TM1152	Principles of Programming	C	2	2	3		3		100	
DB1112	Business Communication Skills - I	C	2	0	2		2		100	
		Total			17		17			

Semester 2		Specialization requirement					17			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM1212	Managing People and Markets	C	3	0	3		3		50	50
TM1222	Business Process Modelling	C	2	2	3		3		100	
TM1232	Database Management	C	2	2	3		3		100	
TM1242	Business Statistics and Software Applications - II	C	2	2	3		3		50	50
TM1252	Business Process Management in Practice	C	0	6	3		3		100	
DB1222	Business Communication Skills - II	C	2	0	2		2		100	
		Total			17		17			

Semester 3		Specialization requirement					17			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM2112	Enterprise Lean Six Sigma - I	C	2	2	3		3		50	50
TM2122	Business Process Architecture and Maturity Models	C	2	0	2		2		50	50
TM2132	Process Analysis and Diagnosis	C	2	2	3		3		100	
TM2142	Work Study and Ergonomics	C	2	2	3		3		50	50
TM2152	Operations Management	C	3	0	3		3		50	50
TM2162	Business Analysis	C	2	2	3		3		50	50
Total					17		17			

Semester 4		Specialization requirement					16			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM2212	Supply Chain Management	C	3	0	3		3		50	50
TM2222	Customer Experience Management	C	2	0	2		2		50	50
TM2232	Workflow Management Systems	C	1	4	3		3		100	
TM2242	Enterprise Lean Six Sigma - II	C	2	2	3		3		50	50
TM2252	Value Stream Mapping	C	1	2	2		2		50	50
TM2262	Process Improvement Project	C	0	6	3		3		100	
Total					16		16			

Semester 5		Specialization requirement					16			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM3112	BPM Change Management	C	2	0	2		2		50	50
TM3122	Project Management	C	2	2	3		3		50	50
TM3132	Quality Management	C	2	2	3		3		50	50
TM3142	ERP Systems and Applications	C	2	2	3		3		50	50
TM3152	Operations Research	C	2	2	3		3		50	50
TM3162	Industry 5.0 and The Future of BPM	C	2	0	2		2		100	
		Total			16		16			

Semester 6		Specialization requirement					15			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM3212	Business Process Simulation	C	2	2	3		3		100	
TM3222	Intelligent Process Automation	C	2	2	3		3		100	
TM3232	Process Mining	C	2	2	3		3		50	50
TM3242	Business Research Methods	C	3	0	3		3		100	
TM3712	ERP Best Business Practice Models	E	2	2	3		3		100	
TM3722	ISO Management Systems and Awards	E	2	2	3				100	
		Total			18		15			

Semester 7		Specialization requirement					13			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM4902	BPM Research Project	C	0	8	4		4		100	
TM4112	Business Strategy and Managing Performance	C	2	2	3		3		50	50
TM4712	Business Process Outsourcing and Shared Services	E	2	2	3		6		50	50
TM4722	Design Thinking	E	2	2	3				100	
TM4732	ERP Solutioning	E	2	2	3				100	
TM4742	Assuring Service Excellence in Organisations	E	2	2	3				50	50
		Total			19		13			

Semester 8		Specialization requirement					13			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM4902	BPM Research Project	C	0	8	4		4		100	
TM4212	Technology and Innovation Management	C	3	0	3		3		50	50
TM4222	Enterprise BPM	C	3	0	3		3		50	50
TM4752	Managing Processes in Software Companies	E	3	0	3		3		100	
TM4762	The ERP Implementation Process	E	2	2	3				100	
		Total			16		13			

Industrial Training		Specialization requirement					6			
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %	
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE
TM4802	Internship	C	0	0		6		6	100	
		Total				6		6		
		Grand Total			136	6	124	6		

Total credit requirement for the Specialization	130
TOTAL CREDIT REQUIREMENT FOR GRADUATION	130

Minor Degree in ERP Systems

Module Code	Module Name	Category	Hours/Week		Credits		Evaluation		Semester	Credits Required
			Lecture	Lab/ Tute	GPA	NGPA	CA%	WE%		
Minor in ERP Systems										
TM3142	ERP Systems and Applications	C	2	2	3		50	50	5	3
TM3712	ERP Best Business Practice Models	E	2	2	3		100		6	3
TM4732	ERP Solutioning	E	2	2	3		100		7	3
TM4762	The ERP Implementation Process	E	2	2	3		100		8	3

Semester 1

***Self-Study hours are given for semester.**

Semester	Code	Module Title			C/E/O	GPA/ NGPA
1	TM1112	Business Process Management (BPM) Foundations			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain the process approach LO-2: identify the essential elements of BPM LO-3: compare the BPE methods used in BPM initiatives LO-4: identify the factors to be considered during the deployment and selection of a suitable BPE method(s) for an organisation						
Syllabus Outline						
1. Process approach vs functional approach 2. Introduction to BPM – Definitions, evolution, key components of a process, BPM life cycle, BPM capabilities, process flowcharts 3. Role of BPM in business 4. Evolution and trends of business process excellence (BPE) methodologies in organisations 5. Factors to be considered when selecting a suitable BPE method (s) for an organisation 6. Roles related to BPM / BPE, competencies required for these roles and future career opportunities						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
1	TM1122	Foundations of Management			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain the fundamentals of a business LO-2: explain the key managerial functions						
Syllabus Outline						
1. Introduction to business and its functions 2. Evolution of management 3. Four managerial functions – planning, organizing, leading, and controlling 4. Recent advancements in management and functions						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
1	TM1132	Mathematics for BPM			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: demonstrate the ability to use algebraic knowledge in different scenarios LO-2: use the theory of maxima and minima in business scenarios LO-3: produce and interpret graphs of basic functions LO-4: evaluate limits, continuity and derivatives of functions or equations. LO-5: apply theories of matrices in business applications LO-6: apply basic integration techniques to solve simple differential equations						
Syllabus Outline						
- Fundamentals of Algebra Real numbers, polynomials, rational expressions, integral exponents and radicals, quadratic equations, inequalities - Functions and graphs Cartesian coordinate system, functions and their graphs, algebra of functions, linear functions, quadratic functions - Exponential and Logarithmic Functions Introduction to exponential functions and its inverse, the logarithmic function and their applications. - Derivatives Limits, derivatives, applications of the derivative, implicit differentiation - Integration Antiderivatives and rules of integration, area and the definite integral, application of the definite integral to business, improper integrals - Systems of linear equations and matrices Systems of linear equations, matrix algebra, Gauss-Jordan elimination, Gaussian elimination, LU factorization, error in solving linear systems, iteration methods						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
1	TM1142	Business Statistics and Software Applications - I			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: apply basic statistics in analysing business problems LO-2: apply basic probability theory in analysing business problems LO-3: apply sampling techniques, estimation, and hypothesis testing in analysing business scenarios LO-4: demonstrate the ability to use statistical software applications						
Syllabus Outline						
- Introduction to statistics and statistical software applications Definitions, data types, types of statistics - Fundamentals of data visualization Bar chart, pie chart, frequency table, histogram, frequency polygon, ogive, box plot, stem and leaf plot - Descriptive statistics Measures of central tendency, measures of dispersion, introduction to skewness and kurtosis - elements of probability Terminology, basic properties, joint probabilities, conditional probabilities and marginal probabilities - Distribution theory Discrete probability distributions, continuous probability distributions - Sampling and sampling distributions Sampling techniques, sampling distribution - Fundamentals of hypothesis testing One sample hypothesis testing - Estimations Point estimation, interval estimation						

1. Introduction to programming
2. Different data types and uses
3. Defining and assigning variables
4. Arithmetic, relational and logical operators
5. Use of control structures to match with business rules

Module Code	DB1112	Semester 1	Module Title	Business Communication I						
Credits	2	Hours/Week			C	E	O	Evaluation %	Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				100	0	
Module Aim:	This is an introductory course which provides students with the basic communication skills required in a business environment.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	demonstrate the effective use of English grammar and writing skills.									
LO-2	demonstrate professional communication etiquette required in business environments.									
LO-3	demonstrate the overall understanding of making business presentations including the use of relevant software applications.									
Syllabus Outline									Learning Outcomes	
1	Business English for Professionals [6 hrs] <i>Revisit key elements of English grammar, Vocabulary, Reading skills</i>									LO-1
2	Essentials of Business Writing [8 hrs] <i>Sentence building, Letter writing, General punctuation review, Summarizing, Paraphrasing</i>									LO-1
3	Professional Communication Etiquette [8 hrs] <i>Telephone etiquette, E-mail etiquette, Meeting etiquette (virtual & physical), Making appointments, Minute taking, Formatting texts, Common business abbreviations and phrases</i>									LO-2
4	Making Effective Business Presentations [8 hrs] <i>Analyzing audience, preparing for presentations, delivering presentations, shaping a presentation, software applications (i.e. PowerPoint, Keynote, Prezi)</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	

Semester 2

Semester	Code	Module Title			C/E/O	GPA/ NGPA
2	TM1212	Managing People and Markets			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain human resource management function and its processes related to managing people LO-2: explain marketing function and processes related to marketing						
Syllabus Outline						
1. Importance of HRM towards BPM practice 2. Essential HRM roles of line and staff managers 3. Subprocesses of the HRM process such as human resource planning, job designing, job analysis, performance management and rewards management 4. Introduction to marketing function and its evolution 5. Key marketing concepts and strategies 6. Subprocesses of the marketing process such as strategic marketing process, product development, pricing, promotion, distribution, sales, and customer services 7. Customer orientation and its importance towards BPM						

1. Business process modelling languages - Textual descriptions vs. diagrammatical representations, diagrammatical process modelling languages
2. Business Process Modelling Notation (BPMN) – Introduction, symbols used in process modelling
3. Key business process modelling concepts and perspectives - Modelling business processes using basic concepts in BPMN 2.0, modelling business processes with different perspectives
4. Advanced process modelling - Process decomposition, reuse of process models, advanced process rework and repetition, handling events and exceptions

Semester	Code	Module Title			C/E/O	GPA/ NGPA
2	TM1232	Database Management			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	100%	-
Learning Outcomes						
After completing this module, students should be able to:						
LO-1: describe the fundamental concepts of databases, including data models, schemas, and relational database design principles						
LO-2: create a conceptual schema to model information in a domain						
LO-3: develop SQL commands to store, retrieve and manipulate data in a relational database						
LO-4: translate a conceptual schema into a relational database schema design						
LO-5: normalise a relational database schema to improve data integrity						
Syllabus Outline						
1. Database management system (DBMS) introduction 2. DBMS concepts and architectures 3. Data modelling using entity-relationship (ER) model 4. Relational data model 5. Data normalization 6. Conversion of ER model into relational model 7. Structured Query Language (SQL)						

Semester	Code	Module Title			C/E/O	GPA/NGPA
2	TM1242	Business Statistics and Software Applications - II			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM1142	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: formulate hypotheses based on different scenarios LO-2: apply appropriate hypothesis testing techniques LO-2: use regression techniques and explain the results LO-3: use statistical software to carryout analyses for different business scenarios						
Syllabus Outline						
- Two-sample tests Comparing two means from independent populations, paired t-test, F-test, z-test - ANOVA One-way ANOVA, two-way ANOVA, introduction to design-of-experiments (DOE) - Categorical data analysis Probability structure for contingency tables, relative risk and odds-ratios, Chi-square test, tests of independence - Non-parametric tests Wilcoxon rank sum test, Kruskal Wallis rank test, other non-parametric tests - Introduction to simple linear regression Ordinary least squares, measures of variation, linear regression assumptions - Multiple linear regression and model building Extending the simple bivariate model, testing portions of the model, dummy variables and interaction terms, modelling non-linearities						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
2	TM1252	Business Process Management in Practice			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
-	6	60*	3	-	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: identify BPM practices in service and manufacturing organisations LO-2: discuss the level of BPM practice in selected Sri Lankan organisations						
Syllabus Outline						
- Field visits to service and manufacturing companies – identify BPM practices and their level of practice and map selected processes - Guest sessions / seminars / workshops on BPM practices - Discussions on practical insights gained via field visits and guest sessions						

Module Code	DB1222	Semester 2		Module Title	Business Communication II					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGP A	GPA	Lectures	Lab / Tutes	Self-study				CA	WE	None
		2	-	70*				100	0	
Module Aim:	This course aims to develop in students the communication and inter-personal skills required in a business environment.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain the use of nonverbal communication methods and essential communication skills required in handling business negotiations and managing conflicts									
LO-2	develop business proposals, reports, and correspondence									
LO-3	develop academic reports and case study analysis									
LO-4	design of personal brands and professional resumes.									
Syllabus Outline										Learning Outcomes
1	Effective use of Nonverbal communication [4 Hrs] <i>Body Language, Emotional intelligence</i>									LO-1
2	Handling Business Negotiations and Conflict management [4 Hrs] <i>Assertiveness, Negotiation techniques</i>									LO-1
3	Preparing Business Proposals, Reports and Correspondence [6 Hrs] <i>Format, Style and Content, Writing Disclaimers, Use of Graphs and illustrations, Summarizing</i>									LO-2
4	Introduction to Academic writing [6 Hrs] <i>Structure of a Report, Academic Referencing (APA) – Use of referencing applications (e.g. Mendeley)</i>									LO-3
5	Case Study Analysis [6 Hrs] <i>Analysis of critical elements, summarizing</i>									LO-3
6	Personal Branding [4 Hrs] <i>Preparing a compelling resume, cover letters and personal branding Use of social media platforms like LinkedIn</i>									LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3, LO-4	
Written examination (WE)							0%			

Semester 3

Semester	Code	Module Title	C/E/O	GPA/ NGPA
3	TM2112	Enterprise Lean Six Sigma - I	C	GPA

Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM1112	50%	50%

Learning Outcomes
After completing this module, students should be able to: LO-1: define Toyota Production System (TPS), its key aims and pillars LO-2: determine essential elements of lean management LO-3: select suitable tools under lean management to address various types of waste LO-4: extend the lean applications to enterprise level of an organization

Syllabus Outline
1. Introduction to Toyota Production System and lean management 2. Process improvement frameworks used under lean management 3. Problem-solving tools used by lean management 4. Role of TPM as an essential component of lean management 5. Enterprise level lean applications through engagement and process approach

1. Process identification - Importance, relationship between process identification and other perspectives
2. Process architecture - Role in BPM initiatives, business process categories and their types of relationships, levels, reference models, SIPOC diagram
3. Process selection - Selecting business processes for improvement, dimensions and measures to assess performance
4. Introduction to business process maturity assessment – Evolution, levels and associated tools, methods at each maturity level
5. Process of undertaking business process maturity assessment
6. Implications on business process maturity assessment on BPM

Semester	Code	Module Title			C/E/O	GPA/ NGPA
3	TM2132	Process Analysis and Diagnosis			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM1222	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: apply appropriate process performance analysis techniques to business scenarios LO-2: analyse process performance of an as-is process model using process analysis techniques						
Syllabus Outline						
1. Qualitative process performance analysis techniques - Value-added analysis, waste analysis, stakeholder analysis, Pareto analysis, PICK charts, root-cause analysis, RACI analysis 2. Quantitative process performance analysis techniques - Flow analysis for time, cost and capacity, queuing theory						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
3	TM2142	Work Study and Ergonomics			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: relate work study and ergonomic concepts with productivity LO-2: determine suitable time and motion study techniques to a given situation LO-3: integrate ergonomics principles in process improvements						
Syllabus Outline						
1. Importance of standardized methods and work measurement for productivity 2. Tools for method study 3. Time measurement techniques 4. Assessment of human capabilities and limitations 5. Multidisciplinary and interdisciplinary nature of ergonomics 6. Application of ergonomics for process improvement						

Semester	Code	Module Title			C/E/O	GPA/NGPA
3	TM2152	Operations Management			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to:						
LO-1: demonstrate the ability to use knowledge of operations management in both manufacturing and service organisations						
LO-2: select appropriate product/service design and facility layout for a business organisation						
LO-3: use planning and forecasting techniques in managing business operations						
Syllabus Outline						
1. Fundamentals of operations management Operations management, operations performance, operations strategy, competitiveness 2. Product/service design, facility layouts, value engineering Product design for manufacturing and service organizations, facility layouts, location planning 3. Planning and controlling in operations management Forecasting, strategic capacity planning, aggregate planning, master scheduling, Material Requirement Planning (MRP I), Manufacturing Resource Planning (MRP II), and Enterprise Resource Planning (ERP), operations scheduling, inventory management						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
3	TM2162	Business Analysis			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	50%	50%
Learning Outcomes						
After completing this module students should be able to: LO-1: explain the basics of business analysis and its relevance to BPM LO-2: explain finance function and its implications towards BPM practice LO-3: apply business analysis knowledge areas to business scenarios						
Syllabus Outline						
1. Introduction to business analysis 2. Key knowledge areas of business analysis 3. Financial structure of business organizations 4. Background, key activities, elements, roles and its importance towards BPM practice 5. Financial statements analysis						

Semester 4

Semester	Code	Module Title			C/E/O	GPA/ NGPA
4	TM2212	Supply Chain Management			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain the supply chain management function and its key components LO-2: discuss the main supply chain management processes and its role in BPM LO-3: design, use, and recommend supply chain strategies based on management techniques, models, and software LO-4: discuss models for integrative and sustainable supply chain decision-making						
Syllabus Outline						
1. Introduction to supply chain management (SCM) and its role of BPM 2. Process perspective of the supply chain using the Supply Chain Operations Reference model (SCOR model) 3. Supply chain process mapping using the SCOR model 4. Supply chain strategies, techniques, models, and software related to the supply chain process management 5. SCM design, collaboration, and integration within the global supply chain context 6. Performance metrics to measure the supply chain processes						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
4	TM2222	Customer Experience Management			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	-	70*	2	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain methods, metrics, and standards related to customer experience management LO-2: apply tools to manage stages of customer life cycle						
Syllabus Outline						
1. Methods of understanding customer experience, generating insights and identifying improvement opportunities 2. Understand the stages of customer life cycle and key consideration at each stage of the life cycle, use of tools and role to be played by the BPM practitioners 3. Key metrics related to customer experience management in various industries 4. Learn about international and local associations, organisation, standards, and certification on customer experience management.						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
4	TM2232	Workflow Management Systems			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
1	4	75*	3	-	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: compare the benefits of different types of workflows LO-2: identify factors to be considered in selecting a BPM software application / vendor LO-3: demonstrate the ability to use basic features of selected BPM software						
Syllabus Outline						
1. Components of a workflow 2. Types of workflows 3. Work Management Systems (WMS) and integrating WMS with other business tools 4. Automating workflows 5. Introduction to BPM software applications and their benefits 6. Basic features and functions of selected BPM software applications						

Semester	Code	Module Title	C/E/O	GPA/ NGPA		
4	TM2242	Enterprise Lean Six Sigma - II	C	GPA		
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM1142, TM1242	50%	50%
Learning Outcomes						
After completing this module, students should be able to:						
LO-1: discuss the concept of Lean Six Sigma						
LO-2: apply key process improvement frameworks in Lean Six Sigma in business scenarios/cases						
LO-3: use basic problem-solving tools in DMAIC framework in business scenarios/cases						
Syllabus Outline						
1. Introduction to Six Sigma						
2. Introduction to Lean Six Sigma						
3. Techniques and the benefits of combining those in process improvement Problem solving frameworks in Lean Six Sigma						
4. DMAIC framework and its 28 sub-steps, DMADV, IDOV Fundamental tools used in each phase of the DMAIC framework						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
4	TM2252	Value Stream Mapping			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
1	2	55*	2	TM2112	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain the history and key concepts of value stream mapping LO-2: build current and future state value stream maps LO-3: discuss the concept of mixed model value stream mapping LO-4: explain the use of value stream mapping in managerial decision making						
Syllabus Outline						
1. Historical background of value stream mapping (VSM) and the concept of value 2. Key concepts, metrics, and objectives of VSM 3. VSM symbols 4. Visualizing interactions and flows 5. Sketching a basic value stream map 6. Demonstrate current value stream maps 7. Identify waste and processes to improve 8. Demonstrate future value stream maps 9. Differences in using symbols in services and manufacturing applications 10. Mixed model VSM 11. Using VSM for managerial decision-making						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
4	TM2262	Process Improvement Project			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
-	6	60*	3	TM1222, TM2112, TM2132, TM2142	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: deconstruct a given scenario LO-2: determine the suitable concepts and techniques required to analyse a given process LO-3: compare alternative solutions for their effectiveness LO-4: explain how a selected solution can improve the process LO-5: assess the effectiveness of a proposed solution to improve a process						
Syllabus Outline						
1. Defining and determining the scope of a problem 2. Modelling a given scenario using suitable BPM techniques 3. Qualitative and quantitative analysis of a process 4. Process redesign for improvement 5. Validating and assessing the proposed improvement						

Semester 5

Semester	Code	Module Title		C/E/O	GPA/ NGPA	
5	TM3112	BPM Change Management		C	GPA	
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	-	70*	2	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: discuss concepts of change management LO-2: develop a comprehensive change management programme and plans for managing stakeholder expectations						
Syllabus Outline						
1. Drivers of change impact and the role of change agents 2. Process perspective of planned change 3. Change implementation 4. Organization development						

Semester	Code	Module Title		C/E/O	GPA/ NGPA	
5	TM3122	Project Management		C	GPA	
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain concepts of project management LO-2: apply project management tools and techniques in stages of project life cycle LO-3: demonstrate the use of project management software application						
Syllabus Outline						
1. Development of project management as a discipline, key concepts, and life cycle 2. Projects selection – Role of organizational strategy, structure, and culture; financial and non-financial criteria 3. Project life cycle stages (define, plan, execute, closure) and tools / techniques used at each stage 4. Features and functions of selected project management software						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
5	TM3132	Quality Management			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: discuss quality management concepts LO-2: apply theories of quality management in process improvement LO-3: discuss the concepts of total quality environment						
Syllabus Outline						
1. Quality definitions and its evolution - Role of quality in businesses, cost of quality, dimensions of quality process quality 2. Quality tools and techniques - Basic quality tools, new quality tools, Statistical Process Control (SPC) 3. Design for quality - House of quality, Quality Function Deployment (QFD), Kano analysis, Failure Mode and Effect Analysis (FMEA) 4. Production quality - Acceptance sampling, OC curve 5. Total Quality Management (TQM) - Basic concepts in TQM, implementation of TQM						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
5	TM3142	ERP Systems and Applications			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: discuss features/functions and benefits of ERP systems and applications LO-2: evaluate ERP systems and select suitable systems for an organisation LO-3: demonstrate the ability to use selected ERP software applications in business environments						
Syllabus Outline						
1. Introduction to ERP systems and applications 2. Architecture of an ERP system 3. Evaluating ERP systems, selection, and implementation 4. ERP software and modules and using them for BPM activities 5. Extracting information from ERP systems and using them for BPE activities						

Semester		Code	Module Title	C/E/O	GPA/ NGPA	
5		TM3152	Operations Research	C	GPA	
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM1132	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: identify the importance of operations research for business decisions LO-2: formulate operations research models for practical scenarios LO-3: apply operations research techniques to obtain optimal solutions using computer solvers						
Syllabus Outline						
1. Introduction to operations research 2. Linear programming algorithms 3. Integer programming 4. Network optimization model 5. Dynamic programming in deterministic and stochastic environments						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
5	TM3162	Industry 5.0 and The Future of BPM			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	-	70*	2	-	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain the technological dimensions linked to Industry 5.0 and its impact on BPM practice LO-2: discuss the importance of sustainable Industry 5.0 practices for BPM LO-3: apply Industry 5.0 concepts to support business processes						
Syllabus Outline						
1. Introduction to industrial revolution and stages 2. Technologies applied in Industry 4.0 and 5.0 3. Artificial intelligence and autonomous decision making for BPM 4. Sustainability practices and their impact on BPM practice						

Semester 6

Semester	Code	Module Title			C/E/O	GPA/ NGPA
6	TM3212	Business Process Simulation			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM1142, TM1242, TM2132, TM3152	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: apply statistical concepts to business process simulation LO-2: develop discrete-event simulation models for business scenarios using simulation software LO-3: assess simulation results and recommend appropriate solutions						
Syllabus Outline						
1. Introduction to simulation – Definitions, methods, nature of systems, advantages and disadvantages 2. Modelling progress of time and variability – discrete-event simulation (DES), modelling variability, random numbers, sampling 3. Developing the conceptual model – introduction, framework for conceptual modelling 4. Data collection and analysis – unpredictable variability, statistical distributions 5. Experimentation – designing and documenting the model, warmup period, replications and run length, comparing alternatives, sensitivity analysis 6. Verification and validation – methods						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
6	TM3222	Intelligent Process Automation			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain intelligent process automation and its application in BPM LO-2: evaluate decisions related to intelligent process automation implementation LO-3: demonstrate the ability to use intelligent process automation software application						
Syllabus Outline						
1. Process automation and intelligent process automation 2. Fundamentals of intelligent process automation and its use in BPM 3. Evolution of intelligent process automation (robotic process automation, intelligent process automation, AI) 4. Intelligent process automation implementation 5. Features and functions of a selected intelligent / robotic process automation software						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
6	TM3232	Process Mining			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM3142	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain the fundamentals of process mining LO-2: demonstrate the ability to use selected process mining software applications LO-3: evaluate information generated by process mining software applications						
Syllabus Outline						
1. Introduction to process mining Evolution, benefits, contemporary developments, and contribution towards BPM practice 2. Process mining software applications, criteria for selection and features, considerations during implementations 3. Process mining software applications in simulated environments 4. Assess information provided by the process mining applications for BPE activities						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
6	TM3242	Business Research Methods			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: identify and explain the process of conducting business research LO-2: demonstrate the ability to use academic writing LO-3: evaluate and propose a research design to a given research problem						
Syllabus Outline						
1. Introduction to business research 2. Process of conducting research 3. Literature review 4. Research designs (quantitative, qualitative, mixed methods, and design science) 5. Academic writing and referencing						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
6	TM3712	ERP Best Business Practice Models			E	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM3142	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain any Best Business Practice (BBP) Scenario LO-2: discuss the functional flows that make up the BBP Scenarios						
Syllabus Outline						
1. Introduction to Best Business Practice Models 2. Lead to Cash 3. Procure to Pay 4. Hire to Retire 5. Make to Order / Make to Stock 6. Engineer to Order 7. Acquisition to Disposal 8. Service Based Solution 9. Project Based Solution 10. Data warehousing 11. ERP system integration						

Semester	Code	Module Title			C/E/O	GPA/NGPA
6	TM3722	ISO Management Systems and Awards			E	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain the requirements of ISO 9001 QMS for BPM LO-2: evaluate a given case organisation against an award scheme LO-3: review given business processes against the requirements of excellence awards						
Syllabus Outline						
1. Introduction to management systems standards 2. ISO 9001 management systems standards and requirements 3. Assuring process governance through management systems 4. Requirements of business process excellence awards 5. Elements of selected business excellence awards 6. Preparing organizations for business process excellence awards						

Semester 7

Semester	Code	Module Title			C/E/O	GPA/ NGPA
7/8	TM4902	BPM Research Project			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
-	-	800*	8	TM3242	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: identify a business problem and its context LO-2: formulate the problem into a viable project proposal LO-3: appraise and critique relevant literature LO-4: design and apply appropriate research design LO-5: discuss findings and recommend solutions to problems identified						
Syllabus Outline						
1. Problem identification and formulation 2. Review of literature 3. Design the research project 4. Data collection and analysis 5. Discussion of findings and recommendations						

1. Introduction to business strategy and strategy development process
2. Factors affecting successful strategy development and creating sustainable competitive advantages
3. Role of BPM and associated tools in strategy development and implementation
4. Introduction business and process performance
5. Balanced Scorecard
6. KPI implementation process and measuring product and process KPIs
7. Performance management capabilities
8. Budget preparation and resource allocation
9. Process performance measurements and management
10. Visualizing performance via dashboards

1. Introduction to business process outsourcing (BPO) and shared service practice
2. Planning the BPO process
3. BPO contract and important aspects
4. Factors to be considered when establishing a BPO or shared service operation and role to be played by BPM professional

Semester	Code	Module Title			C/E/O	GPA/ NGPA
7	TM4722	Design Thinking			E	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM2222	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain design thinking process LO-2: apply design thinking tools and propose process improvements						
Syllabus Outline						
1. Introduction to design thinking 2. Empathise stage 3. Define stage 4. Ideate stage 5. Prototype stage 6. Test stage 7. Process improvements using design thinking tools						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
7	TM4732	ERP Solutioning			E	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM3142	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: identify gaps within a process LO-2: apply ERP knowledge in overcoming the gaps identified in process mapping LO-3: explain fundamentals of human-computer interaction LO-4: apply prototyping tools to design ERP system interfaces LO-5: configure ERP system modules to suit customer requirements						
Syllabus Outline						
1. Requirement gathering and Gap Analysis 2. Human Computer Interaction (HCI) in ERP Solutions 3. Designing interfaces via Prototyping using HCI fundamentals 4. Solution Proofing 5. Configure modules to user scenarios 6. Targeting profitable customers, Developing customer relationships, Expansion (Customer relationship management module)						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
7	TM4742	Assuring Service Excellence in Organisations			E	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain service excellence and its role in BPM LO-2: analyse service delivery processes and propose improvements LO-3: evaluate industry specific requirements for assuring service excellence						
Syllabus Outline						
1. Introduction to services 2. Introduction to service excellence 3. Service quality frameworks – SERVQUAL model 4. Empowerment and service culture 5. Role of technology in service delivery 6. Measuring service delivery process performance and improvement 7. Industry specific service excellence considerations						

Semester 8

Semester	Code	Module Title			C/E/O	GPA/ NGPA
8	TM4212	Technology and Innovation Management			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: relate how technological resources enable an organization to achieve competitive advantage LO-2: apply technology management strategies for forecasting, acquiring and adopting technological resources LO-3: evaluate different innovation management strategies for managing innovation						
Syllabus Outline						
1. Fundamentals of technology management 2. Overview and patterns of technology development 3. Technology acquisition and protection 4. Technology transfer mechanisms 5. Dimensions of innovation 6. Innovation and knowledge management at firm level						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
8	TM4222	Enterprise BPM			C	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	50%	50%
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain the key concepts of Enterprise BPM LO-2: identify the importance of strategic alignment and governance insights from practice LO-3: explain the role of people and culture for Enterprise BPM practices						
Syllabus Outline						
1. Introduction to Enterprise BPM 2. Transitioning to Enterprise BPM 3. BPM maturity model selection, tailoring and application guidelines 4. BPM Governance 5. Role of people and culture for Enterprise BPM 6. Process management centre of excellence 7. BPM integration in support process management 8. Enterprise risk management 9. Enterprise BPM cases						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
8	TM4752	Managing Processes in Software Companies			E	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
3	-	105*	3	-	100%	
Learning Outcomes						
After completing this module, students should be able to: LO-1: discuss software development life cycle and process models LO-2: assess process maturity and performance in software companies LO-3: explain the methods used in assuring quality in software processes LO-4: assess the possibilities of applying BPE initiatives in software companies						
Syllabus Outline						
1. Introduction to software development life cycle (SDLC) and software process models 2. Detail the illustrations of implementing selected process model(s), considerations, critical success factors 3. Assessing process maturity software processes and identifying the gaps for improvement 4. Assuring quality in software processes 5. Measuring software process performance, undertaking BPE activities and assuring compliance with contemporary software standards						

Semester	Code	Module Title			C/E/O	GPA/ NGPA
8	TM4762	The ERP Implementation Process			E	GPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/Tute	Self-Study			CA	WE
2	2	90*	3	TM3142	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: explain ERP implementation and customer service LO-2: develop an ERP implementation plan LO-3: implement a business scenario within an ERP LO-4: discuss data visualization and reporting within the context of ERP						
Syllabus Outline						
- ERP Implementation Planning and Budgeting - The Conference Room Pilot - Showcasing the customer specific Solution BPM - Technological infrastructure - Designing and configuring business processes for ERP - Data Visualization and Report - Operational Intelligence - Moments of Service - Customer Interaction and Support						

Industrial Training

Semester	Code	Module Title			C/E/O	GPA/ NGPA
Industrial Training	TM4802	Internship			C	NGPA
Hours/Week			Credits	Prerequisites/ Corequisites	Evaluation	
Lecture	Lab/ Tute	Self-Study			CA	WE
-	-	600*	6	-	100%	-
Learning Outcomes						
After completing this module, students should be able to: LO-1: appraise the differences between academic and industrial environments LO-2: reflect on the business process management at training institution(s) LO-3: collaborate with the employees while maintaining professional ethics and business practices LO-4: solve a real-life business process problem						
Syllabus Outline						
1. Introduction to internship programme 2. General training at different departments 3. Practical skills for collaboration and negotiations 4. Specific process improvement using BPM knowledge						

Intake:	2025	Specialization		Financial Services Management						Accreditation Requirements	
Details of Curriculum				Stream							
Module Code	Module Name	Category C/E/O	Time allocation [Hours/ Week]		Credits Offered		Norm		Evaluation %		
			Lecture	Lab/ Tute	GPA	NGPA	GPA	NGPA	CA	WE	
Semester 1		Specialization requirement					17				
IM1112	Financial Accounting	C	2	2	3		3		50	50	
DB1112	Business Communication - I	C	2	0	2		2		100	0	
IM1122	Business Economics	C	2	2	3		3		50	50	
DA1142	Principles of Programming	C	2	2	3		3		50	50	
DA1122	Mathematical Foundations For Business	C	2	2	3		3		50	50	
DA1112	Probability and Statistics For Business - I	C	2	2	3		3		50	50	
		Total			17	0	17	0			

Semester 2		Specialization requirement						16			
IM1212	Financial Management	C	2	2	3		3		50	50	
IM1222	Organizational Behaviour and Management	C	3	0	3		3		50	50	
DB1222	Business Communication - II	C	2	0	2		2		100	0	
DA1222	Business Calculus - I	C	2	2	3		3		50	50	
DA1212	Probability and Statistics for Business - II	C	2	2	3		3		50	50	
IM1232	Marketing Management	C	2	0	2		2		50	50	
		Total			16	0	16	0			

Semester 3		Specialization requirement					16				
IM2112	Corporate Finance	C	2	2	3		3		50	50	
IM2122	Cost and Management Accounting	C	2	2	3		3		50	50	
IM2132	Operations Management	C	2	0	2		2		50	50	
DA2112	Introduction to Econometrics	C	2	0	2		2		50	50	
IM2142	Financial Modelling	C	2	2	3		3		100	0	
IM2152	Business and Commercial Law	C	3	0	3		3		50	50	
		Total			16	0	16	0			

Semester 4		Specialization requirement					14				
IM2212	Financial Markets and Institutions	C	2	2	3		3		50	50	
IM2222	Advanced Accounting and Modelling	C	2	2	3		3		50	50	
IM2232	People Management	C	2	0	2		2		50	50	
IM2242	Analytics in Consumer Behaviour	C	3	0	3		3		50	50	
IM2252	Machine Learning for Finance	C	2	2	3		3		100	0	
		Total			14	0	14	0			

Semester 5		Specialization requirement					13				
IM3112	Business Valuation and Analysis	C	2	2	3		3		100	0	
IM3122	Theory and Practice in Banking	C	3	0	3		3		50	50	
IM3132	Risk Management and Insurance	C	3	0	3		3		50	50	
IM3142	Digital Marketing	C	2	0	2		2		50	50	
IM3752	Managerial Economics	E	2	0	2		2		50	50	
IM3762	Project Management	E	2	0	2				50	50	
		Total			15	0	13	0			

Semester 6		Specialization requirement					15				
IM3212	Treasury Dealing	C	2	0	2		2		50	50	
IM3222	Investment and Portfolio Management	C	2	2	3		3		50	50	
IM3232	International Business	C	2	0	2		2		50	50	
IM3242	Data Management and Visualization	C	0	4	2		2		100	0	
IM3252	Financial Technology	C	2	2	3		3		50	50	
IM3262	Business Research Methods	C	2	2	3		3		100	0	
Total					15	0	15	0			

Semester 7		Specialization requirement					16				
IM4112	Strategic Management	C	2	0	2		2		50	50	
IM4122	Behavioural Finance	C	2	0	2		2		50	50	
IM4132	Personal Financial Planning	C	2	0	2		2		50	50	
IM4142	Time Series Econometrics	C	2	2	3		3		50	50	
IM4152	Corporate and Personal Taxation	C	3	0	3		3		50	50	
IM4902	Research Capstone Project	C	0	0	4		4		100	0	
Total					16	0	16	0			

Semester 8		Specialization requirement					17				
IM4212	Financial Services Regulations and Ethics	C	3	0	3		3		50	50	
IM4222	Sustainable Finance	C	2	0	2		2		50	50	
IM4232	Financial Derivatives and Alternative Investments	C	2	2	3		3		50	50	
IM4242	Contemporary Issues in Finance	C	3	0	3		3		50	50	
IM4902	Research Capstone Project	C	0	0	4		4		100	0	
IM4752	Auditing	E	2	0	2		2		50	50	
IM4762	International Financial Management	E	2	0	2		2		50	50	
Total					19	0	17	0			

Industrial Training		Specialization requirement					6			
IM4802	Industrial Training	C	0	0	0	6		6	100	0
		Total			0			6		

Grand Total	128	6	124	6
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Total credit requirement for the Specialization	130
Faculty/ Specialization Electives beyond the specialization requirements [refer faculty elective table]*	
TOTAL CREDIT REQUIREMENT FOR GRADUATION	130



F I N A N C I A L S E R V I C E S M A N A G E M E N T

Overview of the Degree Program

Bachelor of Business Science Honours in Financial Services Management program of the University of Moratuwa provides a strong foundation for the students who have the aspiration to enter and grow in the finance and financial services career. The course structure, with an optimal combination of theory and practice together with a highly regarded panel of lectures reinforce the quality of the degree program, which is well acknowledged by the finance industry in Sri Lanka.

Learning Outcomes of FSM Specialization

On successful completion of the proposed Financial Services Management specialization, the student will be able to;

- I. Demonstrate knowledge and understanding of the operations and regulation of financial markets in Sri Lanka and in the global context.
- II. Demonstrate thorough understanding of service management, especially when applied to the finance industry.
- III. Apply discipline specific finance knowledge and service management knowledge, along with their inter-personal skills for the effective provision of services required in modern financial services organizations.
- IV. Integrate learning into an analytical, problem-solving, creative approach in relation to the challenges and transformations facing the financial services sector.
- V. Equip entrepreneurial skills and small business management skills with special focus on financial services industry.

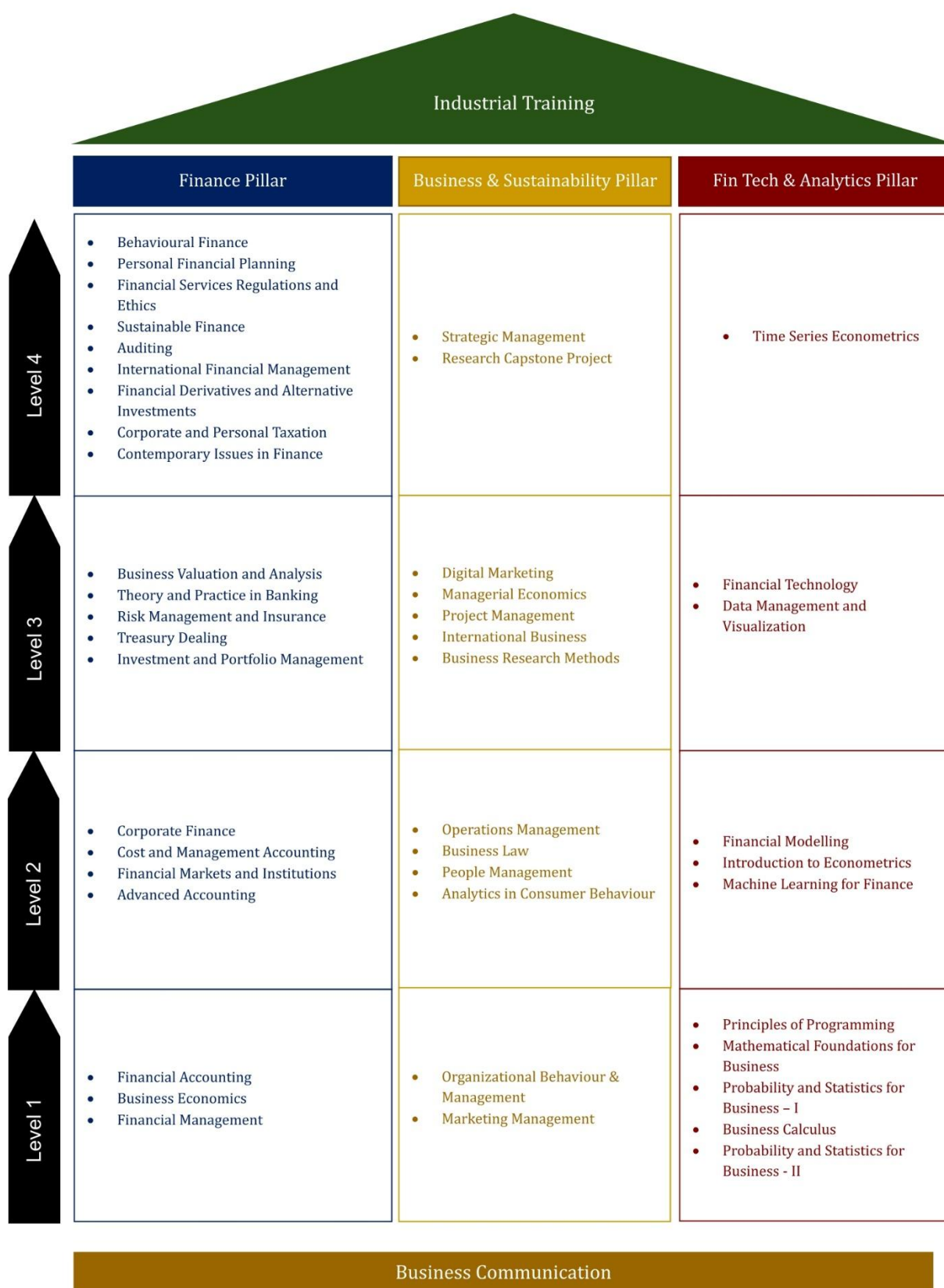


Figure 1. Qualification Structure

Semester offering details

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 1			17.0			
IM1112	Financial Accounting	C	3.0		50	50
DB1112	Business Communication – I	C	2.0		100	-
IM1122	Business Economics	C	3.0		50	50
DA1142	Principles of Programming	C	3.0		50	50
DA1122	Mathematical Foundations for Business	C	3.0		50	50
DA1112	Probability and Statistics for Business - I	C	3.0		50	50
Total			17.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 2			16.0			
IM1212	Financial Management	C	3.0		50	50
IM1222	Organizational Behaviour & Management	C	3.0		50	50
DB1222	Business Communication – II	C	2.0		100	-
DA1222	Business Calculus – I	C	3.0		50	50
DA1212	Probability and Statistics for Business - II	C	3.0		50	50
IM1232	Marketing Management	C	2.0		50	50
Total			16.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 3			16.0			
IM2112	Corporate Finance	C	3		50	50
IM2122	Cost and Management Accounting	C	3		50	50
IM2132	Operations Management	C	2		50	50
DA2112	Introduction to Econometrics	C	2		50	50
IM2142	Financial Modelling	C	3		100	-
IM2152	Business and Commercial Law	C	3		50	50
Total			16.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 4			14.0			
IM2212	Financial Markets and Institutions	C	3		50	50
IM2222	Advanced Accounting and Modelling	C	3		50	50
IM2232	People Management	C	2		50	50
IM2242	Analytics in Consumer Behaviour	C	3		50	50
IM2252	Machine Learning for Finance	C	3		100	-
Total			14.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 5			13.0			
IM3112	Business Valuation and Analysis	C	3		100	-
IM3122	Theory and Practice in Banking	C	3		50	50
IM3132	Risk Management and Insurance	C	3		50	50
IM3142	Digital Marketing	C	2		50	50
IM3752	Managerial Economics	E	2		50	50
IM3762	Project Management	E			50	50
Total			13.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 6			15.0			
IM3212	Treasury Dealing	C	2		50	50
IM3222	Investment and Portfolio Management	C	3		50	50
IM3232	International Business	C	2		50	50
IM3242	Data Management and Visualization	C	2		100	-
IM3252	Financial Technology	C	3		50	50
IM3262	Business Research Methods	C	3		100	-
Total			15.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 7			16.0			
IM4112	Strategic Management	C	2		50	50
IM4122	Behavioural Finance	C	2		50	50
IM4132	Personal Financial Planning	C	2		50	50
IM4142	Time Series Econometrics	C	3		50	50
IM4152	Corporate and Personal Taxation	C	3		50	50
IM4902	Research Capstone Project	C	4		100	-
Total			16.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Semester 8			17.0			
IM4212	Financial Services Regulations and Ethics	C	3		50	50
IM4222	Sustainable Finance	C	2		50	50
IM4232	Financial Derivatives and Alternative Investments	C	3		50	50
IM4242	Contemporary Issues in Finance	C	3		50	50
IM4902	Research Capstone Project	C	4		100	-
IM4752	Auditing	E	2		50	50
IM4762	International Financial Management	E			50	50
Total			17.0	0.0		

Module Code	Module Name	Category C/E/O	Norm		Evaluation %	
			GPA	NGPA	CA	WE
Industrial Training						
IM4802	Industrial Training	C		6	100	
			124	6		
Total Credits			130			

Module Descriptors

*Self-Study hours are given for the semester

Module Code	IM1112	Semester 1	Module Title			Financial Accounting				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	2	90*				50	50	
Module Aim:	This module aims to provide an introductory knowledge on accounting principles, standards and policies relating to the preparation of financial reports to facilitate sound decision making.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 explain fundamental accounting concepts.										
LO-2 prepare and interpret financial statements for a profit oriented organization.										
LO-3 apply accounting standards in business contexts.										
Syllabus Outline										Learning Outcomes
1	Overview of financial accounting and reporting <i>Financial accounting and its importance, users of information, and regulatory framework</i>									LO-1
2	Conceptual framework of financial reporting and importance <i>Objectives and purpose, qualitative characteristics, elements, and recognition</i>									LO-2
3	Understanding general purpose of financial statements and its components <i>Presentation of financial statements, purpose, components, and general features</i>									LO-1, LO-2
4	Preparation of financial statements applying accounting standards <i>Accounting standards for inventory, cash flow statements, property, plant and equipment, revenue, leases, and deferred tax</i>									LO-2, LO-3
5	Financial statement analysis <i>Horizontal, vertical, and ratio analysis</i>									LO-2, LO-3
6	Use of accounting software in financial reporting <i>Introduction to accounting software, practical application</i>									LO2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3	

Module Code	IM1122	Semester 1	Module Title			Business Economics				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	2	90*				50	50	
Module Aim:	This module aims to provide a foundational understanding of both microeconomic and macroeconomic principles, enabling analysis of market dynamics, economic policies, and their impact on businesses. Critical thinking in economic decision-making is fostered by integrating theoretical insights with real-world applications.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain key microeconomic and macroeconomic concepts, tools, and market mechanisms.									
LO-2	explain consumer behaviour and producer behaviour in terms of utility, production costs, revenue and profit maximization.									
LO-3	explore applications of producer and consumer behaviour in different market structures.									
LO-4	evaluate the causes and consequences of business cycles and long-term economic growth within the broader economic framework.									
Syllabus Outline										Learning Outcomes
1	Introduction to microeconomic concepts and tools of analysis <i>Microeconomics concepts and tools.</i>									LO-1
2	Production analysis and consumer and producer behaviour <i>Basic concepts of demand, supply and equilibrium, impact of a change in demand or supply on equilibrium</i>									LO-2
3	Costs, revenue and profits maximization <i>Major influences in consumer behavior, relevance of consumer behavior theories and concepts for marketing decision making.</i>									LO-2
4	Market structures and analytical tools <i>Characteristics of market structures, effect of market on firm behaviour. Market information, Market failure and the role of government.</i>									LO-3
5	Fundamentals of macroeconomics <i>Science and data of macroeconomics, Determinants, distribution and equilibrium in national income accounting and the related various concepts and measurements.</i>									LO-1
6	Macroeconomic stability and policy frameworks <i>IS-LM and categories of inflation and unemployment and possible relationships between various macro-economic concepts. Fixed and floating regimes, Nominal and real exchange rate determinants. Monetary and fiscal policies and their macro-economic implications for growth and stability of the economy.</i>									LO-4
7	Economic Growth and Development Models. <i>Theories of economic growth, development indicators, structural transformations, and sustainable development</i>									LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3, LO-4	

Module Code	DB1112	Semester 1	Module Title			Business Communication I				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				100	0	
Module Aim:	This is an introductory course which provides students with the basic communication skills required in a business environment.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	demonstrate the effective use of English grammar and writing skills.									
LO-2	demonstrate professional communication etiquette required in business environments.									
LO-3	demonstrate the overall understanding of making business presentations including the use of relevant software applications.									
Syllabus Outline										Learning Outcomes
1	Business English for Professionals <i>Revisit key elements of English grammar, Vocabulary, Reading skills</i>									LO-1
2	Essentials of Business Writing <i>Sentence building, Letter writing, General punctuation review, Summarizing, Paraphrasing</i>									LO-1
3	Professional Communication Etiquette <i>Telephone etiquette, E-mail etiquette, Meeting etiquette (virtual & physical), Making appointments, Minute taking, Formatting texts, Common business abbreviations and phrases</i>									LO-2
4	Making Effective Business Presentations <i>Analyzing audience, preparing for presentations, delivering presentations, shaping a presentation, software applications (i.e. PowerPoint, Keynote, Prezi)</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	

Module Code	DA1142	Semester 1	Module Title			Principles of Programming				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	2	90*				50	50	
Module Aim:	The aim of this course is to build students’ confidence in their ability to learn programming and problem-solving skills.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1		analyse simple computing problems.								
LO-2		apply procedural statements — assignments, conditional statements, loops, method calls and arrays.								
LO-3		develop small programs in a selected programming language (e.g. Python) that meet the expressed requirements.								
Syllabus Outline										Learning Outcomes
1	Concepts of Programming <i>Programming languages, problem definition, flow charts, pseudo codes</i>									LO-1
2	Elementary Programming <i>Expressions, variables, operators</i>									LO-1, LO-2
3	Programming Structures <i>Conditions, Loops, Procedures and Functions</i>									LO-2, LO-3
4	Advanced Concepts in Programming <i>Lists, recursions, algorithms for problem solving</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2	

Module Code	DA1122	Semester 1	Module Title			Mathematical Foundations for Business					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	2	90*				50	50		
Module Aim:	The primary aim of this course is to provide an understanding of business calculus and apply basic calculus to solve applications in business and economics.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	apply algebraic techniques including quadratic, exponential and logarithmic functions solve mathematical problems.										
LO-2	analyse and interpret functions and their graphs to model and solve real-world applications.										
LO-3	solve exponential and logarithmic functions and apply their techniques to solve problems related to growth, decay, and financial applications.										
LO-4	utilize trigonometric functions and identities to analyze periodic behaviour and solve practical problems.										
Syllabus Outline										Learning Outcomes	
1	Fundamentals of Algebra <i>Real numbers, polynomials, factoring polynomials, rational expressions, integral exponents and radicals, quadratic equations, inequalities and absolute value.</i>									LO-1	
2	Functions and their graphs <i>Cartesian coordinate system, equations of lines, functions and their graphs, algebra of functions, linear functions, cost, revenue & profit functions, quadratic functions, market equilibrium, demand & supply curves</i>									LO-1, LO-2	
3	Exponential and Logarithmic Functions <i>Introduction to exponential functions and its inverse, the logarithmic function and their applications.</i>									LO-1, LO-3	
4	Topics in Trigonometry <i>Trig functions and their graphs, Trig identities</i>									LO-2, LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3, LO-4		

Module Code	DA1112	Semester 1	Module Title			Probability and Statistics for Business – I				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	None
		2	2	90*				50	50	
Module Aim:	This module aims to provide a basic knowledge of probability and statistics for solving business problems.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	apply fundamental probabilistic techniques to quantify the uncertainty of a random experiment.									
LO-2	analyse and evaluate data using fundamental descriptive statistical techniques.									
LO-3	apply rudimentary statistical techniques such as sampling, estimation and hypothesis testing in analyzing business scenarios and problems.									
LO-4	make use of statistical software (R, Python) for statistical data analysis.									
Syllabus Outline										Learning Outcomes
1	Introduction to set theory and basic probability <i>Counting and sets, basics of combinatorics and permutations, basics of probability, conditional probability, Bayes’ Theorem</i>									LO-1
2	Random variables and probability distributions <i>Introduction to random variables, discrete and continuous distributions, moments of random variables, moment generating functions, Binomial, Poisson and normal distributions</i>									LO-1
3	Descriptive statistics and exploratory data analysis <i>Types of data, organizing and visualizing data, measures of central tendency and dispersion, correlation analysis</i>									LO-2, LO-4
4	Sampling, estimations & distributions <i>Sampling methods, sampling distribution of the mean and proportion, the Central Limit Theorem</i>									LO-1, LO-3
5	Confidence interval estimation <i>Confidence interval estimation for the mean and proportion, determining sample size</i>									LO-3, LO-4
6	Fundamentals of hypothesis testing <i>Null and alternative hypothesis, critical value, errors in testing, power of a statistical test, one-sample tests</i>									LO-1, LO-3, LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4	
Written examination (WE)							50%		LO-1, LO-2, LO-3	

Module Code	IM1212	Semester 2	Module Title			Financial Management					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	2	90*				50	50		
Module Aim:	The purpose of this unit is to provide an understanding of how organizations can be managed more effectively through efficient financial management.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	define and explain the decision-making role and tasks of a financial manager.										
LO-2	describe the importance of the concepts of time value of money, risk and return in making financial decisions										
LO-3	apply finance principles to the main categories of corporate financial decisions										
Syllabus Outline									Learning Outcomes		
1	Introduction to finance and financial environment <i>Introduction to finance, financial system, Role of a finance manager, Objectives of profit and not-for-profit organizations, Stakeholder analysis, and agency theory, Investment, financing, and dividend decisions of a financial manager in the Sri Lankan financial market</i>									LO-1	
2	Time Value of Money <i>Introduction, Present value, Future value, Annuities, Perpetuities, Amortization schedules</i>									LO-2	
3	Risk and return <i>Historical risk and returns, Expected risk and returns, Selection of assets, Investor behaviour, Introduction to two asset portfolio risk and returns, Systematic and Unsystematic risk</i>									LO-2	
4	Valuation of Securities <i>Develop mathematical formulas for bond and stock valuation methods. The concept of yield to maturity</i>									LO-2, LO-3	
5	Capital Budgeting <i>Apply mathematical formulas for investment appraisal techniques (NPV, IRR, Payback period, Capital rationing). Incremental cash flow analysis, Further issues in capital budgeting, Risk analysis.</i>									LO-3	
6	Cost of Capital <i>Measurement of gearing. Cost of equity/debt/preference shares, WACC</i>									LO-3	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3		

Module Code	IM1222	Semester 2	Module Title		Organization Behaviour & Management					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		3	-	105*				50	50	
Module Aim:	This module aims to introduce fundamental concepts and theories of organizational management and demonstrate their application in contemporary organizational contexts.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 discuss basic concepts and theories of organizational behaviour and applications.										
LO-2 apply organizational management theories to modern organizations										
Syllabus Outline										Learning Outcomes
1	Organizational Management <i>Evolution of management thought, Organizational environment and Corporate social responsibility, Managerial decision making and problem solving, Management functions: planning, organizing, leading, and controlling, New trends in management and contemporary challenges in management</i>									LO-1
2	Organizational Behaviour <i>Individual values, attitudes and workplace emotions, Perception and perceptual errors in decision making, Personality theories, impression management strategies, Motivational theories and strategies, Group dynamics and effectiveness, Power dynamics and influence, Conflict and negotiation, Stress management, Change management</i>									LO-2
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2	
Written examination (WE)							50% (3 hrs)		LO-1, LO-2	

Module Code	DB1222	Semester 2	Module Title			Business Communication II				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				100		
Module Aim:	This module aims to provide students with the contemporary Business English skills they need to survive in the globalised world.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain the use of nonverbal communication methods and essential communication skills required in handling business negotiations and managing conflicts.									
LO-2	develop business proposals, reports, and correspondence.									
LO-3	develop academic reports and case study analysis.									
LO-4	design of personal brands and professional resumes.									
Syllabus Outline										Learning Outcomes
1	Effective use of Nonverbal communication <i>Body Language, Emotional intelligence</i>									LO-1
2	Handling Business Negotiations and Conflict management <i>Assertiveness, Negotiation techniques</i>									LO-1
3	Preparing Business Proposals, Reports and Correspondence <i>Format, style and content, Writing disclaimers, Use of graphs and illustrations, Summarizing</i>									LO-2
4	Introduction to Academic writing <i>Structure of a report, Academic referencing (APA) – Use of referencing applications (e.g. Mendeley)</i>									LO-3
5	Case Study Analysis <i>Analysis of critical elements, summarizing</i>									LO-3
6	Preparing a compelling resume, cover letters and personal branding <i>Use of social media platforms (e.g., LinkedIn)</i>									LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3, LO-4	

Module Code	DA1222	Semester 2	Module Title		Business Calculus - I					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	2	90*				50	50	
Module Aim:	This module aims to provide knowledge on advanced business calculus and its applications in business and finance.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	apply fundamental concepts of limits, continuity, and differentiation to analyze and solve problems involving rates of change, marginal functions, and optimization.									
LO-2	use integration techniques to compute antiderivatives, definite and improper integrals, and apply them in business-related problems.									
LO-3	demonstrate a conceptual understanding of the Fundamental Theorem of Calculus and its role in linking differentiation and integration for problem-solving.									
Syllabus Outline									Learning Outcomes	
1	Calculus of one variable <i>Limits, continuity, derivatives, Marginal functions, applications of the derivative, optimization, Implicit differentiation</i>								LO -1, LO-3	
2	Integration <i>Antiderivatives and rules of integration, area and the definite integral, the fundamental theorem of calculus, application of the definite integral to business, integration techniques, improper integrals</i>								LO-2, LO -3	
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3	

Module Code	DA1212	Semester 2	Module Title			Probability and Statistics for Business – II				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1112
		2	2	90*				50	50	
Module Aim:	This module aims to provide knowledge of inferential statistics for solving business problems									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	formulate hypotheses based on different scenarios and apply appropriate parametric and non-parametric hypothesis testing techniques									
LO-2	explain the concept of regression and use regression techniques to assist in decision making									
LO-3	make use of statistical software to carry out analyses based on the above topics									
Syllabus Outline									Learning Outcomes	
1	Two-sample tests <i>Comparing two means from independent populations, paired t-test, F-test for ratio of two variances, z-test for difference in proportions</i>								LO-1, LO-3	
2	ANOVA <i>One-way ANOVA, two-way ANOVA, introduction to design-of-experiments</i>								LO-1, LO-3	
3	Categorical data analysis <i>Probability structure for contingency tables, relative risk and odds-ratios, Chi-square test for differences in proportions, tests of independence</i>								LO-1, LO-3	
4	Non-parametric tests <i>Wilcoxon rank sum test, Kruskal Wallis rank test, and other non-parametric tests</i>								LO1, LO3	
5	Introduction to simple linear regression <i>Ordinary least squares, measures of variation, linear regression assumptions</i>								LO2, LO-3	
6	Multiple linear regression and model building <i>Extending the simple bivariate model, testing portions of the model, dummy variables and interaction terms, modelling non-linearities</i>								LO1, LO2, LO-3	
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50%		LO-1, LO-2	

Module Code	IM1232	Semester 2	Module Title			Marketing Management					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	-	70*				50	50		
Module Aim:	This module aims to provide an introduction to basic marketing concepts to understand the factors that influence marketing decisions in the global market.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	demonstrate an understanding of marketing concepts and marketing orientations.										
LO-2	explain consumer behaviour and its application in different contexts.										
LO-3	explain the process of product development, brand management.										
LO-4	discuss the role of pricing in the firm’s decision-making process and common pricing practices and evaluate common models of distribution and retailing.										
LO-5	analyse different marketing communication tactics.										
Syllabus Outline									Learning Outcomes		
1	Principles of marketing management <i>Basic concepts of marketing management and its applications</i>									LO-1, LO-3	
2	Paradigms of marketing <i>History and philosophies of marketing management</i>									LO-2	
3	Environment scanning & marketing planning <i>Marketing audit, opportunity identification and strategic planning for marketing</i>									LO-2, LO-3	
4	Customer-driven marketing strategy (STP) <i>Segmenting bases, Segmenting, Targeting, Differentiating and positioning the opportunities</i>									LO-1, LO-2	
5	Marketing research <i>The importance of information, How to analyse and distribute information for marketing decision making</i>									LO-3	
6	Dynamics of consumer behaviour <i>Identify consumer market, Influencing factors, Buyer decision behaviour, Application of the concepts in Sri Lankan and global markets</i>									LO-2	
7	Marketing mix strategies <i>Product and brand strategies, Pricing strategies, Marketing communication strategies and distribution strategies</i>									LO-4, LO-5	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4, LO-5		
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3, LO-4, LO-5		

Module Code	IM2112	Semester 3		Module Title		Corporate finance				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab/Tutorials	Self-Study				CA	WE	IM1212
		2	2	90*				50	50	
Module Aim:	The purpose of this module is to provide a broader understanding on how corporate financial decision making is facilitated.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO – 1 demonstrate and understanding of finance strategy in creating shareholder value.										
LO – 2 apply corporate finance theories.										
LO – 3 discuss advanced asset valuation techniques in corporate decision making.										
Syllabus Outline										Learning Outcomes
1	Shareholder value and corporate governance <i>Financial goals and strategy, shareholder value creation, corporate governance, behavioural issues.</i>									LO-1
2	Risk and return <i>Types of risk and return, Measuring and analysing risk and return, Risk diversification, Capital Asset Pricing Model, Markowitz Portfolio Theory</i>									LO-2, LO -3
3	Advanced capital budgeting techniques. <i>Decision tree analysis in finance, types of real options, option value calculations, capital budgeting risk analysis techniques</i>									LO-1, LO-2, LO -3
4	Capital structure theories <i>The Modigliani – Miller theory, the static trade – off theory, the under-investment problem, asymmetric information, the risk – shifting problem, free cash – flow arguments, the pecking order theory, debt overhang.</i>									LO-2
5	Dividend theories <i>Objectives of dividend policy, practical considerations in dividends, stability of dividends, target payout ratio and dividend smoothing, Forms of dividends, Share buybacks, Chronology of dividend dates, Cum – dividend vs Ex – dividend prices., Dividend relevance (Walter’s model), dividend relevance (Gordon’s model), dividend and uncertainty, dividend irrelevance (Miller & Modigliani), Market imperfections and dividends, information content of dividends, taxes.</i>									LO -2
6	Working Capital <i>Networking capital, operating cycle, working capital cycle, determining working capital, estimating working capital needs, Receivables management, Inventory management, Cash management, Working capital finance.</i>									LO - 3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO – 3, LO - 4	
Written examination							50 % (3 hrs)		LO-1, LO-2, LO – 3, LO - 4	

Module Code	IM2122	Semester 3	Module Title			Cost and Management Accounting					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	2	90*				50	50		
Module Aim:	This module aims to provide a comprehensive understanding on cost and management accounting concepts, enabling them to analyse costs, prepare budgets, and apply financial data for strategic business decision-making.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	explain the fundamental concepts of cost and management accounting, including its role in decision-making and its differences from financial accounting.										
LO-2	apply different costing methods to allocate costs and assess their impact on financial decision-making.										
LO-3	prepare budgets, analyse variances, and evaluate cost control measures to support managerial decision-making.										
Syllabus Outline										Learning Outcomes	
1	Overview of cost and management accounting <i>Management Accounting vs financial accounting, Cost and management accounting concepts, Role of management accountant, basic cost concepts.</i>										LO-1
2	Different costing methods <i>Cost classifications, Overheads costing, Absorption costing method (traditional costing method), Activity based costing (Modern costing system).</i>										LO-1, LO-2
3	Short term decision making <i>CVP analysis</i>										LO-2
4	Standard costing and variance analysis <i>Standard cost and standard costing, Advantages and disadvantage of standard costing, Types of standards, Standard cost card, Variance analysis, Type of variance.</i>										LO-1, LO-2, LO-3
5	Budgeting and control <i>Budgeting and strategic planning, Purpose of budgeting, Type of different type of budgeting, Step of functional budgeting</i>										LO-3
6	Inventory management <i>Cost of Inventory, EOQ model, Different stock levels, and valuation of inventory under FIFO and WAC.</i>										LO-2, LO-3
7	Theory of cost based pricing <i>Short run and long run pricing decisions, Pricing Factors, Pricing objectives, Target costing and Lifecycle costing, Pricing methods.</i>										LO-2
8	Strategic management accounting <i>JIT system, Kaizen costing, Lean Production, 5S methods and Value chain analysis</i>										LO-2
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3		

Module Code	IM2132	Semester 3	Module Title			Operations Management				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				50	50	
Module Aim:	This module aims to enable students to investigate methods, systems, and procedures for managing planned coordination of operations									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 explain the fundamental principles of operations management.										
LO-2 analyse and evaluate product/ service design and relevant operations strategies.										
LO-3 apply planning and control techniques in operations management.										
Syllabus Outline									Learning Outcomes	
1	Fundamentals of Operations Management <i>Operations & Productivity, Operations Strategy</i>									LO-1
2	Product/service design and process selection <i>Design of Goods & Services, Process Strategies, Basics of Location Strategies, Basics of Layout Strategies</i>									LO-2
3	Planning and controlling in operations management <i>Forecasting, Aggregate Planning and S&OP, MRP & ERP, Basics of Quality Management & Lean Operations</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3	

Module Code	DA2112	Semester 3	Module Title			Introduction to Econometrics						
Credits	2	Hours/Week				C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	DA1212		
		2	-	70*				50	50			
Module Aim:	This module aims to provide the knowledge required for econometric modelling.											
Learning Outcomes												
After completing this module, the students should be able to:												
LO-1	describe the properties of regression estimators and how to address violations of regression assumptions.											
LO-2	distinguish between cross-sectional, time series and panel data and describe the challenges associated with modelling these types of data.											
LO-3	interpret reported regression results.											
LO-4	examine relationships between variables using appropriate econometric models and diagnostic tests using statistical software.											
Syllabus Outline										Learning Outcomes		
1	Properties of regression estimators <i>Deriving OLS estimates, properties of the OLS estimators, violations of regression assumptions</i>										LO-1, LO-2, LO-3, LO-4	
2	Violations of regression assumptions <i>Multicollinearity, heteroscedasticity, model misspecification, data-related errors</i>										LO1, LO-3, LO4	
3	Qualitative response models <i>Introduction to maximum likelihood estimation, Linear Probability Model, Logit, Probit, Multinomial Logit</i>										LO-2, LO-3, LO-4	
4	Introduction to panel data <i>Pooling independent cross sections, differences in differences, fixed effects and random effects models</i>										LO-2, LO-3, LO-4	
5	Introduction to time series data <i>Identifying trends and seasonality, dynamic models, serial correlation</i>										LO-2, LO-3, LO-4	
6	Simultaneous Equation Models <i>Simultaneous equation bias, identification problem, IV estimation and 2SLS</i>										LO-1, LO-3	
Assessments												
Assessment								Weight		Learning outcomes		
Continuous Assessments (CA)								50%		LO-1, LO-2, LO-3, LO-4		
Written examination (WE)								50%		LO-1, LO-2 LO-3		

Module Code	IM2342	Semester 3	Module Title			Financial Modelling				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	2	90*				100	-	
Module Aim:	The aim of this module is to equip students with financial modelling skills using Excel to analyse financial data, evaluate investment decisions, and support strategic financial planning									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	apply financial modelling techniques using Excel to analyse financial data and support decision-making in various financial scenarios.									
LO-2	evaluate key financial concepts to assess investment opportunities and financial performance.									
LO-3	interpret financial statements and conduct financial analysis using modelling techniques to support forecasting and strategic planning.									
Syllabus Outline										Learning Outcomes
1	Introduction to Financial Modelling <i>Overview of basic Excel functions and usage of Excel for financial modelling</i>									LO-1
2	Financial Decision Making <i>Scenario managing, data tables, solver, linear programming for financial management, Basics of simulation</i>									LO1, LO-2
3	Risk and Return Calculations <i>Calculation of risk and return for individual assets and portfolios, Monte carlo simulation</i>									LO-2
4	Time Value of Money Calculations <i>Calculation of functions for single cash flow, multiple cash flows, annuities, perpetuities and loan amortization schedule</i>									LO-2
5	Capital Budgeting <i>NPV, ARR, IRR and payback calculations using Excel</i>									LO1, LO-2
5	Financial Statement Analysis <i>Vertical analysis, horizontal analysis and ratio analysis, Forecasting</i>									LO1, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	

Module Code	IM2152	Semester 3	Module Title			Business and Commercial Law				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		3	-	105*				50	50	
Module Aim:	The module aims to examine the sources of Sri Lankan law and the contractual relationships between individuals and businesses.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	define and explain fundamental concepts, principles, and statutory provisions in commercial law, including key legal terminology and core values.									
LO-2	analyse the role and significance of commercial law in business operations and its impact on economic, political, and social frameworks.									
LO-3	apply relevant legal principles and statutory provisions in areas such as contracts for goods and services, consumer protection, and business transactions.									
LO-4	evaluate legal rights, responsibilities, and regulatory frameworks concerning employment law, including contracts, termination, and workplace discrimination.									
LO-5	interpret and assess the principles of the Law of Obligations, including contractual and delict liability, negligence, and available legal defences.									
Syllabus Outline									Learning Outcomes	
1	Foundations of Commercial Law: Legal Frameworks and Contract Principles <i>Introduction to Commercial Law and legal frameworks, Key principles of Contract Law: Formation, Terms, and Breach</i>									LO-1
2	Business Entities and Corporate Legal Dynamics: Structures, Governance, and Transactions <i>Business structures and legal implications: Sole traders, Partnerships, and Companies, Corporate governance, Mergers, and acquisitions</i>									LO-2
3	Legal Safeguards in Business: Consumer Protection, Digital Transactions, and Regulatory Compliance <i>Consumer rights and protection laws in business transactions, E-Commerce and digital transactions: Legal challenges, Regulatory compliance and Competition Law in Business</i>									LO-3
4	Employment Law and Workplace Regulations: Rights, Responsibilities, and Ethical Standards <i>Employment Law: Contracts, Rights, and Obligations, Workplace regulations: Health, Safety, and Ethical practices, Termination of employment: Resignation, Dismissal, and Redundancy, Workplace Equality and Anti-Discrimination Laws</i>									LO-4
5	Liability, Intellectual Property, and Dispute Resolution in Business Law <i>Delict Law: Negligence, Liability, and Remedies, Professional and product liability in business, Intellectual property rights: Patents, Copyright, and Trademarks. Dispute resolution in business: Litigation, Mediation, and Arbitration</i>									LO-5
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4, LO-5	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3, LO-4, LO-5	

Module Code	IM2212	Semester 4	Module Title			Financial Markets and Institutions				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	2	90*				50	50	
Module Aim:	This course aims to introduce financial markets and study its structure, institutions, instruments and participants.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain the structure, functions, and role of financial markets and institutions in the local and global economy									
LO-2	analyse key financial concepts to understand their impact on the financial system									
LO-3	evaluate financial risks faced by institutions and apply risk management strategies to mitigate exposure to market, credit, and operational risks									
Syllabus Outline										Learning Outcomes
1	Introduction to financial markets-institutions <i>Components of the financial system, economic role of the financial system, local and global context of financial industry, Emerging issues</i>									LO-1
2	Overview of Financial Institutions <i>Role, structure and function of a bank, sources and uses of funds, Off balance sheet activities, Banking regulations, Regulation and structure of NBFIs, Financial products offered by NBFIs</i>									LO1, LO-3
3	Interest rates determination and yield curves <i>Monetary policy and the economy, Theory of asset demand, Liquidity preference theory, Loanable funds theory, Term structure of interest rates, Theories explaining shape of yield curve, Risk structure of interest rates, Credit ratings.</i>									LO-2
4	Financial Markets <i>Government debt instruments, Exchange rate market conventions and calculations, Equity investing and market microstructure</i>									LO-1, LO-2
5	Risk Management in Financial Institutions <i>Overview of financial risk management, measuring risk exposure such as credit, market, operational and capital risk, Impact of Off-balance sheet activities, Methods used to manage risks</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written Examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3	

Module Code	IM2222	Semester 4	Module Title			Advanced Accounting and Modelling				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	
		2	2	90*				50	50	
Module Aim:	This module aims to enhance understanding of advanced accounting concepts, including business combinations, group financial reporting, and regulatory compliance, to support informed decision-making.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 prepare and analyse group financial statements in accordance with applicable accounting standards										
LO-2 apply accounting standards for financial instruments, including classification, measurement, and presentation										
LO-3 evaluate sustainability-related financial reporting requirements and climate-related disclosures										
LO-4 develop accounting models applicable to advanced financial reporting and decision-making contexts										
LO-5 discuss the use of ERP systems for financial reporting in real world										
Syllabus Outline										Learning Outcomes
1	Group Financial Statements <i>Business Combinations, Consolidated Statement of Financial Position and Income Statement, Investments in Associates</i>									LO-1, LO-4
2	Financial Instruments Accounting <i>Financial Instruments and its presentation</i>									LO-2, LO-4
3	Sustainability Reporting <i>General Requirements for Disclosure of Sustainability-related Financial Information and Climate Related Disclosures</i>									LO-3
4	ERP Application in Accounting <i>Introduction to ERP System, Company Set-up, Chart of Accounts, Sales and Accounts Receivables, Purchases and Accounts Payables</i>									LO-5
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4, LO-5	
Written Examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3, LO-4, LO-5	

Module Code	IM2232	Semester 4	Module Title		People Management						
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	-	70*				50	50		
Module Aim:	The aim of this course is to introduce the principles and practices of contemporary human resource management, with a specific focus on the strategic role of people management in fostering organizational success.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	demonstrate an understanding of the role of HR functions.										
LO-2	apply necessary tools and techniques for the redesign of operations, processes, and culture of business establishments.										
LO-3	critique the HRM practice in business establishments.										
Syllabus Outline									Learning Outcomes		
1	HRM roles and responsibilities <i>The changing role of HRM and growing professionalism within the HR function</i>									LO-1	
2	Performance management, learning and growth & rewards management <i>Performance management, Training and employee development. Career planning, and rewarding employees</i>									LO-1; LO-2	
3	Employee relations and employee well-being <i>Foundations of effective employee relations and well-being</i>									LO-2	
4	Organizational change and people management <i>Managing change and ensuring employee buy-in, Adaptive leadership and empowering employees. Leading with empathy in transitions, Grievance handling and building a positive organizational culture.</i>									LO-2; LO-3	
5	Diversity and inclusion <i>Creating inclusive workplaces, understanding unconscious bias and prompting equity, Leveraging diversity for innovation and performance.</i>									LO-3	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3		

Module Code	IM2242	Semester 4	Module Title			Analytics in Consumer Behaviour				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	IM1232
		3	-	105*				50	50	
Module Aim:	This module aims to enable the participants to learn and understand the theory of consumer behaviour and relates it to the practice of marketing financial products and services. It will present relevant material drawn from psychology, anthropology, social and behavioural sciences within the framework of the consumer decision process, its main influencing factors with an analytical approach.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain the key concepts associated with consumer behaviour with an emphasis on cognitive influences, and decision-making processes to explain how individuals and groups make consumption choices									
LO-2	evaluate the impact of cognitive, social, and external influences on consumer decision-making									
LO-3	analyse interpret and predict consumer behaviour using advanced analytical techniques									
Syllabus Outline										Learning Outcomes
1	Elemental Features of Consumer Choice: Needs, Economics, Deliberation, and Impulse <i>Maslow's Hierarchy of Needs & Consumer Motivation, Impulse Buying Triggers and Emotional Decision-Making, Price Sensitivity and the Psychology of Spending, Behavioural Economics in Consumer Decision-Making (Prospect Theory, Bounded Rationality)</i>									LO-1, LO-2
2	Individual and Social Features of Consumption <i>The Role of Personality and Lifestyle in Consumer Preferences, Cultural and Generational Differences in Consumer Behaviour, Opinion Leaders, Influencers, and Word-of-Mouth Marketing</i>									LO-1, LO-2
3	Perceptual and Communicative Features of Consumer Choice <i>Perceptual Mapping and Brand Positioning, Neuromarketing and Eye-Tracking Studies in Advertising, The Impact of Packaging, Color, and Sensory Cues on Brand Perception, Persuasion Techniques in Marketing Communication</i>									LO1, LO-2
4	An Introduction to Consumer Analytics <i>Definition and Importance of Consumer Analytics, Types of Consumer Data, Cluster Analysis for Market Segmentation, Applications of Consumer Analytics in Digital and Traditional Marketing</i>									LO1, LO-2,LO-3
5	Purchase Insights and Anatomy of Transactions <i>Basket Analysis and Market Basket Modeling, Conjoint Analysis for Understanding Consumer Preferences (How different product attributes influence decision-making), RFM (Recency, Frequency, Monetary) Analysis in Customer Value Segmentation</i>									LO-1, LO-2,LO-3
6	Web and Social Media Activity <i>How consumers behave in digital spaces and social media interactions, Clickstream Analysis for Website Navigation Behaviour, Sentiment Analysis of Social Media Conversations</i>									LO-1, LO-2,LO-3
7	Extant Research and Exogenous Cognition <i>Consumer Behaviour Research & Theories, Heuristics and Biases in Decision-Making (Framing, Anchoring, Availability Heuristic)</i>									LO-1, LO-2,LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3	

Module Code	IM2252	Semester 4	Module Title		Machine Learning for Finance						
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	2	90*				100	-		
Module Aim:	This course aims to provide theoretical and practical aspects of statistical and machine learning techniques for finance.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1 describe the fundamental concepts in problem-solving with intelligent systems.											
LO-2 explain the mathematical basis for the techniques used in machine learning											
LO-3 apply the appropriate computational intelligence techniques for a given problem											
LO-4 Make use of machine learning tools to solve business-related problems											
Syllabus Outline									Learning Outcomes		
1	Introduction to Statistical Machine Learning <i>Empirical risk minimization, Bayes optimal classifier, PAC learnability, Uniform convergence, VC dimensions</i>									LO-1, LO-2	
2	Supervised Learning Algorithms I: Regression Algorithms <i>Review of linear regression, Model selection and regularization (Subset selection, Stepwise selection, Ridge regression, LASSO), Model comparisons</i>									LO-1, LO-3, LO-4	
3	Supervised Learning Algorithms II: Classification & Ensemble Techniques <i>Logistic regression (Binary, Multi-class), Naive Bayes, KNN, Linear and Quadratic discriminant analysis, Decision trees, Support vector machine, Bagging (Random forests), Boosting (Gradient tree boosting, ADA boost)</i>									LO1, LO-3, LO-4	
4	Supervised Learning Algorithms III: Temporal Dependencies <i>RNN, CNN, LSTM, TCN and Transformers (Attention mechanisms)</i>									LO1, LO-3, LO-4	
5	Model Testing, Evaluation and Validation <i>Overfitting and under-fitting, Bias-variance trade-off, Errors in estimation (Training vs Test MSE, Mean absolute error, Root mean squared error), Confusion matrix, Sensitivity and specificity, ROC curve, Validation test split, Cross validation</i>									LO-1, LO-2, LO-3	
6	Unsupervised Learning Algorithms <i>Clustering, Dimensionality Reduction, Principal component analysis, Singular value decomposition</i>									LO-1, LO-2 ,LO-4	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3, LO-4		

Module Code	IM3112	Semester 5	Module Title		Business Valuation and Analysis					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	IM2312
		2	2	90*				100		
Module Aim:	The module aims to help students develop business valuation and financial analysis skills.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 make use of financial information to analyse firms.										
LO-2 develop valuation models based on discounted cash flow method.										
LO-3 discuss valuations using alternative business valuation approaches.										
Syllabus Outline										Learning Outcomes
1	Introduction and Financial Statement Analysis <i>Financial ratio analysis, Risk analysis including Dupont analysis, Analysis of growth potential. Comparative analysis of ratio, Industry analysis, Cost drivers and revenue drivers' identification, Convert accounting statements, cost of capital calculation</i>									LO-1
2	Forecasting and Valuation of Free Cash Flows <i>Free cash flows, Enterprise valuation, Continuation value. Cash flow to equity valuation.</i>									LO-2
3	Relative Valuation <i>Equity multiples, Options strategies and pay-offs, Equity/debt valuation, Real option valuation.</i>									LO-2
4	Mergers, Acquisitions, Buyouts and Restructuring <i>Mergers & acquisitions, Offer structures, and Leveraged buyouts.</i>									LO-3
5	Develop financial model for business valuation <i>Use excel model</i>									LO-2
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	

Module Code	IM3122	Semester 5	Module Title		Theory and Practice in Banking					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		3	-	105*				50	50	
Module Aim:	This course aims to develop a comprehensive understanding of banking principles and practices in Sri Lanka and globally, covering the theoretical foundations, industry context, key regulations, emerging trends, and practical banking techniques.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 analyse the role and significance of banks in the local and global economy.										
LO-2 evaluate the performance of banks.										
LO-3 apply various risk measurement methodologies and assess compliance frameworks in banks.										
Syllabus Outline										Learning Outcomes
1	Overview of banking industry <i>Evolution of the banking industry, Banking system in Sri Lanka, Types of banking, Central banking, Financial intermediation, Asset transformation.</i>									LO-1
2	Measuring financial performance <i>Profitability analysis, CAMEL approach, Managing non-interest income and expenses. Ratio analysis</i>									LO-2
3	Risks in banking industry <i>Credit risk and counterparty risk, Interest rate risk, Currency risk, Liquidity/funding risk, Settlement/payment risk, Operational risk, Capital/gearing risk, Sovereign/political risk</i>									LO-3
4	Management of risks <i>Asset and liability management, Gap analysis, Duration analysis, and other mechanisms</i>									LO-3
5	Innovations in banking industry <i>e-banking, Islamic banking, Securitization, Shadow banking, Credit default swap</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3	

Module Code	IM3132	Semester 5	Module Title		Risk Management and Insurance					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		3	-	105*				50	50	
Module Aim:	The course aims to provide a comprehensive understanding of risk management and insurance principles, focusing on applying these concepts to manage risk exposures in both private and public enterprises.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain the concept, types, causes, and costs of risk, along with the role of people's attitudes and the scope and benefits of risk management.									
LO-2	describe the processes, methods, and agents involved in effective risk management.									
LO-3	analyse the different types of insurable risks, insurance policies, and the role of insurance in mitigating the risk.									
Syllabus Outline										Learning Outcomes
1	Fundamentals of Risk and Its Impact <i>Meaning and nature of risk, Types of risk, Risk and business stakeholders, People's attitudes to risks, Costs associated with risk, Causes of risk</i>									LO-1
2	Principles and Process of Risk Management <i>Scope & benefits of risk management, Process of risk management, Methods of risk management, Agents of risk management</i>									LO-1; LO-2
3	Risk Identification, Assessment, and Control <i>Risk detection, Risk evaluation, Risk control</i>									LO-2
4	Insurance Basics <i>Risk and insurance, Legal principles in risk and insurance. Types of insurance contracts.</i>									LO-2; LO-3
5	Insurance Industry and Operations <i>Overview on insurance industry, Licencing and regulations, Supporting organizations, Reserve building, Special accounting rules, Distribution system (Underwriting, Claims settlement, Insurance selling, Rate making)</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3	

Module Code	IM3142	Semester 5	Module Title			Digital Marketing				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				50	50	
Module Aim:	This course aims to equip students with the skills necessary to create and execute an effective digital marketing strategy by leveraging a range of digital marketing tools, tactics and techniques.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 identify the significant role of digital marketing in overall business strategy in the era of Industry 4.0										
LO-2 apply concepts and tools to develop a winning digital marketing strategy										
LO-3 evaluate the effectiveness of various digital marketing approaches and tools in achieving business goals										
Syllabus Outline									Learning Outcomes	
1	Introduction <i>Introduction to digital marketing strategy, Digital customer and customer value</i>									LO-1
2	Digital Marketing Tools, Tactics and Techniques <i>Content marketing, Web user experience for marketing acquisition & conversion, social media marketing, Advertising and influencer marketing, Search Engine Marketing (SEM), Direct marketing tools in digital marketing</i>									LO-2
3	Digital Marketing Performance Evaluation <i>Digital marketing metrics</i>									LO-3
4	Digital Marketing Applications in real life organizations <i>Risk and insurance, Legal principles in risk and insurance. Types of insurance contracts.</i>									LO-2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2. LO-3	

Module Code	IM3752	Semester 5	Module Title			Managerial Economics				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				50	50	
Module Aim:	The course aims to equip students with essential theories and techniques, enabling them to apply these concepts effectively to enhance managerial decision-making.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain how managers pursue organisational goals, constrained by limited financial and other resources									
LO-2	apply the tools of economic theory to explain optimal production and pricing decisions by the firm in each market structure									
LO-3	apply regression analysis, estimation and forecasting, and game theory to guide managerial decision-making									
Syllabus Outline									Learning Outcomes	
1	Introduction to Managerial Economics <i>Goals of managerial decisions, Economic concepts and models (Decision making as optimizing with constraints, marginal analysis in decision making, statistical analysis of economic relationships.</i>									LO-1
2	Organizational decision making <i>Demand analysis and estimation, Production analysis and estimation, Cost analysis and estimation, Business and economic forecasting</i>									LO-2; LO-3
3	Market structures <i>Different market structures, Pricing strategies,</i>									LO-1; LO-3
4	The role of government and managerial decision making <i>Rationale for government involvement in market economy, Competition policy, Game theory</i>									LO-2; LO-3
5	Economics of managing risks <i>Business decisions under uncertainty</i>									LO-2; LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3	

Module Code	IM3762	Semester 5	Module Title		Project Management					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				50	50	
Module Aim:	The course aims to equip students with the knowledge, skills, and tools necessary to effectively initiate, plan, execute, monitor, and close projects across various industries.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1		explain the key principles and practices of Project Management.								
LO-2		analyse projects using appropriate project management tools.								
LO-3		discuss the methods of project status reporting.								
LO-4		apply economic and financial cash flow models to analyse project risk and develop the suitable financial structure for a project.								
Syllabus Outline									Learning Outcomes	
1	Define projects with clearly identified scope, requirements, and stakeholders <i>PMBoK knowledge areas, Definition of project management and relationship to other management disciplines, Role of the project manager, Evaluate project environment factors. Define project requirements and scope, Identify and manage stakeholders through a Stakeholder Register and Stakeholder Engagement Plan</i>								LO-1	
2	Project Execution <i>Plan and estimate project scope, resources, and schedule, Scope management, Network diagrams and critical path analysis, Resource histograms, Project quality and project performance. Manage project costs, Procurement management, Project appraisal, Risk management, Case Studies</i>								LO-2	
3	Communicate project information effectively both orally and in writing <i>Determine the information and communication needs of the stakeholders, Communicate the status of project to appropriate stakeholders, Prepare professional documentation consistent standards.</i>								LO-3	
4	Financing projects <i>Financing projects and sources of funds, Structure and risk, valuing projects</i>								LO-4	
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3, LO-4	

Module Code	IM3212	Semester 6	Module Title			Treasury Dealing				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				50	50	
Module Aim:	This course will combine classroom teaching and direct experimental learning in financial markets.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 explain dealing practices and conventions in the capital market.										
LO-2 organize the front-office and back-office functions of a treasury dealing room.										
LO-3 evaluate transactions completed in the simulated treasury dealing room.										
Syllabus Outline										Learning Outcomes
1	Introduction to the Capital Market Conventions <i>Objectives & Responsibilities of Treasury Management, Organization Structure of Treasury, decide on constructing a trading book, Payment and settlements</i>									LO-1
2	Overview of the function of a dealer <i>The main functions and practical issues facing FOREX dealing, Bond Dealing, Risk management function, Position keeping function</i>									LO-2
3	Foreign Exchange Theory and Practice <i>Advanced practical concepts in FOREX markets, the transaction process, Information Environment, Role of the Regulator and its Influence</i>									LO-1, LO-3
4	Trading on Bonds <i>Advanced practical concepts in bond trading include leveraging, trading strategies, unique market features, and market conventions.</i>									LO-1, LO-3
5	Trading on shares <i>Advanced practical concepts in stock trading include margins, trading strategies, unique market features, and market conventions</i>									LO-1, LO-3
6	Regulations and Ethics <i>Regulations governing capital markets, insider trading laws, market transparency rules, and anti-manipulation policies and ethical trading decisions.</i>									LO-1
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3	

Module Code	IM3222	Semester 6	Module Title		Investment and Portfolio Management					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	IM2412
		2	2	90*				50	50	
Module Aim:	This course aims to impart knowledge, skills and techniques required to analyse investment and manage financial asset portfolios.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 demonstrate an understanding of asset pricing theory.										
LO-2 explain different portfolio theories.										
LO-3 propose performance measures for portfolio constructions.										
Syllabus Outline										Learning Outcomes
1	Introduction and overview <i>Statistical and theoretical background of portfolio management.</i>									LO-1
2	Portfolio theory <i>Risk aversion, discrete versus continuous compounding, Asset allocation across risky and risk-free portfolios, Diversification, Optimal portfolios, Black Litterman Model</i>									LO-1, LO-2
3	Informational efficiency <i>Definitions, theory, empirical evidence with relevance to funds management, Behavioural issues.</i>									LO-1, LO-2
4	Asset pricing theory and practice <i>Capital Asset Pricing Model, Arbitrage Pricing Theory and Factor models</i>									LO-1, LO-2, LO-3
5	Equity portfolio management <i>Index investment, Active management, Investment strategies (strategic, tactical, statistical arbitrage etc.)</i>									LO-1, LO-2, LO-3
6	Performance measurement <i>Jensen, Sharpe, Treynor Indices; Information ratio, Portfolio Performance Index (PPI). Extrapolation issuers</i>									LO-3
7	Portfolio Construction (Extensions), Derivatives and Portfolio Management <i>Alternative objectives and portfolio construction criteria: Risk management. The role of derivatives.</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3	

Module Code	IM3232	Semester 6	Module Title		International Business					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				50	50	
Module Aim:	This course focuses on the core concepts and techniques for entering the international marketplace with an emphasis on the effect of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	identify the concepts, tools of analysis and various frameworks, standards and norms pertaining to international trade and business.									
LO-2	demonstrate how international business variables affect the trade process.									
LO-3	evaluate the effects of current regional trade agreements and economic integration on developing countries.									
Syllabus Outline										Learning Outcomes
1	Introduction to international business and environment <i>Globalization and business today</i>									LO-1
2	International trade and foreign direct investment <i>Trade Theories and International Investment</i>									LO-2
3	Economic, political and sociocultural aspects of international trade and business <i>Major influences and relevance of theories and concepts for business decision making</i>									LO-2
4	Legal, financial, marketing and human capital requirements for international trade and business <i>International HRM, International Financial Management, International marketing and entry strategies.</i>									LO-2
5	Regional and global trade policies <i>Global and regional trade agreements and their impact</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3	

Module Code	IM3242	Semester 6	Module Title		Data Management & Visualization					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		-	4	40*				100		
Module Aim:	This course aims to help students to articulate ideas/stories behind big data and communicate findings in visual, oral and written contexts appropriate for various applications.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 explain the need for data visualization and the data visualization process.										
LO-2 develop appropriate visualizations for given data.										
LO-3 develop business performance dashboards using data visualization software.										
Syllabus Outline									Learning Outcomes	
1	Data search and acquisition									LO-1
2	Data analysis using software tools <i>Static charts, Reshaping data, Measure names and values</i>									LO -2, LO -3
3	Chart types and Chart selection									LO -2, LO -3
4	Annotations and Maps									LO -2, LO -3
5	Data stories and Interactive dashboards									LO -2, LO -3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100%		LO-1, LO-2, LO-3	

Module Code	IM3252	Semester 6	Module Title		Financial Technology					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	2	90*				50	50	
Module Aim:	This module aims to provide students with a comprehensive understanding of financial technology (FinTech), covering its key concepts, innovations, and applications in the financial services industry by exploring the impact of emerging technologies such as blockchain, digital payments, and artificial intelligence on financial systems, markets, and regulation.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	describe the evolution of financial innovations and influential environment dynamics.									
LO-2	describe FinTech applications to payments, investment management, bank lending, derivatives, financial regulation, financing of start-ups.									
LO-3	explain the role of artificial intelligence, machine learning and regulatory frameworks in transforming financial services and decision making.									
Syllabus Outline										Learning Outcomes
1	Evolution of financial innovations and influential environment dynamics <i>An Overview of Financial Products, Financial Services, Financial Innovation and Financial Technology and market dynamics</i>									LO-1
2	FinTech and money <i>Payments, Cryptocurrencies and Distributed Ledger Technology / Blockchain</i>									LO-2
3	FinTech and Financial Institutions <i>Commercial Banks, Investment Banks, Central Banks, Brokers, Dealers, Insurers</i>									LO-2
4	FinTech and Financial Markets <i>Underwriting, Trading and Valuation of Financial Securities – Equity, Debt, and Derivatives</i>									LO-2
5	FinTech in Investment Management <i>Big Data, Artificial Intelligence, and Machine Learning, Text Analytics, Natural Language Processing, Robo-Advisory Services, Algorithmic Trading</i>									LO-3
6	Start-up Financing and FinTech <i>Angel Investing, Venture Capital, Accelerators, Initial Coin Offering (ICO), Crowdfunding and Marketplace (P2P) Lending</i>									LO-2
7	FinTech and RegTech <i>Bubbles, Panics, Crashes, Crises, Financial Innovation, Regulation and Supervision of FinTech</i>									LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3	

Module Code	IM3262	Semester 6	Module Title			Business Research Methods				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-Study				CA	WE	-
		2	2	90*				100		
Module Aim:	This module aims to enhance the range of research methods and underpinning philosophical approaches to research and explain epistemological and ontological considerations in research design and methodology.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	identify the significance of the major steps involved in conducting business research in a global context.									
LO-2	apply concepts of various business research designs and methods and be able to evaluate the strengths and weaknesses in research designs for particular projects.									
LO-3	apply an appropriate research design for a particular project, explaining the limitations, advantages, and implications of the technique employed.									
LO-4	justify and design suitable questions for a survey instrument and other alternative data collection approaches.									
LO-5	analyze data in relation to a particular research question using multiple analytical tools.									
LO-6	develop the skills necessary to produce clear, concise, and effective scientific and technical documents									
Syllabus Outline									Learning Outcomes	
1	Introduction to the philosophy of research and the research process									LO-1
2	The role of literature, literature reviews and critiques									LO-2
3	Experimental design, surveys and questionnaires									LO-4
4	Qualitative field work and analyzing qualitative data									LO -4
5	Archival research and sampling, descriptive and inferential statistics									LO-2
6	Data analysis using appropriate software packages – practical session									LO -4, LO -5
7	Technical writing and editing									LO-6
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							100 %		LO-1, LO-2, LO-3 , LO-4, LO-5, LO-6	

Module Code	IM4112	Semester 7	Module Title			Strategic Management				
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	IM1222
		2	-	70*				50	50	
Module Aim:	The module aims to provide an understanding of strategic analysis, strategic decision-making and strategic processes within and between organisations									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	identify the fundamentals of strategy.									
LO-2	discuss the role strategy plays in aligning organizational competencies with challenges of static and dynamic business environments.									
LO-3	compare and contrast the processes of formulating and implementing strategy.									
LO-4	review the strategic management processes that may lead to sustainable competitive advantage of an organization.									
LO-5	analyse different types of business strategies and means by which they contribute to sustainable development.									
Syllabus Outline										Learning Outcomes
1	Strategic management and strategic competitiveness									LO-1
2	The external environment: Opportunities, threats, industry competition and competitor Analysis									LO-1, LO-2
3	The internal environment: Resources, capabilities and core competencies									LO-1, LO-2
4	Business-level strategy & Corporate-level strategy									LO-3
5	Merger and acquisition strategies									LO-5
6	Cooperative strategy									LO-5
7	Corporate governance									LO-5
8	Strategy implementation: Strategic Leadership, Organisational structure and controls									LO-3, LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4, LO-5	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3, LO-4, LO-5	

Module Code	IM4122	Semester 7	Module Title			Behavioural Finance					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	IM2312	
		2	-	70*				50	50		
Module Aim:	This course examines cognitive biases people exhibit when making financial decisions. It provides an understanding of the nature of these cognitive biases using insights from psychology, neuroscience and experimental economics.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	explain how cognitive biases predictably and consistently affect financial decisions.										
LO-2	explain theories of behavioural finance in predicting investor behaviour.										
LO-3	apply behavioural finance models to financial markets.										
Syllabus Outline										Learning Outcomes	
1	Introduction to behavioural finance <i>Intellectual underpinnings, Rational Market Hypothesis, Behaviourist views, Neo-classical vs Behavioural economics, Empirical evidence and practical issues.</i>										LO-1
2	Heuristics and biases <i>Information processing errors, Self-deception, Emotional and social factors</i>										LO-1, LO-2
3	Foundations of behavioural finance <i>Prospect theory and mental accounting, Challenges to Efficient Market Hypothesis, Neuroscientific and evolutionary perspective</i>										LO-1, LO-2
4	Behavioural aspects of investing <i>Investor behaviour, Market anomalies, Value investing.</i>										LO-3
5	Behavioural corporate finance <i>Behavioural aspects of investing, financing, dividends. M&A, corporate governance issues</i>										LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3 LO-4		
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3, LO-4		

Module Code	IM4132	Semester 7	Module Title		Personal Financial Planning					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	-	70*				50	50	
Module Aim:	This module aims to equip students with essential knowledge and skills in financial planning by analyzing personal financial needs, exploring financial markets in Sri Lanka, and examining financial instruments, insurance, and wealth management strategies.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain the process of financial planning for personal financial needs									
LO-2	explain the nature of currently available financial and insurance products that may be used for personal financial planning									
Syllabus Outline										Learning Outcomes
1	Planning for personal finances <i>Fundamentals of personal financial planning, managing savings, Budgeting for personal finances</i>									LO-1
2	Managing credit <i>Consumer credit facilities, Cost of credit alternatives,</i>									LO-2
3	Investing financial resources <i>Investing in stocks, bonds, unit trusts.</i>									LO-2
4	Investing in long-term assets Buy or lease vehicles, investing in houses, and real estate									LO-2
4	Planning for retirement <i>Retirement needs analysis, Retirement savings and investment strategies, Insurance and risk management in retirement, succession planning</i>									LO-2
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3	

Module Code	IM4142	Semester 7	Module Title			Time Series Econometrics				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		2	2	90*				50	50	
Module Aim:	This course aims to familiarize the student with the time-series econometrics models.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	explain the concepts and properties of stationary and integrated univariate time series									
LO-2	describe the properties of different time series models and identify appropriate univariate and multivariate time series models based on the data									
LO-3	experiment with parametric variance models									
LO-4	apply the basic methodology of identification, estimation, diagnostic checking and model selection to time series model building									
Syllabus Outline										Learning Outcomes
1	Introduction <i>Components of time series, basic time series models, ACF and correlogram, tests of serial correlation</i>									LO-1
2	Stationary processes <i>AR, MA, ARMA, Box-Jenkins methodology</i>									LO-2, LO-4
3	Non-stationary processes <i>Tests of stationarity, ARIMA models, cointegration and error correction models</i>									LO-2, LO-4
4	Multivariate models <i>Simultaneous equation bias, triangular systems, VAR models</i>									LO-2, LO-4
5	Modelling volatility <i>ARCH, GARCH models</i>									LO-3, LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1,LO-2, LO-3, LO-4	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3, LO-4	

Module Code	IM4152	Semester 8	Module Title		Corporate and Personal Taxation					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		3	-	105*				50	50	
Module Aim:	This module aims to equip students with foundational knowledge of Sri Lanka’s tax system and the skills to assess and compute direct and indirect tax liabilities for individuals and businesses.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1		demonstrate an overall understanding of the types of taxes in Sri Lanka (Direct and Indirect Taxes).								
LO-2		determination of residency rule application in taxation and source of income.								
LO-3		estimate the income tax liability of an individual, a partnership and a company								
LO-4		assess the indirect tax liability (i.e. Value Added Tax) to obtain awareness of tax obligations and procedures								
Syllabus Outline										Learning Outcomes
1	Introduction of Taxation <i>Objectives and principles of taxation, Imposition of taxes, Types of taxes (Direct and Indirect Taxes), Tax bases, Sources of income</i>									LO-1, LO-2
2	Employment Income <i>Taxable and exempted employment income, Non cash benefits, APIT payment</i>									LO-2
3	Business Income <i>General deductions, Main deduction, Specific deductions</i>									LO-2
4	Investment Income and other Income <i>Type of investment incomes, exemption on each investment incomes and capital gains tax</i>									LO2
5	Tax computation of a person (individual, Company and Partnership) <i>Tax computation on individual, Company and partnership, Qualifying payment and relief, Tax rate and tax credits</i>									LO-3
6	Value Added Tax (VAT) <i>Registration, Time of supply, Tax invoice, VAT rate, Computation of VAT, VAT payment and VAT Return, Simplified Value Added Tax (SVAT)</i>									LO-4
7	Tax obligations and procedures <i>Payment of income tax, Furnishing of Income tax return, Assessments, objections and appeals.</i>									LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3, LO-4	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3, LO-4	

Module Code	IM4902	Semester 7/8	Module Title			Research Capstone Project				
Credits	8 (S 7=4 + S8 = 4)	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self- study				CA	WE	-
		-	-	800*				100		
Module Aim:	This module aims to demonstrate both theoretical and practical knowledge, analytical skills and personal characteristics at levels which are appropriate with professional business practice.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	discuss a business problem and its context.									
LO-2	formulate the problem into a viable project proposal under individual supervision									
LO-3	review relevant literature and critique the impact of the proposed project.									
LO-4	evaluate the suitability of alternative research methods and apply appropriate methods to the chosen business problem									
LO-5	recommend courses of action through an appropriately written project									
LO-6	debate the effectiveness of the proposed business solution									
LO-7	defend project results to peers and supervisors									
Syllabus Outline <i>The following should be covered with the communication and interaction with the academic / project supervisor with a minimum of 120 contact hours during semester 7 & 8. Research and thesis supervision on an individual's basis with special to Financial Service Management aspects.</i>										Learning Outcomes
1	Problem identification									LO-1
2	Research methodology and Research design									LO-2, LO-3, LO -4
3	Project proposal writing and presentation									LO-4, LO-5
4	Field work, analysis, discussion and recommendations									LO-3, LO-4
5	Project report writing and presentation									LO-5, LO -6 , LO -7
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)		Detailed proposal, Research report / oral presentation and viva					100%		LO-1, LO-2, LO-3, LO-4, LO-5, LO-6, LO-7	

Module Code	IM4212	Semester 8	Module Title		Financial Services Regulations and Ethics					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		3	-	105*				50	50	
Module Aim:	The aim of this module is to provide knowledge about the financial services industry, its regulation and professional practice.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 identify the structure of the financial services industry in Sri Lanka										
LO-2 explain the importance of a regulatory framework										
LO-3 discuss legal aspects and ethical conduct										
Syllabus Outline										Learning Outcomes
1	Introduction to financial services industry									LO-1, LO-2
2	Structure and components of financial services industry									LO-1
3	Regulatory framework									LO-2
4	Concept of Risk and its implications on stakeholders									LO-2
5	Legal aspects									LO-3
6	Professionalism and ethical practices									LO-2, LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3	

Module Code	IM4222	Semester 8	Module Title		Sustainable Finance						
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	-	70*				50	50		
Module Aim:	This module aims to provide students with an in-depth understanding of sustainable finance, its key principles, financial instruments, and the role of finance in global sustainability initiatives.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	explain the core principles and differences between traditional finance and sustainable finance										
LO-2	analyze key sustainable financial instruments such as green bonds, social bonds, and sustainability-linked loans and identify investment strategies and market mechanisms										
LO-3	identify the emerging technologies and practices in Sustainable Finance and the role of finance in global sustainability initiatives										
Syllabus Outline										Learning Outcomes	
1	Foundations of Sustainable Finance <i>Introduction to Sustainable Finance, Green Financial Instruments – Green bonds, social bonds, and sustainability-linked loans</i>										LO-1, LO-3
2	Investment Strategies and Market Mechanisms <i>Impact Investing – Measuring impact, sectors benefiting, challenges, and opportunities, Carbon Markets and Trading – Carbon credits, trading mechanisms, international frameworks</i>										LO-1, LO-2, LO-3
3	ESG and Risk Management in Finance <i>ESG Integration in Investment Decisions – Tools, evaluation metrics, challenges, Climate Risk and Financial Implications – Types of risks, financial management strategies</i>										LO-1, LO-2, LO-3
4	Corporate Financing for sustainability and Technological Innovations in Sustainable Finance <i>Corporate Financing for Sustainability – Financing models, Public-Private Partnerships, Role of fintech in sustainable investments, Blockchain applications for transparency in green finance</i>										LO1, LO-2,LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3		

Module Code	IM4232	Semester 8	Module Title			Financial Derivatives & Alternative Investments					
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	IM2112 / IM2212	
		2	2	90*				50	50		
Module Aim:	This module aims to impart a fundamental understanding of tradable financial derivatives and other alternative Investments										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	demonstrate knowledge of how different types of derivatives operate, and are applied and priced in the markets										
LO-2	distinguish the attributes of main financial derivatives along with other alternative investments										
LO-3	decide the type of security to be used for hedging and speculative purposes										
Syllabus Outline										Learning Outcomes	
1	Derivative Markets and Securities <i>Structure of Forward, Futures and Options markets, Basic payoff diagrams, Relationship between Forward and Option contracts, Derivative portfolio management</i>										LO-1
2	Forward and Futures contracts <i>Contract mechanisms, hedging, valuation and strategies</i>										LO-1, LO-2, LO-3
3	Option contracts <i>Options markets, valuation and trading strategies.</i>										LO-1, LO-2, LO-3
4	Swap <i>Agreements to exchange cash flows, such as interest rate swaps and currency swaps.</i>										LO-1, LO-2, LO-3
5	Alternative Investments <i>Private Equity & Venture Capital, Real Estate Investment Trusts (REITs), Cryptocurrencies and other Blockchain assets</i>										LO-2
6	Challengers and regulation of the alternative investments <i>Regulations governing capital markets, insider trading laws, market transparency rules, and anti-manipulation policies and ethical trading decisions.</i>										LO-1
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3		

Module Code	IM4242	Semester 8	Module Title			Contemporary Issues in Finance				
Credits	3	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		3	-	105*				50	50	
Module Aim:	This module aims to provide students with an in-depth understanding of sustainable finance, its key principles, financial instruments, and the role of finance in global sustainability initiatives.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1	assess multiple sources of financial and/or accounting research in order to develop a comprehensive understanding of relevant issues.									
LO-2	develop individual-led critical thinking skills through exposure to both academic and industry-led research in finance.									
LO-3	discuss contemporary issues in finance and/or accounting to a non-technical audience as part of a group.									
Syllabus Outline										Learning Outcomes
1	Contemporary issues in corporate finance <i>Contemporary issues in main corporate finance categories (investing, financing, dividends, working capital and corporate governance)</i>									LO-1, LO-2, LO-3
2	Contemporary issues in investments <i>Contemporary issues in financial market and, portfolio management</i>									LO-1, LO-2, LO-3
3	Contemporary issued in financial institution management <i>Contemporary issues in banking and non-banking institutions</i>									LO-1, LO-2, LO-3
4	Emerging frontiers in finance – trends, technologies, and transformations <i>Contemporary issues in emerging trends in financial technology, biodiversity finance, mineral finance, and other areas of financial development.</i>									LO1, LO-2,LO-3
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3	
Written examination (WE)							50% [3 hrs]		LO-1, LO-2, LO-3	

Module Code	IM4752	Semester 8	Module Title			Auditing					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	-	70*				50	50		
Module Aim:	This module aims to provide students with a comprehensive understanding of auditing processes, applicable regulatory frameworks, auditing standards and ethical requirements.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	explain the auditing process, including audit engagement, risk assessment, and planning.										
LO-2	apply appropriate audit procedures and evaluate audit evidence for different classes of transactions and account balances.										
LO-3	describe the ethical conduct and best practices on corporate governance.										
Syllabus Outline										Learning Outcomes	
1	Introduction to auditing, audit engagement and planning <i>Scope, terms and conditions, risk assessments, assertions</i>										LO-1
2	Audit procedures and evidences <i>Audit procedures on different class of transactions and account balances</i>										LO-1, LO-2
3	Internal controls and internal auditing <i>Internal control environment, Types of fraud detection, Types of internal controls</i>										LO-2
4	Finalizing the audit and audit report <i>Reporting responsibilities of an auditor, Elements of an audit report, Different types of audit qualifications.</i>										LO1, LO-2
5	Fundamental principles and ethics <i>Code of Professional Conduct and Ethics</i>										LO-3
6	Corporate Governance <i>Introduction to CG, Role and Functions of BOD, Board Committees, Governance practices</i>										LO-3
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3		

Module Code	IM4762	Semester 8	Module Title			International Financial Management					
Credits	2	Hours/Week			C	E	O	Evaluation %		Prerequisites	
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-	
		2	-	70*				50	50		
Module Aim:	The aim of this course is to provide a good understanding of finance from an international perspective.										
Learning Outcomes											
After completing this module, the students should be able to:											
LO-1	explain the key principles and concepts of international financial management.										
LO-2	analyze the impact of exchange rate fluctuations, inflation, and interest rates on multinational financial decisions and foreign exchange exposure.										
LO-3	evaluate financial strategies for multinational corporations in an international context.										
Syllabus Outline										Learning Outcomes	
1	An Overview on multinational financial management <i>Globalization and reasons, Types of global expansion, Implications of globalization on financial management</i>									LO-1	
2	Exchange rate Systems, Dollarization, Transactional and Translational Exposure <i>Trilemma of exchange rate determination, History of exchange rate systems, Exchange rate systems, Foreign exchange exposure</i>									LO-1, LO-2	
3	International flow of funds <i>Balance of Payment, Current account deficit, Factors affecting international trade flows/FDIs.</i>									LO-1	
4	International financial markets <i>Foreign exchange market, International money market, International credit market, International bond market, International stock market</i>									LO-1	
5	International Arbitrage and Interest Rate Parity <i>Law of one price, Arbitrage, Theoretical relationships according to arbitrage</i>									LO-2, LO-3	
6	Relationship between inflation, interest rates and exchange rates <i>Absolute form PPP, Relative form PPP, International Fisher's effect</i>									LO-2	
7	International capital Budgeting and transfer pricing <i>Foreign investment analysis, Foreign project appraisal, Transfer pricing</i>									LO-3	
8	Country Risk <i>Political stability, Economic stability, Emerging market crisis</i>									LO-3	
Assessments											
Assessment							Weight		Learning outcomes		
Continuous Assessments (CA)							50%		LO-1, LO-2, LO-3		
Written examination (WE)							50% [2 hrs]		LO-1, LO-2, LO-3		

Module Code	IM4802	Module Title			Industrial Training					
Credits	6	Hours/Week			C	E	O	Evaluation %		Prerequisites
GPA/NGPA	GPA	Lectures	Lab / Tutorials	Self-study				CA	WE	-
		-	-	600*				100		
Module Aim:	This module aims to enable the participants to acquire transferable skills in the area of business and financial services by offering them the chance to gain practical exposure.									
Learning Outcomes										
After completing this module, the students should be able to:										
LO-1 compare academic and industrial environments.										
LO-2 relate the knowledge gained via training to the R & D project.										
LO-3 appraise professional ethics and business practices.										
LO-4 discuss the findings in a training report.										
Syllabus Outline										Learning Outcomes
The following should be covered with a minimum of 600 hours on the job under an assigned supervisor of the training organisation and an academic coordinator.										
1	Induction <i>This is an initial period to help the student in the transition from academic to industrial life. The students should meet his/her mentor to discuss the contents and the objectives of training. He/She should also receive information about the training organisation, its products or services and the terms and conditions of employment.</i>									LO-1
2	General training <i>In a large organisation, this should include an introduction to the work done in a number of departments. Under these circumstances, the student may eventually be working as a member of a team in the organisation. The student should be made aware of the management and administration sectors of the organisation.</i>									LO-1, LO-2
3	Practical Skills <i>During this period, the student should receive instructions in the practical skills essential for his/her future employment. It should also include an appreciation of the business processes.</i>									LO-2, LO-3
4	Directed objective training <i>The major part of the training should have directed application to the activity which the student intends to follow after the training program (activities should be relevant to the specialization in which the student will be graduating in). At this stage, the student should be encouraged to work on a real project and be given increasing responsibility for independent work to establish interest and confidence in his/her work.</i>									LO-3, LO-4
Assessments										
Assessment							Weight		Learning outcomes	
Continuous Assessments (CA)		Training report and Training Diary					50%		LO-1, LO-2, LO-3, LO-4	
		Final presentation and viva					50%			