INTERNATIONAL QUALIFICATIONS AND ASSESSMENT CENTRE (IQAC)

«Approved»
2025 y. «16» July

Programme	**Level 3 International Foundation Year Diploma in Business (RQF)**		
Unit Number/ Unit Title	**Unit 6 INTRODUCTION TO RESEARCH**		
Cohort Code:	L03IRS-U6		
Unit Level	3		
Total GLH	Total qualification time 200/ Total Guided learning hours 90/ Self-guided learning hours 110		
Credits	20 CATS/ 10 ECTS		
Lecturer			
Start Date		**End Date**	

Unit Aims	This unit introduces learners to the fundamental principles and practices of research. Students will develop an understanding of the research process, including how to identify research problems, formulate research questions, and apply appropriate methods for data collection and analysis. Emphasis is placed on critical thinking, ethical considerations, and the practical application of research skills within academic, vocational, and professional contexts. By the end of the unit, learners will be able to plan and conduct a small-scale research project, interpret findings, and present results effectively.
Differentiation Strategies *(e.g. planned activities or support for individual learners according to their needs)*	The total number of students to be in the lesson is 13. This is a multicultural group of students predominantly are at the ages of 16-17, with numerous ethnic, gender, and creed background. These are level 3 students; hence it is assumed that they have practical, theoretical, or technological knowledge and understanding of a subject or field of work to find ways forward in broadly defined, complex contexts. These students must be able to generate information, evaluate, synthesise the use information from a variety of sources. Various approaches to addressing the various identified students needs will be adopted throughout the lesson. Such will include:- 1. Progressive tasks

	2. Digital resources 3. Verbal support 4. Variable outcomes 5. Collaborative learning 6. Ongoing assessment 7. Flexible-pace learning
Equality & Diversity	Variety of teaching techniques will be employed to ensure that the needs of each individual learner are met.
Safeguarding & Prevent	Safeguarding policies and the Prevent duty are strictly observed to ensure the safety, well-being, and inclusivity of all students and staff.
Health & Safety	SIRM H&S policies will be maintained.
Learning Resources	**Teaching and Learning Materials** • **The Craft of Research** – Booth, Colomb & Williams A widely-used guide to formulating research questions, structuring arguments, and writing clearly. Now in its **5th edition (2024)**. • **Research Design: Qualitative, Quantitative, and Mixed Methods Approaches** – Creswell & Creswell Thorough overview of the three major research paradigms, including philosophical foundations and practical applications. • **Introduction to Research Methods in Education** – Punch & Oancea Focused on educational contexts, this text covers research questions, literature reviews, methods (qualitative, quantitative, mixed) and ethics.

Learning Outcome	Assessment Criteria
1. Apply statistical methods to provide business or management information.	1.1 Distinguish between different types of data. 1.2 Determine and interpret summary statistics. 1.3 Differentiate and integrate elementary functions using standard results.
2. Apply the laws of probability to find solutions to a range of problems.	2.1 Determining probabilities 2.2 Calculating the expected value of an outcome. 2.3 Probabilities and normal distribution.

No	Learning Outcome / Topic	Learning and Teaching Activities	Which assessment criteria does the session relate to?	Day/month/ year/ signature
1.	**What is Business Research?**	**What is Business Research?** - The role of data and evidence in decision-making (e.g., market research, financial analysis).	*Module 1: The Research & Data Landscape (LO1.1)*	
2.	**Variables & Data Collection**	**Variables & Data Collection** - Understanding what we measure (e.g., customer age, profit, satisfaction ratings) and how we collect it (surveys, company data).	*Module 1: The Research & Data Landscape (LO1.1)*	
3.	**Categorical Data (Qualitative)**	**Categorical Data (Qualitative)** - Types: Nominal (e.g., gender, brand names) and Ordinal (e.g., satisfaction levels: poor, fair, good).	*Module 1: The Research & Data Landscape (LO1.1)*	
4.	**Numerical Data (Quantitative)**	**Numerical Data (Quantitative)** - Types: Discrete (e.g., number of products sold) and Continuous (e.g., height, weight, time).	*Module 1: The Research & Data Landscape (LO1.1)*	
5.	**Data Collection Workshop**	**Data Collection Workshop** - Designing a simple survey to collect different types of data for a given business problem	*Module 1: The Research & Data Landscape (LO1.1)*	
6.	**Introduction to Data Visualization**	**Introduction to Data Visualization** - The purpose of charts and graphs. Creating and interpreting bar charts and pie charts for categorical data.	*Module 2: Describing and Summarizing Data (LO1.2)*	
7.	**Frequency Distributions & Histograms**	**Frequency Distributions & Histograms** - Grouping numerical data to see patterns and shape.	*Module 2: Describing and Summarizing Data (LO1.2)*	
8.	**Measures of Central Tendency**	**Measures of Central Tendency** - Calculating and interpreting the **Mean, Median, and Mode**.	*Module 2: Describing and Summarizing Data (LO1.2)*	
9.	**When to Use Which Average?**	**When to Use Which Average?** - Understanding the impact of outliers (e.g., average income vs. median	*Module 2: Describing and Summarizing Data (LO1.2)*	

		income).		
10.	**Measures of Spread**	**Measures of Spread** - Calculating and interpreting the **Range** and **Standard Deviation** (conceptually).	*Module 2: Describing and Summarizing Data (LO1.2)*	
11.	**Putting It All Together**	**Putting It All Together** - Using summary statistics to describe a dataset (e.g., summarizing sales figures for a report).	*Module 2: Describing and Summarizing Data (LO1.2)*	
12.	**What is Probability?**	**What is Probability?** - Defining probability (0 to 1) in a business context (e.g., probability of a sale, risk of investment loss).	*Module 3: Introduction to Probability Theory (LO2.1, LO2.2)*	
13.	**Calculating Basic Probabilities**	**Calculating Basic Probabilities** - The formula: Probability = (Number of favorable outcomes) / (Total number of outcomes).	*Module 3: Introduction to Probability Theory (LO2.1, LO2.2)*	
14.	**Two-Way Tables**	**Two-Way Tables** - Using contingency tables to calculate probabilities from categorized data (e.g., probability a customer is female *and* bought a product).	*Module 3: Introduction to Probability Theory (LO2.1, LO2.2)*	
15.	**Expected Value** - **Introduction (LO2.2)**	**Expected Value** - **Introduction (LO2.2)**: The concept of "average long-term outcome." Simple examples (e.g., expected profit from a new product launch).	*Module 3: Introduction to Probability Theory (LO2.1, LO2.2)*	
16.	**Calculating Expected Value**	**Calculating Expected Value** - Applying the formula: $E(X) = \Sigma [x * P(x)]$.	*Module 3: Introduction to Probability Theory (LO2.1, LO2.2)*	
17.	**Expected Value in Business Decisions**	**Expected Value in Business Decisions** - Using E(V) to choose between different business strategies or investment options.	*Module 3: Introduction to Probability Theory (LO2.1, LO2.2)*	
18.	**Patterns in Data**	**Patterns in Data** - Introduction to distributions and the concept of the "bell curve."	*Module 4: The Normal Distribution (LO2.3)*	
19.	**Properties of the Normal Distribution**	**Properties of the Normal Distribution** - Understanding mean, median, mode symmetry, and the 68-95-99.7 (Empirical) Rule.	*Module 4: The Normal Distribution (LO2.3)*	

20.	**The Standard Normal Distribution**	**The Standard Normal Distribution** - Introduction to Z-scores: what they are and what they mean (number of standard deviations from the mean).	*Module 4: The Normal Distribution (LO2.3)*	
21.	**Z-Score Calculations**	**Z-Score Calculations** - Using the formula to standardize a value.	*Module 4: The Normal Distribution (LO2.3)*	
22.	**Finding Probabilities with Z-Scores**	**Finding Probabilities with Z-Scores** - Using Z-tables to find the probability a value is below or above a certain point.	*Module 4: The Normal Distribution (LO2.3)*	
23.	**Research Project Intro: "The Business Problem"**	**Research Project Intro: "The Business Problem"** - Students choose a simple business scenario (e.g., "Should Café X introduce a new menu item?").	*Module 5: Bringing It All Together - The Research Project*	
24.	**Project Workshop 1: Data Collection Plan**	**Project Workshop 1: Data Collection Plan** - Designing a method to gather the necessary data (e.g., survey, hypothetical data set provided by tutor).	*Module 5: Bringing It All Together - The Research Project*	
25.	**Project Workshop 2: Data Summary & Visualization**	**Project Workshop 2: Data Summary & Visualization** - Creating charts and calculating summary statistics for their project data.	*Module 5: Bringing It All Together - The Research Project*	
26.	**Project Workshop 3: Probability & Expectation**	**Project Workshop 3: Probability & Expectation** - Calculating probabilities from their data and a simple expected value.	*Module 5: Bringing It All Together - The Research Project*	
27.	**Project Workshop 4: Draft Report Writing**	**Project Workshop 4: Draft Report Writing** - Structuring a simple research report: Introduction, Methods, Results, Discussion.	*Module 5: Bringing It All Together - The Research Project*	
28.	**Finalizing the Research Report**	**Finalizing the Research Report** - Peer review and final edits.	*Module 5: Bringing It All Together - The Research Project*	
29.	**Research Project Presentations**	**Research Project Presentations** - Students present their findings and justify their business recommendation based on the data.	*Module 5: Bringing It All Together - The Research Project*	

30.	**Research Project Intro: "The Business Problem"**	**Research Project Intro: "The Business Problem"** - Students choose a simple business scenario (e.g., "Should Café X introduce a new menu item?").	*Module 5: Bringing It All Together - The Research Project*	

Recommendations

1. **The Craft of Research** – Booth, Colomb & Williams
   A widely-used guide to formulating research questions, structuring arguments, and writing clearly. Now in its **5th edition (2024)**.

2. **Research Design: Qualitative, Quantitative, and Mixed Methods Approaches** – Creswell & Creswell
   Thorough overview of the three major research paradigms, including philosophical foundations and practical applications.

3. **Introduction to Research Methods in Education** – Punch & Oancea
   Focused on educational contexts, this text covers research questions, literature reviews, methods (qualitative, quantitative, mixed) and ethics.

4. **Introduction to Research Methodology** (2024 edition)
   A comprehensive, accessible overview of research—from concept formation to presentation of findings—with strong emphasis on ethics and real-world application.

5. **Introduction to Research Methods (5th Edition)** – various authors
   A practical textbook guiding learners from idea generation to analysis and reporting.

6. **Research Methods for the Social Sciences: An Introduction** – Valerie Sheppard
   Open-access textbook offering broad coverage: ethics, research questions, data collection, sampling, and writing research proposals. Perfect for beginners.

7. **Designing Social Inquiry: Scientific Inference in Qualitative Research** – King, Keohane & Verba
   A classical text arguing that qualitative and quantitative research share the same underlying logic of causal inference.

8. **The Practice of Social Research** – Earl Babbie
   A trusted foundational text in social research methods, currently in its 15th edition, offering broad, methodological guidance especially for social sciences.

9. **Research Methodology: Methods and Techniques** – C. R. Kothari
   A staple in social science and business research methodology, well-regarded for its clarity and use in South Asian education contexts.

10. **Research Synthesis and Meta-Analysis: A Step-by-Step Approach** – Harris Cooper (plus *Ethical Choices in Research*)
    Excellent for understanding how to synthesize findings across studies and appreciating ethical considerations throughout the research process.

Why These Books Matter for Level 3 Learners

Book	Key Strengths
The Craft of Research	Excellent for learning how to structure a research argument and communicate findings.

Book	Key Strengths
Creswell’s Research Design	Provides clarity on choosing and designing appropriate research methods.
Punch’s Education Focus	Ideal for context-specific projects, especially in educational settings.
Intro to Research Methodology (2024)	Practical, up-to-date, and emphasizes ethics and application.
Intro to Research Methods (5th Ed.)	Easy-to-follow roadmap from concept to analysis.
Sheppard’s Open Textbook	Fully accessible and beginner-friendly with breadth across methods.
Designing Social Inquiry	Deepens understanding of inference logic across methods.
Babbie’s Classic Text	Builds foundational understanding of social research methods.
Kothari’s Methodology Guide	Clear presentation of essential methods, especially for social sciences.
Cooper’s Synthesis & Ethics	Delivers advanced insight into combining research findings and ethical obligations.