

MICRO-CREDENTIAL IN QUANTITATIVE METHODS

Data-Driven Decisions, Powered by AI

Instructor Oh Hui Xin

Videos are available beginning
January 11, 2027.

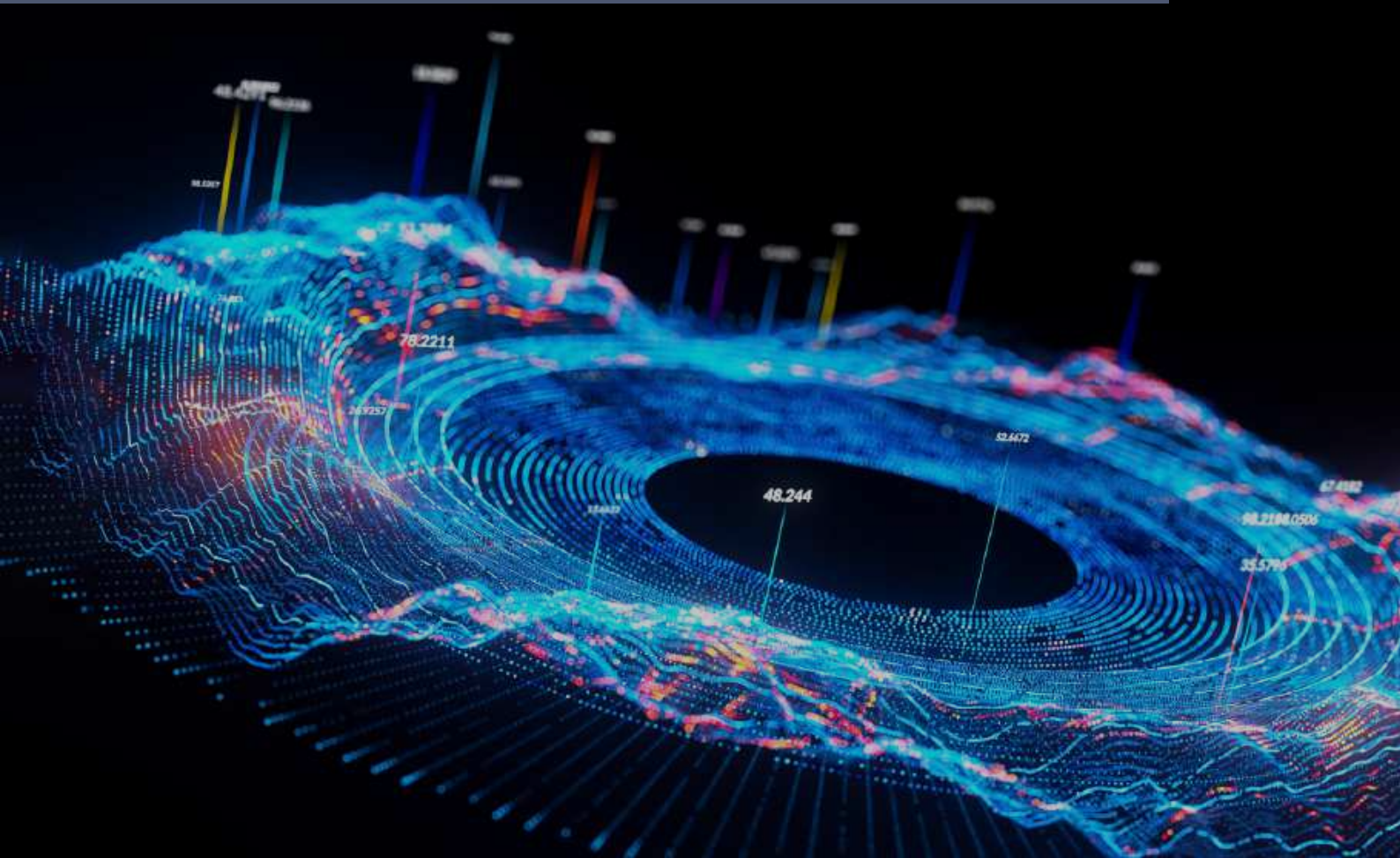
Course Credits:
2 Credits

Live sessions are on:

- January 23, 2027
- February 13, 2027
- March 20, 2027
- April 3, 2027
- April 17, 2027
- May 8, 2027



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Course Overview

Data-driven strategies encourage business growth and efficiency while promoting a competitive edge for organizations to thrive through incisive insights based on empirical evidence.

Business analysis requires the skill sets needed to identify business needs, business environments, markets, and competitors, enabling students to develop corresponding solutions that may affect business growth. Quantitative business analysis takes a deeper dive by employing statistical methods to analyze, identify, and draw conclusions about the relationships between current and future variables. This enables organizations to study and understand prevailing trends and patterns, predict future developments, and comprehend how different factors can affect outcomes for greater business profitability.

The goal of this course is to provide students with the quantitative tools and analytical rigor needed for business analytics. In this course, students will strengthen their understanding of foundational statistical methods such as confidence intervals, hypothesis testing, and stochastic modeling. They will also learn how quantitative techniques can transform seemingly difficult and ambiguous problems into clearly defined and easily answered questions. Additionally, students will learn how AI can act as a force multiplier for analytics.



Course Outline

1. Asynchronous 1 - Topics

Math review, The Normal Distribution, Algebra of Random Variables, The Normal CDF

2. Class 1 - Topics

Activity: Competing with Probability Distributions, Activity: Understanding Histograms, The Inverse Normal CDF, Activity: Finding the Limits of The Central Limit Theorem

3. Asynchronous 2 - Topics

Hypothesis testing, The T-Distribution, Difference-in-means tests, Using Google Colab

4. Class 2 - Topics

Hypothesis Testing Projects: Choosing Thresholds for Fraud Detection, Avoiding False Positives in A/B Testing

5. Asynchronous 3 - Topics

One-tailed tests, Confidence Intervals, Bootstrapping, Using AI for Analytics

6. Class 3 - Topics

Activities: Data Viz and Analytics with AI

7. Asynchronous 4 - Topics

More Algebra for Random Variables, Correlation and Covariance, The Binomial Distribution

8. Class 4 - Topics

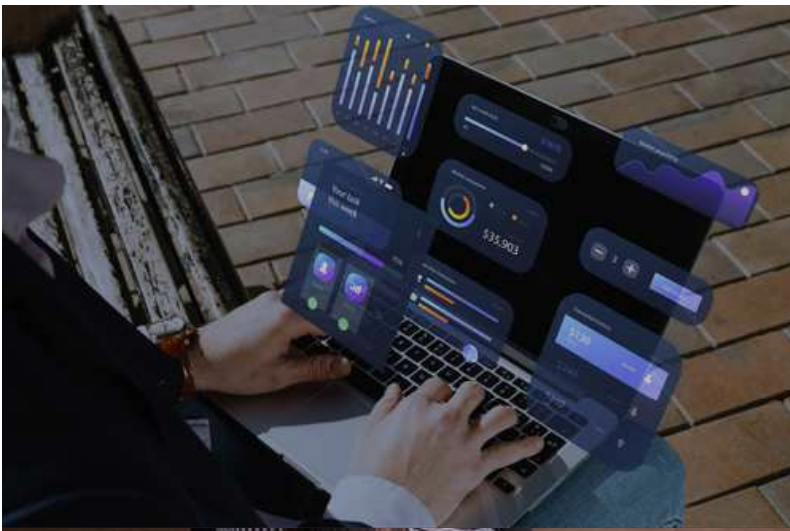
Activity: More AI Analytics, Project: Correlation and Product Bundling

9. Asynchronous 5 - Topics

Dimensionality Reduction

10. Class 5 - Topics

Project: Making Big Data Manageable with Dimensionality Reduction



Outcomes that Drive Business Growth

This course will enable you to:



Solve

foundational mathematical problems in topics like probability and statistics, using both classic spreadsheets and AI tools.



Apply

statistical techniques and quantitative analysis to business problems management.



Propose

rational decisions in a variety of business contexts.



Assessment

Learners must undergo the various assessment categories below and achieve minimum stipulated grades in order to receive the Micro-Credential in Quantitative Methods:

Reflections	10%
Class Participation	
• In-class Discussion	5%
• In-video Quizzes	5%
Problem Sets	40%
Final Exam	40%

Course Structure

Asynchronous

Before the first live session and between sessions, students will watch short video lectures and complete brief homework assignments to strengthen their classroom learnings.

Live Sessions

There will be a review discussion of the asynchronous content at the beginning of each class. Following this, students will work on in-class analytics projects and participate in interactive simulations.

Who Should Take This Course

Anyone without a background in analytics but wants to develop their skills and knowledge in analytics.

Academic Requirements

Quantitative Preparation course (for those with a limited math background). We will share a link to this course with ACE learners upon registration.

Course Format & Duration

RM10,000 | 2 credits | 17-week duration

- Video lectures and assignments available from **January 11, 2027.**
- Classes start with a review of pre-course content, followed by analytics projects and simulations.

Live-session	Date and Time
First Live Session	Saturday, January 23, 2027 9:00 AM – 1:00 PM (MYT)
Second Live Session	Saturday, February 13, 2027 9:00 AM – 1:00 PM (MYT)
Third Live Session	Saturday, March 20, 2027 9:00 AM – 1:00 PM (MYT)
Fourth Live Session	Saturday, April 3, 2027 9:00 AM – 1:00 PM (MYT)
Fifth Live Session	Saturday, April 17, 2027 9:00 AM – 1:00 PM (MYT)
Exam	Saturday, May 8, 2027 9:00 AM – 1:00 PM (MYT)

Faculty



Driven by a strong passion for education, Hui Xin is the Academic Manager overseeing Quantitative courses. She holds a Master of Applied Statistics and a Bachelor of Science (Honors) in Mathematics and Economics.

Before her current role, Hui Xin was a fellow with Teach For Malaysia, where she committed herself to addressing educational inequality and enhancing quality in Malaysian public schools through a transformative leadership development program. During this time, she also pursued her postgraduate studies in education, blending theory with practical experience.

Following her fellowship, Hui Xin served as a lecturer in Mathematics and Statistics, where she fostered academic excellence and empowered her students to thrive. She is also a certified trainer in the Train-the-Trainer (TTT) program and teaches the Certificate in Teaching and Learning. In these roles, she equips educators with the tools and strategies needed to inspire their students.

RM10,000 or approx USD 2,200

The Royal Malaysian Customs Department has expanded the scope of the Sales and Service Tax (SST) framework to include education services. Under this regulation, a 6% Service Tax applies to education services provided to self-funded non-Malaysian individuals.

Education fees that are fully sponsored by an organization are exempt from Service Tax

The ACE courses are:

- Stackable to degrees. They can be combined to gain eligibility to apply for comprehensive qualifications, culminating in the ASB Master of Business Administration (full-time 12 months) or Executive Master of Business Administration degrees (part-time 16 months).
- HRD Corp and STF claimable by eligible Malaysian employers, terms and conditions apply.



Register now for this course:

Asia School of Business, ASB Academic, 11
Jalan Dato' Onn, 50480 Kuala Lumpur
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