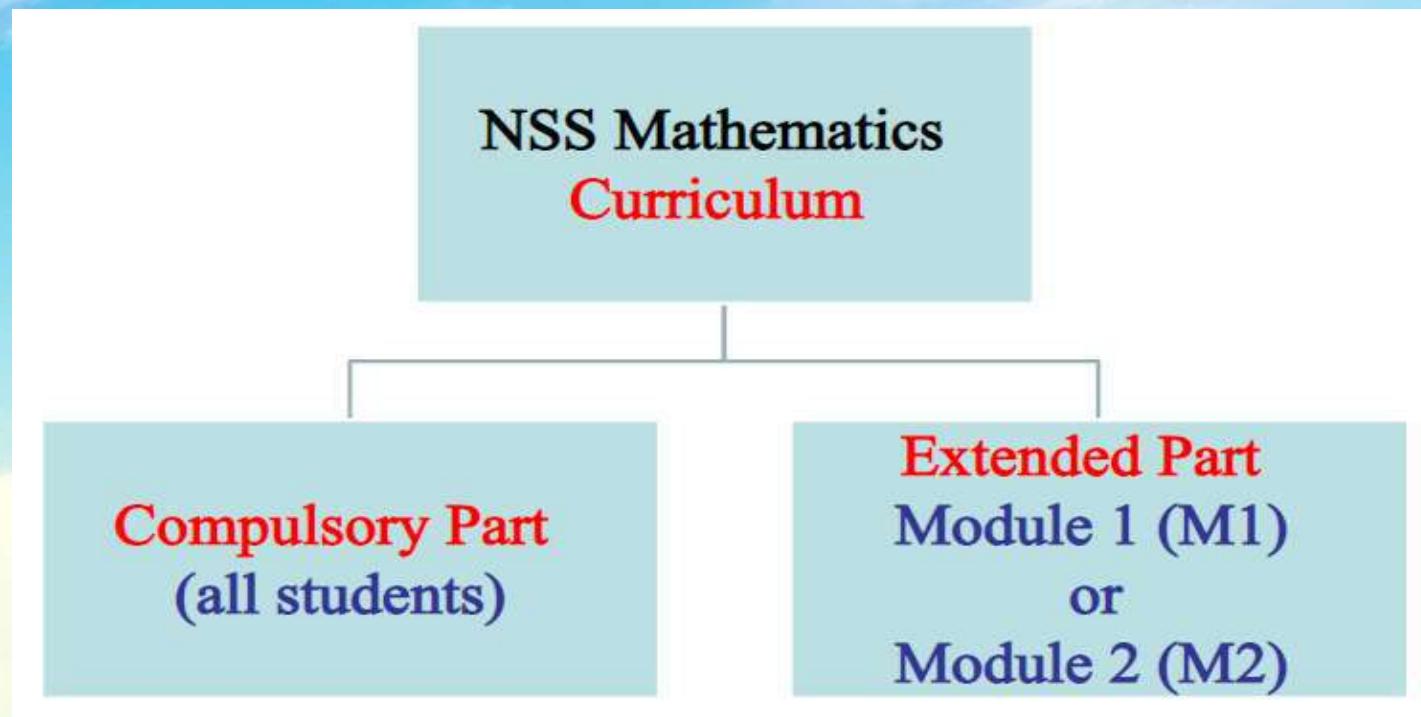


中學文憑試數學延伸課程的介紹

HKDSE Mathematics Extended Part

- **Module 1 (M1)**
- **Module 2 (M2)**

HKDSE 數學科的課程結構



M1 : Calculus and Statistics (微積分與統計)

M2 : Algebra and Calculus (代數與微積分)

同學可按自己的興趣及能力來考慮選修延伸部分。

延伸部分簡介

- 延伸部分提供兩個單元 M1 和 M2 供學生選擇，學生最多只可修讀一個單元。
- 延伸部分並不等於一個選修科目。
- 各開一班，每班名額 36人。

延伸部分簡介（續）

M1 (單元一) (微積分與統計)

- 為那些**將來在學科或職業上需要更深入及廣闊的數學知識**、並希望在高中階段多學習一些**數學應用**的學生而設。
- 提供微積分與統計的直觀概念、相關基本技能及有用工具。
- 強調**應用性**多於其嚴謹性。

M2 (單元二) (代數與微積分)

- 為那些希望**從事與數學有關的職業**（例如**工程師、教師**），並希望在高中階段學習更艱深數學知識的學生而設。

延伸部分的課題內容

M1 (單元一)	M2 (單元二)
<p><u>Algebra</u></p> <ol style="list-style-type: none">1. Binomial expansion2. Exponential and Logarithmic functions <p><u>Differentiation</u></p> <ol style="list-style-type: none">3. Limits and Derivative4. Differentiation of5. Applications of differentiation <p><u>Integration</u></p> <ol style="list-style-type: none">6. Indefinite integration and its applications7. Definite integrals and its applications8. Estimate definite integrals by the trapezoidal rule	<p><u>Algebra (Basic)</u></p> <ol style="list-style-type: none">1. Odd and even functions2. Mathematical Induction3. Binomial Theorem4. More about Trigonometric functions <p><u>Differentiation</u></p> <ol style="list-style-type: none">5. Limits and the number e6. Differentiation7. Applications of differentiation <p><u>Integration</u></p> <ol style="list-style-type: none">8. Indefinite integration and its applications9. Definite integration10. Application of definite integration

延伸部分的課題內容（續）

M1 (單元一)	M2 (單元二)
<p><u>Statistics (Probability and Distributions)</u></p> <ul style="list-style-type: none">9. Review on basic statistic and probability10. Conditional probability and Bayes' theorem11. Discrete probability distributions12. Some special discrete probability distributions13. Normal distribution and its applications14. Point and interval estimation	<p><u>Algebra (Advanced)</u></p> <ul style="list-style-type: none">11. Matrices and Determinants12. Systems of Linear Equations13. Introduction to Vectors14. Scalar products and Vector products15. Applications of Vectors

延伸部分考試模式

Hong Kong Diploma of Secondary Education Examination			
	Component	Weighting	Duration
Compulsory Part	Paper 1 Conventional questions	65%	2 hours 15 minutes
	Paper 2 Multiple-choice questions	35%	1 hour 15 minutes
Module 1	Conventional questions	100%	2 hours 30 minutes
Module 2	Conventional questions	100%	2 hours 30 minutes

- 考生在必修部分及延伸部分的成績會分開匯報。
- 數學科未施行校本評核。

哪些同學**適合**修讀數學科延伸部分？

1. 好喜歡計數，無時無刻都在思考數學問題。
2. 幾喜歡計數，但數學未算高分。
3. 不喜歡計數，但整體成績好。
4. 簡單 加減乘除 都要依賴計數機。

答案：

1. 非常歡迎修讀
2. 需要慎重考慮
3. 不太需要考慮
4. 不太適宜考慮

表 2h : 2022 年文憑試甲類學科各科報考的統計

Table 2h : 2022 HKDSE Entries statistics in each of the Category A subjects

全體考生

All Candidates

科目 Subject	參與學校數目 No. of participating schools	性別 Gender	報考人數 No. of candidates entered		
			中文作答 Chinese version	英文作答 English version	總數 Total
必修部分 Compulsory Part	469 (99.8%)	男生 Male	10 409 (22.5%)	13 427 (29.0%)	23 836 (51.5%)
		女生 Female	8 129 (17.6%)	14 320 (30.9%)	22 449 (48.5%)
		總數 Total	18 538 (40.1%)	27 747 (59.9%)	46 285 (100.0%)
延伸部分(微積分與統計) Extended Part (Calculus and Statistics)	207 (44.0%)	男生 Male	367 (14.8%)	1 066 (43.1%)	1 433 (57.9%)
		女生 Female	200 (8.1%)	843 (34.0%)	1 043 (42.1%)
		總數 Total	567 (22.9%)	1 909 (77.1%)	2 476 (100.0%)
延伸部分(代數與微積分) Extended Part (Algebra and Calculus)	331 (70.4%)	男生 Male	571 (11.6%)	3 043 (61.6%)	3 614 (73.2%)
		女生 Female	210 (4.3%)	1 112 (22.5%)	1 322 (26.8%)
		總數 Total	781 (15.8%)	4 155 (84.2%)	4 936 (100.0%)

數學延伸部分的認受性

八大收生在2024年起將 M1 和 M2 視同一個選修科計算；
大部分院校亦以**最佳五科計分**

Maths Extended Part M1/M2 (is Required / is Preferred)

University Entrance Requirement for Specific subjects <u>Required / Preferred</u>	Engineering 工程學 Actuarial Science 精算 Quantitative Finance 計量金融
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General Entrance Requirements of UGC-funded Undergraduate Programmes under 2024 JUPAS

Universities	Basic Requirements (Chinese, English, Mathematics, Citizenship and Social Development* and Electives)	Counting M1/M2 as equivalence to an elective
 City University of Hong Kong	332A33	✓
 Hong Kong Baptist University	332A33	✓
 Lingnan University	332A22	✓
 The Chinese University of Hong Kong #	332A33	✓
 The Education University of Hong Kong	332A22	✓
 The Hong Kong Polytechnic University	332A33	✓
 The Hong Kong University of Science and Technology #	332A33	✓
 The University of Hong Kong #	332A33	✓1

* An attainment at "Attained (A)" in "Citizenship and Social Development" is required for meeting the entrance requirement.

The requirements are subject to relevant University committees' final approval.

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