Extended Part of NSS Mathematics Curriculum

The Extended Part is designed for students who need more mathematical knowledge and skills for their future studies and careers, and for those whose interest and maturity have been developed to a level that enables them to benefit from further mathematical study in different areas. The Extended Part aims at extending students' mathematics horizon beyond the Compulsory Part. Students have to handle more complicated problems in the Extended Part than in the Compulsory Part.

Two modules are offered as choices for students in the Extended Part. They are Module 1 (Calculus and Statistics) and Module 2 (Algebra and Calculus). Students are allowed to take at most one of the two modules.

Topics in Module 1

Foundation Knowledge Area : Binomial expansion, Exponential and logarithmic functions

Differentiation and Its Applications

Integration and Its Applications

Further Probability

Binomial and Poisson Distributions and Their Applications

Normal distribution and Its Applications

Point and Interval Estimation

Topics in Module 2

Foundation Knowledge Area : Surds, Mathematical induction, Binomial Theorem, More about Trigonometric Functions, Introduction to the number e

Limits and Differentiation

Integration

Matrices and Systems of Linear Equations

Vectors

These two modules will be offered in S5 and S6 with 3 periods per cycle in the time-table.

Extra classes will be held in the S4 summer vacation, Saturdays in Sept and Oct, and the vacations in S5.

Students who meet the following criteria and are interested can apply to take the module:
- (i) Annual overall ranking within first half of the level
- (ii) Annual Maths overall ranking within 70
- (iii) Both language subjects and LS within 70
- (iv) Pass in electives

The class size will depend on the number of eligible applicants. Students should consider their interest and ability.

If the course is under-enrolment, the school will not offer the course in the academic year of 2022 – 2023 by considering the resource allocation.

Teachers will consider all applications seriously.

> Taster Classes will be organized for the S4 students by ZOOM lesson at 3 p.m.on the following dates :
>
> Module 1   18 Jan (TUE) and 20 Jan (THU)
> Module 2   18 Jan (TUE) and 25 Jan (THU)