# **Mathematics in the European School**

## Teaching

All teaching of mathematics in the European section is in English.

The curriculum that is followed is the one established by the European Schools.

At EIPACA teaching is divided into 45 min lessons and according to the year group and options, the number of periods of study changes.

Year	Level of mathematics	Number of periods per week	Link
S1	Not applicable	4	
S2	Not applicable	4	Curriculum
S3	Not applicable	4	
S4	Elementary	4	Curriculum 4P
	Standard	6	Curriculum 6P
S5	Elementary	4	Curriculum 4P
	Standard	6	Curriculum 6P
S6	Elementary	3	Curriculum 3P
	Standard	5	Curriculum 5P
	Higher (further)	3	Curriculum HL
S7	Elementary	3	Curriculum 3P

Standard	5	Curriculum 5P
Higher (further)	3	Curriculum HL

#### Mathematics from S1 to S3

The syllabuses have been developed with the aim of enhancing the understanding of key concepts. The program has been planned in order to provide students with enough time to further develop previous concepts as well as new concepts. At the very core of the mathematics teaching approach we aim to develop inference skills, analytical skills, strategic thinking and a true enjoyment of the subject.

### Mathematics from S4 to S7

MATHEMATICS SYLLABUS - SECONDARY YEARS 4-7 Preamble to the syllabuses

The syllabuses place a great deal of emphasis on strategic thinking skills, as well as analysing results obtained. The aim is to develop pupils' mathematical skills, such as creative, logical and analytical thinking. Pupils should develop the skills of formulating mathematical problems appropriately, then finding the solutions to the problems and finally presenting their methods and conclusions in a neat and orderly fashion. Problems that come up in day-to-day situations and that can be resolved with the aid of mathematical thinking or operations are to be used effectively.

The syllabuses preserve the foundations of mathematics teaching and leaves the core of the subject unchanged, but at the same time it has as objective the systematic implementation of modern technological tools in the teaching. Purposeful and efficient use of the chosen technological tool\* helps pupils to become confident in the fundamental mathematical concepts. End of semester B-tests are in two parts: one being "without the tool" and the the other "with the tool".

\* With the new programs being put into place, Geogebra is progressively replacing the TI Nspire CX CAS calculator (S4-S5 in september 2020, S6 in september 2021, S7 in september 2022)

From S4 onwards, the students have the possibility of following mathematics at the elementary, standard or further level:

### Elementary level

- Intended for pupils who do not consider continuing with studies where mathematics plays an important role. Its purpose is to help pupils to understand the scientific and

technological world surrounding them without putting too much emphasis on theoretical aspects of mathematics.

## Standard level

- Intended for pupils who need mathematics in their higher level studies and because of this can benefit from a solid foundation and a good general knowledge of mathematics.

## Further level

- Intended for pupils who have taken the 5 period course in years 6 and 7. Its purpose is to provide pupils with the knowledge sufficient for higher studies where mathematics has an important and fundamental role. The course requires dedication and the pupils are trained to solve problems with more varied methods.
- The syllabus consists of two parts one compulsory and the other optional which allow for the incorporation of national syllabuses as well as entry requirements to institutions of higher education in different member states.