

Mathematics for non-specialist
BMA-LOTD-516.02, BMI-LOTD-516E.02
Course content and evaluation method

I. Teaching Modality

- **Instructor:** Mr. Richie Elian
- **Location:** Online
- **Course Duration:** 1h30 per week
- **Teaching Format:** Lectures and exercises
- **Course Materials:** Provided progressively during the semester; students are also expected to take notes during class.
- **Assessment:** Final oral exam conducted online.

II. Course Topics

Chapter	Content	Prerequisites
Introduction to Calculus	Functions, derivatives	Basic notions of functions: images, antecedents, vocabulary, representative curve, variation table, etc ...
Complex Numbers	Overview of number sets, algebraic form of complex numbers, trigonometric and exponential forms, geometric interpretation. Binomial theorem.	Ability to perform algebraic calculations with real numbers, including expanding and factoring expressions, solving quadratic trinomials using the discriminant (Δ), applying basic high school trigonometry (sin, cos, tan, ...), and locating points in a two-dimensional coordinate system.
Probability	Discrete probability, continuous probability (normal distribution)	Basic notions of probability from high school.
Introduction to Linear Algebra	Matrices (addition, multiplication, determinant, inverse); application of the binomial theorem	Knowledge acquired in the previous chapters.

III. Evaluation and grading

1. Final Oral Exam Structure (approx. 15 minutes total):

Part	Duration	Description
Part 1	5–10 minutes	The student will receive a list of potential topics in advance, and will have to prepare for all of them. At the exam, two topics will be randomly selected, and the student will choose one to solve a related exercise.
Part 2	5–10 minutes	A discussion between the teacher and the student on the selected topic (part 1), including conceptual questions.

2. Grading Breakdown:

- **Part 1:** /9
- **Part 2:** /8
- **Oral Communication Quality:** /3
- **Total:** /20

3. Conversion to the ELTE Grading System:

Score (out of 20) ELTE Grade

0 – 9.99	1 (Fail)
10 – 11.99	2 (Sufficient)
12 – 13.99	3 (Satisfactory)
14 – 15.99	4 (Good)
16 – 20	5 (Excellent)

NB: All information provided here is indicative and may be subject to slight modifications depending on contextual or pedagogical needs.