

## About the final exam

Arrive at the exam at least 30 minutes early, so that you can get your exam questions (for part 2 below) and have half an hour to prepare. One question will be in the basic subjects: Algebra, Analysis, Geometry or Discrete mathematics and algorithms from the topics in [https://math.bme.hu/~zv/angol\\_bsc/BSC\\_FINAL\\_EXAM.pdf](https://math.bme.hu/~zv/angol_bsc/BSC_FINAL_EXAM.pdf)

The other will be in your chosen special subject (Differential Equations 1, Operations Research, Algebra 2, Stochastic Processes, Differential Geometry 2, Convex Geometry, Functional Analysis 1, Partial Differential Equations or Applied Numerical Methods with Matlab). When you sign up for the final exam, also send a message to [zv@math.bme.hu](mailto:zv@math.bme.hu) with your choice. For list of topics and/or practice problems in your special subject see [https://math.bme.hu/~zv/angol\\_bsc/](https://math.bme.hu/~zv/angol_bsc/)

The latest version applies unless you took the subject earlier and requested in your message an earlier version.

The exam will have 2 parts.

**Part 1:** BSc theses defence: 15 minutes + 5 minutes for questions of the exam committee and from the written evaluations.

Prepare slides for the presentation.

The committee will have 2 or 3 members from the Institute of Mathematics, your supervisor cannot be included but can be present at your defence.

**Part 2:** Present your answer at the blackboard for the questions you were given in the general subjects and in your the special subject.

Here you need not present proofs (of course you may remember the main ideas, but it is not expected), what is important is to have a safe knowledge of basic notions, important theorems, connections between theorems, notions, implications, examples, counterexamples, applications of the theory, etc. From the special subject you may get some questions of theory and some problems to solve as well.

## Result:

According to Section 156. and 160. of the Code of Studies

[Result of the final examination]

(1) The results of the final examinations (RFE) are calculated as follows:

$0.5 \times \text{AGS} + 0.5 \times T$ , where AGS is the average of the grades of the subjects of the final

examinations (here you get one mark for part 2 and one mark for part 3 above) and T is the grade given for the bachelor thesis.

(2) The final examination is unsuccessful and the RFE is zero if any of the grades given at the final examination is a fail.

[Degree certificate result]

(1) The result of the degree certificate must be rounded up to two decimals, but partial grades should not be rounded up.

(2) The following formula will be used for the calculation of the degree certificate result:

$$0.2 \times \text{AGS} + 0.3 \times \text{T} + 0.5 \times \text{GPA}$$

where GPA is the cumulative grade point average for the whole of the study period.