# <u>First steps</u> (Numerical Methods, BMEEOAFMB51)

- Check the Numerical methods subject web page in moodle (edu.epito.bme.hu). All the necessary information are there! (https://edu.epito.bme.hu/local/coursepublicity/publiccourses.php?publicityid=3562)
- Check the Subject Datasheet for the requirements! (https://edu.epito.bme.hu/local/coursepublicity/mod/emktad/view.php?id=93620)
- Check the Detailed course schedule (https://edu.epito.bme.hu/local/coursepublicity/mod/resource/view.php?id=93833)
- Intsall Matlab to your computer using a BME email address or use online Matlab (you will need the Symbolic Math, Optimization, Global optimization, Mapping, Image Processing, Curve Fitting, Statistics and Machine Learning Toolboxes)
- Please create a MathWorks Account and solve the Matlab Onramp online tasks!
- Read and solve the examples from '01 Matlab basics' practice material (<a href="https://edu.epito.bme.hw/local/coursepublicity/mod/resource/view.php?id=93647">https://edu.epito.bme.hw/local/coursepublicity/mod/resource/view.php?id=93647</a>) (You will find the Matlab solution for this in the folder of the lecturer, Piroska Laky)
- You can check recorded videos also from 2020/21 (These lessons were recorded at the Numerical Methods lessons of another MSc course.): https://edu.epito.bme.hw/local/coursepublicity/mod/page/view.php?id=95405

#### About the semester in detail

- The <u>detailed course schedule</u> for every course is on the <u>moodle site</u> (https://edu.epito.bme.hu)
- We'll keep the moodle site up-to-date. You can find there all necessary info. Each actual practice materials will be available at the ,Materials by lecturers' part in the folder of your lecturer.
- The practice materials from earlier years can be found together in the <u>Numerical methods</u> for <u>Civil Engineers (2019)</u> book (see in moodle)

### Requirements

60 points can be achieved during the semester, 30 points and a successful midterm test are required to obtain the signature.

- 1 Midterm Tests (30 points, min. 12 points)
- 10 practice exercises (3 points each, max. 30 points, each task can be solved twice, the last result counts.)

#### 40 points can be achieved at the exam, where 20 points is required to pass the subject.

The final grade is calculated from the sum of the points obtained during the semester (60%) and the points obtained in the exam (40%).

## **Midterm Test**

- 30 points, min. requirement is 12 points.
- At the 7th educational Week,

#### **Practice tests**

- These exercises are short tasks related to a specific topic.
- Each task can be solved twice, the last result counts.
- 3-3 points can be achieved by solving the tasks
- These are available for at least one week after the related topic. You'll see the due dates on the moodle site.
- The first task is a bit longer; therefore, it has a more extended due date:
  - Please do the official <u>Matlab Onramp</u> tutorial that covers the basics of Matlab usage!(<u>https://www.mathworks.com/learn/tutorials/matlab-onramp.html</u>)

#### Matlab

During the practices we'll work in a MATLAB environment, you can also install it at home with a Campus license, just follow the related guide on the subjects website!