Tárgytematika / Course Description
Solid Mechanics 4.

GKNB_AMTA022

Tárgyfelelős neve / Teacher's name: dr. Antali Máté
Félév / Semester: 2023/24/2
Beszámolási forma / Assesment: Folyamatos számonkérés
Tárgy heti óraszáma / Teaching hours(week): 1/1/1
Tárgy féléves óraszáma / Teaching hours(sem.): 0/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

The courses in Solid Mechanics aim to provide general basic knowledge about the concepts and methods in Solid Mechanics and develop skills in applying these methods in engineering problems through problem-solving and project tasks. Solid Mechanics 4 focuses on Vibrations and its Finite Element applications.

TANTÁRGY TARTALMA / DESCRIPTION

The semester covers the following topics:

Basics of vibrations
Damped and forced vibrations
Basics of modal analysis

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESMENT'S METHOD

Students can reach a maximum of 50 points in the semester.
A maximum of 35 points can be reached from a test.
A maximum of 15 points can be reached from project tasks.
For a successful semester, the minimum conditions are
to reach at least 14 points from the test,
and to reach at least 20 points in the whole semester.
Each missing or unsuccessful test can be repeated once.
At the end of the semester, not satisfying the minimum conditions results in grade fail (1).
When the minimum conditions are satisfied, the grades are determined:
20 – 27 points: pass (2)
28 – 34 points: satisfactory (3)

35 – 42 points: good (4)
43 – 50 points: excellent (5)

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

Logan D.: A First Course in Finite Element Method, 5th ed. CL Engineering, 2016
Meirovitch L.: Fundamentals of Vibrations, Waveland Pr Inc., 2010

AJÁNLOTT IRODALOM / RECOMMENDED MATERIAL