1. Course number and name

RB-S1-19-S07-2, **Structural Mechanics III**

2. Credits and contact hours[*]

3 ECTS, lectures: 10 hours**, classes: 2 hours**, project: 13 hours**, laboratory: 5 hours**

3. Instructor's or course coordinator's name

Ryszard Walentyński PhD, DSc/University Professor

4. Text book, title, author, and year

- Ghali et al.: „Structural Analysis: The Unified Classical and Matrix Approach". Taylor & Francis
- Karnovski and O. Lebed: „Advanced Methods of Structural Analysis". Springer C.H.
- Norris and J.B. Wilbur: „Elementary Structural Analysis". McGraw Hill

a. other supplemental materials

- any other book of Structural Mechanics

5. Specific course information

a. brief description of the content of the course (catalog description)

Lectures:

Dynamics of structures.

Classes:

Dynamics of structures.

Project:

Dynamics of structures.

Laboratory:

Getting skills on selected programs of structural analysis.

b. prerequisites or co-requisites

Mechanics, Mechanics of Materials, Structural Mechanics I&II

c. indicate whether a required, elective, or selected elective (as per Table 5-1) course in the program

Required.

6. Specific goals for the course

a. specific outcomes of instruction, ex. The student will be able to explain the significance of current research about a particular topic

The student knows:

principles of dynamics of structures

have skills in:

- selected computer programs of structural analysis,
- finding dynamic characteristics of dynamic systems,

have social competencies in:

- responsibility for accuracy of the work results and their interpretation,
- ability to work on the given task autonomically and cooperate in a team.

b. explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course.

K1A_W04, K1A_U03, K1A_U12

7. Brief list of topics to be covered

a) Principles of dynamics of structures.

b) Analysis of discrete dynamic systems

*- Consultations were not included in the contact hours

**-per semester