Structural Software

1. **Course number and name:** 020LOCGS5 Structural Software

2. **Credits and contact hours:** 2 ECTS credits, 1x1.25 hours

3. **Name(s) of instructor(s) or course coordinator(s):** Kamal SAFA

4. **Instructional Materials:**

    a. Autodesk Robot Structural Analysis software.

    b. Instructor's Class Notes

5. **Specific course information**
    a. Catalog description: Introduction to the Finite Elements Method

    b. Prerequisites or co-requisites: None

    c. Required: Required course for Buildings and Engineering Management Specialty and Public Works and Transportation Specialty students.

6. **Educational objectives for the course**
    a. Specific outcomes of instruction:
        - Introduce the students to engineering software that allows them to accomplish their final year project.
        - Expose the students to several modeling techniques for the design of different types of structures such as buildings or bridges.
        - Present students the needed methods to interpret the output of a given software.

    b. PI addressed by the course:

PI	1.4	2.2
Covered	yes	yes
Assessed		

7. **Brief list of topics to be covered:**
    1. Introduction (1.5 hours)
    2. Modeling of Geometry (6 hours)
    3. Loads and analysis (6hours)
    4. Results interpretation (4 hours)