

## Course title: Mechanics

| Module basic data  |   |           |            |
|--|---|-----------|------------|
| <b>Academic unit:</b>  | Civil Engineering Faculty   |           |            |
| <b>Module title:</b>   | Mechanics   |           |            |
| <b>Level:</b>  | Bachelor  |           |            |
| <b>Module status:</b>  | C compulsory  |           |            |
| <b>Study year:</b>   | First(I), semester II   |           |            |
| <b>Weekly hours:</b>   | 2+2   |           |            |
| <b>Credit value – ECTS:</b>  | 6   |           |            |
| <b>Time / venue:</b>   | 9 <sup>15</sup> -10 <sup>00</sup> ; room S 507  |           |            |
| <b>Module professor:</b>   | Prof.ass.dr. Hajdar Sadiku  |           |            |
| <b>Contact details:</b>  | Email: <a href="mailto:hajdar.sadiku@uni-pr.edu">hajdar.sadiku@uni-pr.edu</a><br>Tel: +377 44 127773  |           |            |
| Module description   |   |           |            |
| <b>Module description</b>  | Module: Mechanics I includes: General knowledges of solid body statics, Space and surface forces system, Body and body system , Lattice girders and methods of methods of rods force calculation , Gravity center and solution of Space linear beams .  |           |            |
| <b>Module outcome:</b>   | Module targets: To introduce to students Mechanics problems which shall be basics for profesional modules, during study in Civil Engineering Faculty.   |           |            |
| <b>Learning achieved results:</b>  | To obtain knowledge on basic problems of Mathematics, Introduction on Mechanics problems, Force and loadnes understanding, Body equiliber conditions, of body systems and Lattice girders both in surface and space. Calculation of gravity center of bodies generally, and especially of plain figures |           |            |
| Learning activities loadness ( should correlate with student learning outcomes ) |   |           |            |
| Activity   | Hours   | Days/week | Totally    |
| Lessons  | 2   | 15        | 30         |
| Practical work   | 0   | 0         | 0          |
| Contact with lecturer/consultation   | 1   | 15        | 15         |
| Field exercise   | 0   | 0         | 0          |
| Colloquiums, workshops   | 2   | 1         | 2          |
| Home works   | 6   | 1         | 6          |
| Student individual work time   | 3   | 15        | 45         |
| Final exam preparation   | 2   | 2         | 50         |
| Time on evaluation process (tests quiz final exam )                              | 2   | 1         | 2          |
| Projects, presentation , etc   | 0   | 0         | 0          |
| <b>Total</b>   |   |           | <b>150</b> |

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| <b>Teaching methodology:</b>   | <b>Lessons, Exercise and Individual works</b>   |
| <b>Evaluation methodology:</b> | In evaluation, should be estimated weight of each partial evaluation and its impact on on final evaluation. One of the methods is as follows:<br>First estimation: 25%<br>Home works and other activities 10%<br>Reilable presence 10%<br>Final exam 55 %<br>Total 100% |

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| <b>Literatur</b>                 |  |
| <b>Basic literature:</b>         | [1] Prof. Ass. Dr. Hajdar Sadiku Mechanics I (Lessons by PowerPoint), FN Prishtinë   |
| <b>Complementary literature:</b> | [2] Prof. Dr. Fetah Jagxhiu, Mechanics I (lessons), FN Prishtinë<br>[3] Prof. Dr. Fetah Jagxhiu, Mechanics I (Exercises), FN Prishtinë |

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|------------------------------|---|
| <b>Learning proces plan:</b> |   |
| <b>Week order</b>            | <b>Lecture to be developed</b>              |
| <b>First week:</b>           | Introduction of module syllabus             |
| <b>Second week:</b>          | Mechanics basics principles -axioms         |
| <b>Third week:</b>           | Concurent (several) forces system           |
| <b>Fourth week:</b>          | General systems of forces and par of forces |
| <b>Fifth week:</b>           | Plain forces system                         |
| <b>Sixth week:</b>           | Statical beams                              |
| <b>Seventh week:</b>         | Body systems                                |
| <b>Eighth week:</b>          | Graphical statics basics                    |
| <b>Ninth week:</b>           | Lattice girders                             |
| <b>Tenth week:</b>           | Beam section forces                         |
| <b>Eleventh week:</b>        | System of space concurrente forces          |
| <b>Twelfth week:</b>         | Space system forces equiliber               |
| <b>Thirteenth week:</b>      | Solid bodies gravity center                 |
| <b>Fourteenth week:</b>      | Gravity center of plain figures             |
| <b>Fifteenth week:</b>       | Space linear beams                          |

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| <b>Academic polices and bon sense rules:</b>   |
| Lecturer defines criteria for viability in lessons and bon sense rules, order of staying, mobile switching off , time ect. ) |