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**BSc Architecture and Spatial Planning**

 **Syllabus**

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| **Subject**  |  **STATICS**  |
| **Type**  **Semester** **ECTS** **Code**   |
| OBLIGATIVE (O)  2 6 30-MET-254   |
| **Lecturer**  | Besian SINANI, PH.D.   |
| **Assistant**  | Arbëresha KASTRATI, Msc  Blertë Retkoceri, Msc   |
| **Aims and objectives**  |  The course covers the following topics; statics of particles: forces in plane, forces in space, equilibrium, moment of a force, moment of a couple, equivalent systems of forces on rigid bodies, equilibrium in two dimensions, equilibrium in three dimensions, distributed forces: centroids and center of gravity, analysis of structures: trusses, frames and machines, internal forces in beams and cables, friction, moments of inertia of areas, moments of inertia of masses, method of virtual work.   |
| **Results of achievement**  | 1. To provide definition of force and moment vectors and give necessary vector algebra
2. To explain the concept of equilibrium of particles and rigid bodies in plane and 3D space
3. To give information about support types and to give ability to calculate support reactions
4. To explain the equilibrium of structures and internal forces in trusses, and frames
5. To give information about distributed loads 6) To provide information on moment of inertia

7) To explain virtual work concept.   |