Production process planning and CAPP (ECTS credits: 6)

Contact person: Dr. Lívia Szedmina (slivia@vts.su.ac.rs)

**Course description:**

Throughout the course the students will learn different methods of production planning, and through some typical examples they will practice the production planning tasks, such as: assessing the technological feasibility of the part, defining blank, defining the required number and the order of the operations and the decomposition of the operations to particular cuts, detailed planning of the cuts. They practice both the conventional production planning, and the planning with the aid of computers.

1. The goal and the methods of the production planning
2. Individual production planning
3. Type-based production planning
4. Group technology
5. Technologies of blank production
6. Defining the size of the blank
7. Technologically correct planning
8. Standard and dedicated fixtures for rotational parts
9. Production planning of a short rotational part
10. Production planning of a long rotational part
11. Standard, dedicated and modular fixtures for box-shaped parts
12. Production planning of a simple box-shaped part
13. Production planning of a complex box-shaped part
14. Production planning of a complex box-shaped part 2
15. Automated production planning

**Aims:**

#### Students will learn the methods of production process planning of different machine elements.

#### The students should be able to define the blank parts, to plan the production process, to project technological operations.

#### Students will learn the ways to plan production processes with the help of computers.

**Learning outcomes:**

The students should get basic knowledge needed for production process planning. Students should be able to solve concrete planning tasks.