**Refrigeration Systems**

Language: the course is offered in Serbian and Hungarian.

***Goals:***

The aim of this course is to help students to achieve competence, academic skills, and methods for their acquisition. It puts an emphasis on the improvement of both the creative abilities and practical skills which are essential to the profession. The objectives of the course are concrete, achievable and aligned with the defined basic tasks and objectives of the study program.

***Theoretical teaching includes the following topics:***

Thermodynamic basis: Moist air, thermodynamic properties of moist air, Mollier's "h-x" diagram, Important psychometric processes, Dalton's and Lewis's Law of evaporation, Wet bulb temperature of moist air, Evaporation heat transfer calculation, Heat exchangers: NTU method, Heat exchanger characteristics; Characteristics of compressors; Condensers: Sizing of air-cooled, water-cooled and evaporative condensers; Evaporators: the process of refrigerant boiling, the processes on the cooled fluid side, Sizing of air cooling evaporators, Characteristics of evaporators; Analysis of complete vapor compression refrigeration systems.