

Title <b>Heat and Gas Engineering</b>	Code <b>1010101251010130351</b>
Field <b>Environmental Engineering First-cycle Studies</b>	Year / Semester <b>3 / 5</b>
Specialty -	Course <b>core</b>
Hours Lectures: <b>2</b> Classes: -    Laboratory: -    Projects / seminars: <b>1</b>	Number of credits <b>4</b>
	Language <b>polish</b>

**Lecturer:**

Zbigniew Bagieński, Ph.D., Eng.  
e-mail: zbigniew.bagienski@put.poznan.pl

**Faculty:**

Faculty of Civil and Environmental Engineering  
ul. Piotrowo 5  
60-965 Poznań  
tel. (061) 665-2413, fax. (061) 665-2444  
e-mail: office\_dceef@put.poznan.pl

**Status of the course in the study program:**

Core course.

**Assumptions and objectives of the course:**

Knowledge of theoretical and practical problems with the projection and the exploitation local (communal and industrial) heat supply systems.

**Contents of the course (course description):**

Characteristic of energy sources. Heat supply systems of cities; heat balances; heat sources. Heat -generating plant: technology, heat and mass balances, protections, water deacidification, regulation. Cogeneration. Heat distribution network: configuration, pressure lines, structure, elongation compensation, heat insulation. The projection of the local heat systems.

**Introductory courses and the required pre-knowledge:**

Physics, Fluid Mechanics I, Heat Engineering.

**Courses form and teaching methods:**

Lectures, Project, The technical excursion.

**Form and terms of complete the course - requirements and assessment methods:**

The credit of the project.

**Basic Bibliography:**

**Additional Bibliography:**