



SUBJECTS OF ENGINEER'S THESES IN THE ACADEMIC YEAR 2021/2022

In the academic year 2021-22, there are **three** subjects of engineer's theses and six locations in Poznań, one in Murowana Goślina, one in Buk.

The student should choose one of the indicated subjects and execute it at one of the indicated locations. The selection of the place should take account of the requirements of the function chosen, the requirements arising from the Planning Consent for the parcel selected as well as the student's personal preferences. The indicated locations will also have maps and detailed Planning Consents.

Materials to the subjects of engineer's theses are published on WAPP website and in the E-Moodle.

It is not permissible to choose one's own subject of the engineer's thesis.

NOTE:

The project should be prepared on the basis of the applicable law, in particular in compliance with the provisions of the following:

- the act of 07 July 1994 – Building Regulations;
- the act of 27 March 2003 on town and country planning and land development;
- the Ordinance of the Minister of Infrastructure of 12 April 2002 on the technical conditions for buildings and the situation thereof, together with the invoked detailed norms and provisions;
- the Ordinance of the Minister of Internal Affairs and Administration of 24 July 2009 on fire protection water supply and fire protection roads;
- the Ordinance of the Minister of Transport, Construction and Maritime Management of 25 April 2012 on the detailed scope and form of a building project.

In accordance with the provisions of Article 5.1 of the act of 7 July 1994 – Building Regulations (Journal of Laws 2017, item 1332, as amended), a building facility as a whole and its individual parts, together with related building equipment, must be ... designed ... as specified in the legislation, including in the technical and building provisions, and in accordance with the principles of technical knowledge, ensuring:

- 1) the fulfilment of the main requirements concerning building facilities ...:
 - a) the carrying capacity and stability of the structure,
 - b) fire safety,
 - c) occupational safety and health, environmental protection,
 - d) safety and security of the use and accessibility of facilities,
 - e) noise protection,
 - f) energy efficiency and thermal insulation,
 - g) sustainable use of natural resources;
- 2) operating conditions consistent with the intended use of the facility, in particular with regard to the following:
 - a) water and electricity supply and, as necessary, heat and fuel supply, on the assumption of efficient use of those factors,
 - b) disposal of waste water, precipitation and thaw waste water;
- 2a) possible access to telecommunications services, in particular with regard to access to broadband Internet;
- 3) possible maintenance of proper technical condition;
- 4) necessary conditions for the use of public buildings and of multi-family residential buildings by persons with disabilities, in particular by persons on wheelchairs;
- 5) occupational safety and health conditions;
- 6) citizens' protection, in accordance with the requirements of civil defence;



- 7) the protection of facilities entered in the register of monuments and facilities subject to conservation protection;
- 8) proper situation on the building parcel;
- 9) respect for legitimate third-party interests existing in the area of impact of the facility, e.g. ensuring access to a public road;
- 10) conditions of the safety and health of persons present at the construction site.

SUBJECTS OF ENGINEER'S THESES

SUBJECT NO. 1:

Office building:

a. land development

The project should contain land development appropriate for the facility function designed, including access paths and roads to the building, the location of decorative structures, the landscape design (with information on the main plant species and their location), parking spaces (in accordance with the Planning Consent for the site selected).

b. entrance area:

The project should have an appropriately designed entrance area accessible to persons with disabilities, with the possibility to organise proper customer service – an information desk/a reception, an entrance hall, back-up facilities.

c. office space:

The project should contain various types of office interiors, suitable for the chosen office function, the building designed can have several different functions, e.g. an architects' practice, an advertising office, a graphic studio, an accounting office, a law firm, an IT business, etc. The floors should be adapted both to the work environment and to the possibility for persons with disabilities to use various services. Office premises should have the basic arrangement with regard to the interior design and furnishings. (a representative area – for contacting customers, a managers' area, closed office rooms, open space rooms, a conference room, specialist premises, rest rooms, publicly available toilets, a server room, archives)

d. recreational area for workers

The facility designed should have a recreational area available to all persons working in the building, an integral element of such a recreational area may be a landscape project and decorative structures.

e. small food- and beverage-serving premises

The facility designed should have small food- and beverage-serving premises, adjusted to the size of the building and the number of workers. Such food- and beverage-serving premises should include facilities for serving (in accordance with the applicable law) hot meals (perhaps as a catering service), snacks and beverages. The premises designed should have the main arrangement with regard to interior design and furnishings, with a division into clean and dirty areas. The issue of supplies and waste disposal must be properly resolved. Such food- and beverage-serving premises may be combined with the recreational area intended for workers.

f. technological part:

The building should have mechanical equipment for ventilation and air conditioning, lifts, access pathways for persons with disabilities and the building should contain technical rooms enabling proper functioning of installations (air intake, air outlet, a ventilation room, a boiler room/heat centre, technical rooms, utility rooms) as well as an underground garage whose size is adjusted to the solutions adopted. Where possible, the building should have energy-efficient installations.



SUBJECT NO. 2:

Boarding house:

a. land development

The project should contain land development appropriate for the facility function designed, including access paths and roads to the building, the location of decorative structures, the landscape design (with information on the main plant species and their location), parking spaces (in accordance with the Planning Consent for the site selected).

b. entrance area:

The project should have an appropriately designed entrance area accessible to persons with disabilities, with the possibility to organise proper customer service – a reception, an entrance hall, back-up facilities.

c. hotel rooms:

The project should contain various types of hotel rooms (single rooms, twin and double rooms, studios, suites); every room should have a bathroom, a module: a desk, a TV panel, a wardrobe, a bed – it may be an element of architectural detail. The hotel rooms should have the basic arrangement with regard to the interior design and furnishings. The building should be accessible to persons with disabilities, at least one room of each type should be adapted to the needs of persons with disabilities.

d. conference, SPA or sports and recreation space.

The facility designed should have an additional area with its intended purpose to be chosen by the student from the following three options, fully accessible to persons with disabilities:

a conference centre:

- two conference rooms for approx. 30 persons, with the possibility to be combined,
- a separate lounge,
- sanitary facilities,
- connection with the food- and beverage-serving area. *SPA:*
- a lounge/reception/changing rooms,

- a complex of sauna/jacuzzi facilities, optionally: a small swimming pool (technical facilities)/massage or bubble bath rooms,
- a doctor's surgery (if medical procedures are introduced)

- sanitary facilities,

sports/recreation:

- a lounge/reception/changing rooms,
- a pitch/exercise rooms/a gym,
- sanitary facilities,
- food- and beverage-serving premises. An integral element of such an additional area should be designed landscape and decorative structures. Designed premises should have the basic arrangement with regard to the interior design and furnishings.

e. small food- and beverage-serving premises (breakfast/a café or restaurant)

The facility designed should have small food- and beverage-serving premises, adjusted to the size of the building and the number of guests. Such food- and beverage-serving premises should have facilities enabling to serve (in accordance with the applicable law) breakfast, they may perform the function of a café or a restaurant available to guests and outsiders in the afternoon. The premises designed should have the main arrangement with regard to interior design and furnishings, with a division into clean and dirty areas. The issue of supplies and waste disposal must be properly resolved.

f. technological part:

The building should have mechanical equipment for ventilation and air conditioning, lifts, access pathways for persons with disabilities and the building should contain technical rooms enabling proper functioning of installations (air intake, air outlet, a ventilation room, a boiler room/heat centre, technical rooms, utility rooms) as well as an underground garage whose size is adjusted to the solutions adopted. Where possible, the building should have energy-efficient installations.



SUBJECT NO. 3:

Multi-family residential building, with services:

a. land development

The project should contain land development appropriate for the facility function designed, including access paths and roads to the building, the location of decorative structures, the landscape design (with information on the main plant species and their location), parking spaces (in accordance with the Planning Consent for the site selected).

b. entrance area:

The project should have an appropriately designed entrance area accessible to persons with disabilities, with the possibility to organise proper resident and customer service – an information desk (services), separate entrances for residents and customers, an entrance hall, back-up facilities.

c. dwellings

The facility designed should contain various types of dwellings adjusted to the nature of the facility as selected by the student, e.g. small dwellings for tenants, small dwellings for young people, dwellings for seniors, luxury suites, dwellings for large families, dwellings for artists (studios) – different types of dwellings may be combined to form a functionally logical whole. The dwellings should have the basic arrangement with regard to the interior design and furnishings. At least one dwelling of each type should be adapted to the needs of persons with disabilities (with an appropriate arrangement of the main rooms such as: a bedroom, a kitchen, a dining room, a bathroom; showing the possibility for them to be used by persons with disabilities)

d. common areas (to be used by all residents)

The facility designed should have recreational areas available to all residents of the building, an integral element of such recreational areas should be landscape projects and decorative structures. That part should be fully accessible to persons with disabilities.

e. service space


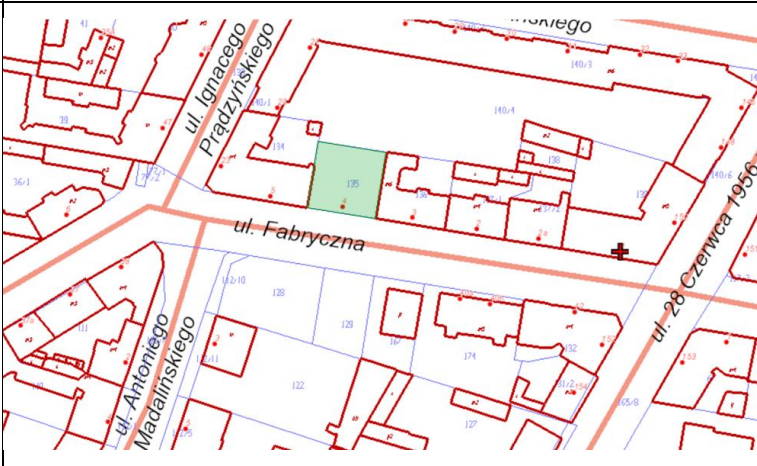
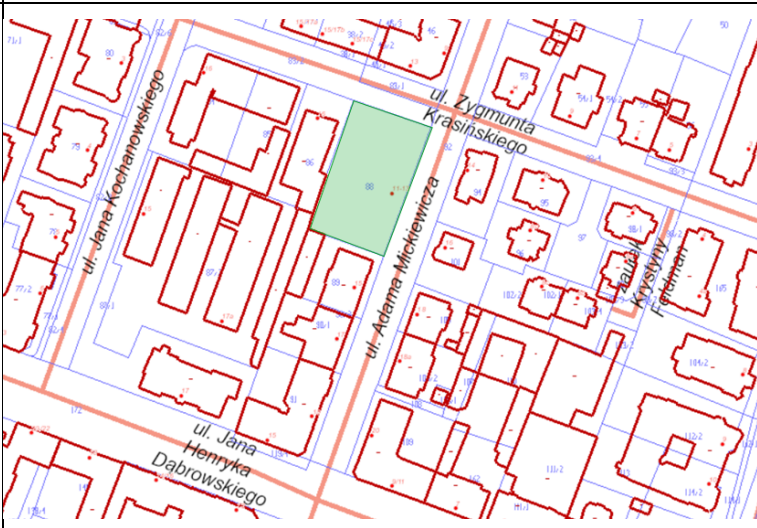
The facility designed should have an area intended as service premises. The student should determine the intended use of such an area and correctly design its layout, in accordance with the function proposed by the student, e.g. a restaurant, an art gallery, surgeries, a law firm, a shoemaker’s shop, a watchmaker’s shop, etc. That part should be fully accessible to persons with disabilities. The premises designed should have the basic arrangement with regard to the interior design and furnishings.

f. technological part:

The building should have mechanical equipment for ventilation and air conditioning, lifts, access pathways for persons with disabilities and the building should contain technical rooms enabling proper functioning of installations (air intake, air outlet, a ventilation room, a boiler room/heat centre, technical rooms, utility rooms) as well as an underground garage whose size is adjusted to the solutions adopted. Where possible, the building should have energy-efficient installations.

No.	LOCATION	PARCEL No.	SITE PLAN
1.	ul. Kolejowa	dz. 240/9	



2.	ul. Kościelna	dz. 118/1, 118/2, 118/3, 154/57, 154/58, 154/59	
3.	ul. Fabryczna	dz. 135	
4.	ul. Mickiewicza	dz. 88	



5.	ul. Przemysłowa - Żupańskiego	dz. 41	
6.	ul. Górna Wilda i ul. Wierzbicice	dz. 64 i 76/7	
7.	Murowana Goślina	dz. 574	

