

## General Information:

**Name of Course:**

# BUILDING DESIGN 1

**Course Code:**

PM-RTENE017

**Semester:**

2<sup>nd</sup>

**Number of Credits:**

4

**Allotment of Hours per Week:**

1 Lecture and 3 Practical Lessons /Week

**Evaluation:**

Signature (with grade)

**Prerequisites:**

**Basics of Architecture module B and C**

**Instructors:**

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## Introduction, Learning Outcomes:

As an introduction to Architectural Design, this course will explore the most fundamental part of the design process: design from the basics. Main focus will be on the private environment, the making of homes, so students are given a theoretical and practical basis for designing residential buildings in lectures.

The studio is meant to challenge the student's preconceptions about architecture while enabling them to become critical of the built environment. Emphasis will be placed on the formation of ideas and the abilities of the student to carry these ideas throughout the design process.

Several themes discussed in Module-B will be enhanced throughout the semester including spatial experience – influenced by light, contextual analysis, formal concepts. The process of architectural study includes models, drawings, diagrammatic as well as analytical and other visual material necessary to verify a concept or idea. The design process is a visual one through which thoughts must be recorded in forms of drawings and models, not verbs.

Upon completion of this course students should be able to interpret the different trends in architecture theory, visual communication techniques and apply their individual creativity with the knowledge of technical skills. The analysis of diverse design problems should result in complex residential building designs in an architecturally creative and appealing way.

To achieve this, lectures are given in the following topics: functional spatial arrangements in a house, layout schemes in case of diverse settings and orientations, hierarchy of the spaces, the cohesion of formal and functional elements, coherence of inside and the outside, the importance of transitional spaces, some residential building types, and contemporary examples.

In the semester assignments students present their understanding of complex design problems of the massing process, setting, functionality, aesthetics and structural coherence.

The course is based on the development of 2 basic architectural design projects in the practical part (marked with a P) and some research in form of studies and oral presentations the content of the lectures (marked with an L).

The projects are shown and presented for all the tutors in the class, where after the critic there is the possibility to make some improvements if needed for a better grade.

## General Course Description and Main Content:

As the first design studio course students attend in the Architecture graduate programme, it aims to provide the knowledge and firm basis of an individual architectural approach which is needed to acquire the final degree.

The Project's course includes:

- Regular (weekly) supervisions by the assigned tutor (teacher of the Architectural Institute).
- Process Dairy Booklet which is assessed as part of the regular supervision by the Main Supervisor contains sketches, ideas, the design process etc.
- The Design Projects are in details as a planning permission requires, a summary of the drawings documentation (ground plans, sections, elevations 1:100),
- Examinations in three stages (as in the Schedule of the Course).

### **Methodology:**

The course is based on lectures, supported by individual regular consultations and presentations.

### **Schedule:**

The semester is divided into two principle periods and exercises.

The rough outline of the schedule is as follows:

P Week 1-6: Design of a one level house in a suburban neighbourhood with plain landscape for a young family without children, or 1 child.

L Week 01: General information, registration; Developing the program, Building site, Setting

L Week 03: Functions and dimensions in a dwelling; Form & function

L Week 05: Material usage, Graphics – case studies; Test (15p)

#### Week 7: PROJECT PRESENTATION 1<sup>st</sup> DESIGN (35p)

- Required content presented on printed posters:
  - o Diagrams and sketches explaining the design process and idea developing
  - o Analyses of the site, functionalities, (inspirations, examples, conditions, relationships in space, needs and requirements, etc.)
  - o Presentation of the Building Site (analyses, diagrams, maps, materials, primer structures), master plans, geographical and morphological conditions)
  - o Site Plan with the Building's Surrounding (1:200) (with built and natural environment-
    - a./ the building site's boundaries, fences, gates, parking places
    - b./ the connecting road system inside and outside the plot
    - c./ the cardinal points
    - d./ the planned building and objects with main dimensions, and dimensions of height
    - e./ covered and green areas
  - o Floor plan ( 1:100) (with openings, names and dimensions, flooring)
  - o Sections (1:100) (at least 2, but all those needed for the understanding)
  - o Elevations (1:100 – all 4)
  - o Views, Details, Architectural Ideas (all those necessary to understand the design, but at least 3)
  - o Scaled Model incl. site (1:200)

L Week 7: Possible settings on a slopy site

Week 8-14: Design of a multilevel house in a suburban neighbourhood on a slope - for a family with 3 children.

L Week 9: Spatial consequences of light; Sustainability

L Week 13: Case studies

L Week 15: "My dream house" – case study presentation / layouted booklet 20\*20 at least 10 pages – 1 chosen house – a thorough analysis about the setting, the architectural language, functionality (10p)

#### Week 15: PROJECT PERESENTATION 2<sup>nd</sup> DESIGN (35p)

- Required contain presented with printed posters:
  - o Diagrams and sketches explaining the design process and idea developing
  - o Analyses of the site, functionalities, (inspirations, examples, conditions, relationships in space, needs and requirements, etc.)
  - o Presentation of the Building Site (analyses, diagrams, maps, materials, primer structures, geographical and morphological conditions)
  - o Site Plan with Building's Surrounding (1:200) (with built and natural environment - a./ the building site's boundaries, fences, gates, parking places b./ the contour lines of the slope, the main level heights c./ the connecting road system inside and outside the plot d./ the cardinal points e./ the planned building and objects with main dimensions, and

dimensions of height f./ covered and green areas, the main level heights g./ the height of ledge and ridge, the number of storeys

- o Floor plan ( 1:100) (with openings, names and dimensions )
- o Sections (1:100) (with the necessary number of understanding, but at least 2)
- o Elevations (1:100)
- o Views, Details, Architectural Ideas (with the necessary number of understanding, min, 3.)
- o Scale Model incl. site ( 1:200)

### **Studio Culture:**

The course is based on through collaboration, participation and discussions trough lessons. This is an interaction between Students and Faculty; used the teaching methods like 'Problem-based learning' and 'learning-by-doing'. The communication and work should be reflect a respect for fellow students and their desire to work with regard to noise levels, noxious fumes, etc. – from each site of participants.

### **Attendance:**

Attending is required all classes, and will impact the grade (max. 5%). Unexcused absences will adversely affect the grade, and in case of absence from more than 30% of the total number of lesson will be grounds for failing the class. To be in class at the beginning time and stay until the scheduled end of the lesson is required, tardiness of more than 20 minutes will be counted as an absence. In the case of an illness or family emergency, the student must present a valid excuse, such as a doctor's note.

The highest possible grade on the late project (in two weeks) is '2'. The Final Project cannot be turned in late.

### **Evaluation + Grading**

Grading will follow the course structure with the following weight: Project Presentation (oral and graphical) - 01, 35%, Project Presentation 02 (oral and graphical), 35 % and Test 15%, Booklet 10%. The remaining 5% will be assessed according to participation, progress, effort and attitude. Please note that attendance will adversely affect one's grade, both in direct grade reduction and in missing work in the development of a project. The final grade will be based on the following guidelines:

5. Outstanding work. Execution of work is thoroughly complete and demonstrates a superior level of achievement overall with a clear attention to detail in the production of drawings, models and other forms of representation. The student is able to synthesize the course material with new concepts and ideas in a thoughtful manner, and is able to communicate and articulate those ideas in an exemplary fashion in.

4. High quality work. Student work demonstrates a high level of craft, consistency, and thoroughness throughout drawing and modelling work. The student demonstrates a level of thoughtfulness in addressing concepts and ideas, and participates in group discussions. Work may demonstrate excellence but less consistently than an '5' student.

3 Satisfactory work. Student work addresses all of the project and assignment objectives with few minor or major problems. Graphics and models are complete and satisfactory, exhibiting minor problems in craft and detail.

2. Less than satisfactory work. Graphic and modelling work is substandard, incomplete in significant ways, and lacks craft and attention to detail.

1. Unsatisfactory work. Work exhibits several major and minor problems with basic conceptual premise, lacking both intention and resolution. Physical representation in drawing and models is severely lacking, and is weak in clarity, craft and completeness.

### **Grading Scale:**

Numeric Grade:	5	4	3	2	1
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Evaluation in points:	89%-100%	77%-88%	66%-76%	55%-645%	0-54%
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**PTE Grading Policy:**

Information on PTE's grading policy can be found at the following location:

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**Students with Special Needs:**

Students with a disability and needs to request special accommodations, please, notify the Deans Office. Proper documentation of disability will be required. All attempts to provide an equal learning environment for all will be made.

**Readings and Reference Materials:**

**Required:**

<http://www.amazon.ca/The-Language-Architecture-Principles-Architect/dp/1592538584>

**More:**

<http://www.amazon.com/Architectural-Graphics-Francis-D-Ching/dp/0470399112>

[http://www.amazon.ca/Architects-Data-Ernst-Neufert/dp/1405192534/ref=pd\\_bxgy\\_14\\_img\\_3/179-5143019-6085951?ie=UTF8&refRID=0ZYEVNXC1DM3RR4D7YK](http://www.amazon.ca/Architects-Data-Ernst-Neufert/dp/1405192534/ref=pd_bxgy_14_img_3/179-5143019-6085951?ie=UTF8&refRID=0ZYEVNXC1DM3RR4D7YK)

[http://www.amazon.ca/Design-Drawing-Francis-D-Ching/dp/0470533692/ref=pd\\_bxgy\\_14\\_img\\_3?ie=UTF8&refRID=1KVFZT78N1A3JVMAEHW7](http://www.amazon.ca/Design-Drawing-Francis-D-Ching/dp/0470533692/ref=pd_bxgy_14_img_3?ie=UTF8&refRID=1KVFZT78N1A3JVMAEHW7)