

Requirements for the Research-based Design Thesis for Master of Architecture, Tongji University

Department of Architecture, CAUP, Tongji University 2019.08.16

In accordance with the *Program for Master of Architecture in Tongji University*, this *requirement* applies to M. ARCH students who are writing research-based design theses. Specifically, it applies to thesis proposals, mid-term reviews and thesis defenses as well.

1. Thesis Proposal

The topic should have

- 1) an articulated regional, cultural, environmental, technical or theoretical context.
- 2) a clearly defined research question. Farsightedness and innovation are encouraged.

2. Content: Research and Design

The student should

- 1) conduct literature review, case analysis and raise research questions appropriately.
- 2) investigate geographical, natural, historical and humanities environment, as well as technological conditions in relation to the topic.
- 3) propose design ideas, methods and strategies, and justify them with analytical diagrams.
- 4) address the research questions with in-depth designs.

3. Output Requirement: Research Report and Design

- 1. The research report contains text and analytical diagrams. It should be composed of field surveys, site analysis, proposing design brief and appropriate design strategy. A reasonable length should be longer than 15000 words (without punctuation). The writing style and layout should follow existing guidelines, i.e., *Guidelines for Master's Theses of Tongji University*.
- 2. The design project should consist of physical models and drawings. The drawings should be no less than 10 panels (in A1 format). Meanwhile, these panels should be presented in the research report with folded A3 drawings as appendix. The drawings should include (but not limited to):
- 1) Master plans, floor plans, elevations, cross-sections, etc. and photographs of physical models.
- 2) Analytical diagrams of environment, organization, function, transportation and landscape. It is also necessary to provide perspectives and renderings illustrating design intentions, design concept analysis and lists of economic and technical indicators.
- 3) Design development (choose one according to the following four directions)
 - a. Architecture Design: Axonometric drawing of typical structural system, construction details of typical building facades and the corresponding elevations.
 - b. Urban Design: Urban design guidelines of a series of street blocks.
 - c. Interior Design: construction details and the corresponding elevations, design of typical furniture.
 - d. Architecture-Heritage Conservation: Value assessment, pathology analysis and conservation strategy of Architectural Heritage, conservation and rehabilitation design in technological level.