

**New York City College of Technology – City University of New York**  
300 Jay Street, Brooklyn, New York 11201

**Department of Architectural Technology**  
Bachelor of Technology in Architectural Technology

**ARCH 3610                      ARCHITECTURAL DESIGN VI**  
2 classroom hours, 6 lab hours, 5 credits

**Professors:**                      Iliya Azaroff, AIA    iazaroff@citytech.cuny.edu

**Course Description:** This is an Advanced Design studio with an emphasis on a more complex building organization. The primary emphasis is in the further development and exploration of design principles involved in creating appropriate architecture, focusing on the integration of program, context, site, composition and space planning.

**Course context:** This course is the sixth semester of architectural design. It is a required course.

**Prerequisites:** ARCH 3510 or ARCH 3511 with a grade of C or higher

**Suggested Text:** Clark, Roger H. (2004) *Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Partis*. John Wiley & Sons; 3<sup>rd</sup> edition [ISBN # 0471479748]

Vicente Guallart (2009) *Geologics, Geography Information Architecture*, Actar Press.  
Martin Bone, Kara Johnson (2009) *I miss my Pencil*, Chronicle Books  
Gramazio & Kohler (2008) *Digital Materiality*, Lars Muller Publishing  
Frei Otto, the IL series 1 through 36

**Web subscriptions:**

- inhabitat news letter
- Gizmag
- gizmodo.com
- Artdaily.org

**Attendance Policy:** No more than two absences will be permitted during the semester. For the purpose of record, being late for class twice will be considered as one absence. Being more than 10 minutes late for class will be considered lateness. Exceeding this limit will expose the student to failing at the discretion of the instructor.

**Course Structure:** There will be one project. Research papers, 2D and 3D drawings, and physical study models and final models will be utilized in program development, design and presentations.

<b>Grading:</b>	Research Documentation/Blog	30%
	Research Presentation	10%
	Class Participation	10%
	Design Presentation project 1	20%
	<u>Design Concept and Development project 2</u>	<u>30%</u>
	<b>TOTAL:</b>	<b>100%</b>

**A final grade of C or higher is required in this course to use it as a prerequisite for subsequent courses.**

**Academic Integrity:** Students and all others who work with information, ideas, texts, images, music, inventions and other intellectual property owe their audience and sources accuracy and honesty in using, crediting and citation of sources. As a community of intellectual and professional workers, the college recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension and expulsion

### **Learning Objectives**

Upon successful completion of this course, the student will:

1. **Develop** advanced level schematic design drawings and models. (Knowledge)
2. **Understand** the differences between different building systems (electrical, lighting, plumbing, HVAC and structure) and **integrate** them into the schematic design deliverables. (Knowledge)
3. **Research** building typologies and the neighborhood of the chosen site with emphasis on history, sociology, and infrastructure changes and **integrate** research into design. (Knowledge)
4. **Apply** knowledge of building codes pertaining to egress, plumbing, and fire protection/suppression to design without compromising design aesthetics. (Knowledge)
5. **Demonstrate** knowledge of different societies' values regarding space and its social implications. (Knowledge)
6. **Distinguish** between media and **determine** the appropriate method and media required to complete a drawing or model. (Gen Ed)
7. **Generate** talking points for persuasive presentation of design. (Gen Ed)
8. **Write** comparisons of precedents on specified typologies. (Gen Ed)
9. **Research** precedents and implement information literacy. (Gen Ed)
10. **Apply** quantitative analysis to design. (Gen Ed)
11. **Collaborate** on group projects. (Gen Ed)
12. **Critique** written reports and oral presentations of fellow students. (Gen Ed)
13. **Produce** orthographic, axonometric, perspective, and architectural vignette drawings. (Skill)
14. **Synthesize** site circulation, zoning, urban context, and views to design. (Skill)
15. **Synthesize** construction types, circulation systems, hierarchy, and light to building design. (Skill)
16. **Apply** sustainable principles to development design and construction documents. (Skill)
17. **Analyze** and **reduce** complex media (print, visual, sites) to component parts. (Skill)

### **Assessment**

To evaluate the students' achievement of the learning objectives, the professor will do the following:

1. **Review** students' creative process (initial sketches through to the final project) by means of frequent pin-ups. (Los: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14-17)
2. **Assess** the students' use of professional vocabulary during oral presentations and written work. (Lo: 7, 8, 14)
3. **Review** students' ability to incorporate a concept into their design work. (Los: 1)
4. **Evaluate** students' ability to write descriptions of building typologies and the surrounding neighborhood and their effective use of information literacy skills. (Lo: 7, 9)
5. **Evaluate** students' participation in class discussions regarding students written and oral presentations. (Lo: 12)

6. **Review** students' accuracy with applying quantitative information to a design scheme. (Los: 10)
7. **Evaluate** students' application of design precedents. (Los: 3, 9)
8. **Review** students' ability to synthesize circulation, zoning, urban context, and views into a design. (Lo: 14)
9. **Review** students' ability to synthesize construction types, hierarchy, and light into building design. (Lo: 15)
10. **Review** students' ability to incorporate environmental systems and sustainable concepts into their design work. (Lo: 1, 2, 3, 14, 15, 17)
11. **Review** of group projects will be based on the completeness of the work as well as the effectiveness of the group's team work and communication skills. (Lo: 11)
12. **Evaluate** students' ability to diagram complex media. (Los: 17)

### **Course Outline:**

**Week 1:** Introduction to the essentials! Essentials of Life, Human comfort. Need vs. Desire.  
Discussion: Who is our client? What is the culture of our time?

**Week 2: Presentation essentials, need vs. desire and intro to culture of our time.**

**Week 3: Charrette Project one defining the future of the city through community Equity.**

**Presentation** Introduction to building typologies and research methods.

- a. Define building typologies
- b. Introduce research methods and outline information that may be included
- c. Show examples of architectural thesis research projects
- d. Students to select building typology

Assignment: Research, readings and blog assignment.

**Week 4: Presentation Jury**

Site/Geographics and analysis of Geographies.

a building, including design concept, program, structural analysis, materials.... Introduction to key architectural terms that are used in describing a building. Continue research and posting.

**Week 5:** Introduction to program development Project 2.

Discussion of bubble diagram, space matrix, and findings during the research process. Review site analysis. Assignment: Students to create bubble diagrams and space matrixes and reading. Posting of Bubble diagram, space matrix.

**Week 6:** Introduction to concept development using various approaches, including: Datum/grid, Conceptual idea of program, Impression of site and key word. Beginning work of initial concepts to include multiple study models, sketches and collages.

**Week 7:** Continuation of concept development with manipulation of models, through expansion of ideas, combination of models and subtraction of elements.

**Week 8:** Introduction to final concept development. Develop plans and sections with their relationship to the site. Individual desk critiques. Assignment: Students to develop their design concepts and schematic design in plan, section and conceptual models. Post results.

**Week 9:** Introduction to development of conceptual ideas into realized building forms. Individual desk critiques. Assignment: Working with the design concept and program requirements, students will continue to develop their projects. Posting of all progress.

**Week 10: Pin-up of work to date.**

**Week 11:** Introduction to interiors and developing interior elevations and sections. Discussion of various materials that may be used on the interior of the building. Individual desk critiques. Assignment: Working with the design concept and program requirements, students will select appropriate materials and develop interior elevations and sections.

**Week 12:** Introduction of layout, presentation and organization. Assignment: Students to create typical layout and thumbnail drawings for each sheet in their presentation.

**Week 13:** Discussion: Criteria for final presentations. Development of final design, models, plans, sections, and elevations.

**Week 14:** Design and presentation refinements. Final juried presentations

**Week 15:** Portfolio review: Design portfolio to be prepared by each student, showcasing the semester's work. Plans, sections, elevations, renderings and photographs of the models to be included