ARCHITECTURE
Course 4

Department Contact
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Description
Architecture is the art and science of designing large structures and buildings. Architecture combines creativity with an understanding of modern technologies, social issues, and cultural trends to design structures for human use and therefore must also analyze and understand the safety and reliability of their created structures. Architects can design structures such as residential buildings, offices, churches, college campuses, industrial parks, and entire communities. Practicing architecture in a firm will also involve planning, budgeting, handling financial accounts, negotiating with contractors, ensuring compliance with health and safety regulations, and preparing specifications for materials and workmanship.

Inside Course 4

4	Architecture	Undergraduates: 22
4-B	Art and Design	Undergraduates: 12

Introductory Classes

4.001 **Where Is and What Is Architecture & Design?**
Introduces Architecture and Design through conversations and presentations with MIT architecture and design faculty and MIT alumni. Discusses the two undergraduate majors, two undergraduate minors, and two HASS concentrations offered through Course 4 along with careers in architecture and design. Subject can count toward the 6-unit discovery-focused credit limit for first-year students.

4.02A **Design Studio: How to Design Intensive**
Introduces fundamental design principles as a way to demystify design and provide a basic introduction to all aspects of the process. Stimulates creativity, abstract thinking, representation, iteration, and design development. Equips students with skills to have more effective communication with designers, and develops their ability to apply the foundations of design to any discipline. Limited to 30; preference to Course 4 and 4B majors and Design and Architecture minors, and first- and second-year students.

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4.021   **Design Studio: How to Design**
Introduces fundamental design principles as a way to demystify design and provide a basic introduction to all aspects of the process. Stimulates creativity, abstract thinking, representation, iteration, and design development. Equips students with skills to have more effective communication with designers, and develops their ability to apply the foundations of design to any discipline. Limited to 25; preference to Course 4 and 4B majors and Design and Architecture minors, and first- and second-year students.

4.053   **Visual Communication Fundamentals**
Provides an introduction to visual communication, emphasizing the development of a visual and verbal vocabulary. Presents the fundamentals of line, shape, color, composition, visual hierarchy, word/image relationships and typography as building blocks for communicating with clarity, emotion, and meaning. Students develop their ability to analyze, discuss and critique their work and the work of the designed world.

4.605   **A Global History of Architecture**
Provides an outline of the history of architecture and urbanism from ancient times to the early modern period. Analyzes buildings as the products of culture and in relation to the special problems of architectural design. Stresses the geopolitical context of buildings and in the process familiarizes students with buildings, sites and cities from around the world. Additional work required of graduate students.

4.657   **Design: The History of Making Things**
Examines themes in the history of design, with emphasis on Euro-American theory and practice in their global contexts. Addresses the historical design of communications, objects, and environments as meaningful processes of decision-making, adaptation, and innovation. Critically assesses the dynamic interaction of design with politics, economics, technology, and culture in the past and at present.

Course 4-Friendly UROP Areas
- MIT Media Lab
- Comparative Media Studies (CMS)

Skills
- Familiarity with basic engineering fundamentals
- Interpret and write technical documentation
- Conduct systems and quality control analysis
- Strong communication, interpersonal, and problem-solving skills

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Possible Future Jobs

- **Project architect:** Plan and design structures, such as private residences, office buildings, etc. Manage construction projects from the conceptual design phase through completion of the structure, leading teams of engineers and contractors to meet client needs, schedule, and budget.
- **Graphic designer:** Develop the overall layout and production design, using computer software or by hand, for various applications such as advertisements, brochures, magazines, and corporate reports.
- **Interior designer:** Make interior spaces functional, safe, and beautiful by determining space requirements and selecting decorative items, such as colors, lighting, and materials. They read blueprints and must be aware of building codes and inspection regulations, as well as universal accessibility standards.

Career Industry Examples

Architecture	Energy	Product Design
Consulting	Urban Planning	Real Estate Development
Visual Arts/Education		

Sample Employers

ADL Ventures	FM Global	Rhapsody Venture Partners
Autodesk	HYA Architecture	TAD Associates
Crusoe Energy Systems Ideo	Ideo	