Architecture: Principles, History, and Today
Semester 1

Grade Level: 9–12
Credit: 0.5

Course Overview

Architecture is all around us—it shapes our cities, reflects our values, and tells the stories of civilizations across time. In this engaging, design-forward course, students explore the foundational principles of architecture while tracing its evolution from ancient monuments to modern skylines. Through hands-on design challenges, visual analysis, and creative exploration, students begin to see the built environment not just as background—but as a powerful, expressive art form. This course empowers students to think critically, draw imaginatively, and design with purpose.

What Students Will Explore

The semester begins with an exploration of architectural fundamentals, including form, function, balance, scale, space, and structure. Students learn how buildings "speak" through design elements and materials, and how architects consider both aesthetics and utility in every project. They'll sketch floor plans, analyze spaces, and begin practicing basic architectural drawing techniques.

Next, students take a journey through architectural history, discovering how social, religious, and technological forces shaped design across civilizations—from the pyramids of Egypt and the temples of Greece to Gothic cathedrals and Islamic geometric design. They'll examine how the Renaissance redefined proportion, how the Industrial Revolution introduced new materials and construction methods, and how the 20th century brought about modernism, brutalism, and organic architecture.

The course then turns to the present, where students study notable architects and current architectural trends. Sustainability, green design, and smart technology will be key focus areas, helping students connect the past to the present—and their ideas to the real world.

Key Learning Experiences

- Design Sketchbooks – Students maintain a visual journal of architectural sketches, observations, and reflections
- Historic Styles Gallery Walk – Analyze and present architectural styles across time and culture
- Model-Making Challenges – Build basic 3D models to understand spatial relationships and structural ideas
- Architect Spotlight Series – Research and share the contributions of iconic architects, past and present
- Site Analysis Exercises – Learn how geography, climate, and culture influence architectural choices

Learning Objectives

By the end of this course, students will be able to:

- Identify and apply fundamental principles of architectural design
- Analyze and describe key architectural styles and movements throughout history
- Recognize the impact of social, cultural, and technological developments on architectural trends
- Demonstrate basic skills in architectural sketching, planning, and visual communication
- Evaluate how modern architecture addresses issues such as sustainability and urban development
- Communicate architectural ideas clearly through both verbal and visual presentations

Student Outcomes & Successes

Students who complete this course emerge with a new way of seeing the world around them. They are equipped to observe, interpret, and appreciate buildings as expressions of culture, purpose, and innovation. Many students develop a strong design portfolio that they can use in future art or technical education programs.

Others discover a newfound passion for architecture, urban planning, or engineering. Whether pursuing a creative career or simply gaining a deeper appreciation for design, students leave this course with confidence, creativity, and a broadened perspective on how the spaces we live in shape our lives.

The course is a fully online, self-paced, competency-based program, and we're very proud of it!

Students only advance once they've demonstrated true mastery of each skill—no rushing, no guessing. This flexible structure not only supports individual learning styles and schedules but also empowers learners to take ownership of their progress, knowing exactly what they can do next.

Moreover, every module, assignment, and assessment is meticulously aligned with state standards and clear learning objectives, guaranteeing comprehensive coverage of essential knowledge and real-world skills students need to succeed. This isn't just online learning—it's purposeful, rigorous, and personalized, ensuring no student advances until they truly understand the material.