

Architectural Science

The Architectural Science major focuses on the technical and creative aspects of building design and construction, combining principles of architecture, engineering, and technology. Students learn about building systems, materials, sustainable design, and project coordination while developing technical drawing and 3D modeling skills. This major is ideal for individuals interested in the intersection of design and functionality in the built environment. Typical industry sectors include architecture and design firms, construction, urban planning, sustainable building development, and interior design consulting.

Job Title Examples:

- Architectural Drafter
- Design Assistant
- BIM (Building Information Modeling) Technician
- CAD Technician
- Junior Architectural Designer
- Project Coordinator
- Interior Design Assistant
- Sustainability Consultant
- Construction Documentation Specialist
- Planning Technician

Hard and Soft Skills Needed:

Hard Skills:

1. CAD Software Proficiency (AutoCAD, Revit)
2. 3D Modeling and Rendering
3. Building Code Knowledge
4. Structural Systems Understanding
5. Sustainable Design Practices

Soft Skills:

1. Creativity
2. Attention to Detail
3. Problem-Solving
4. Communication
5. Team Collaboration

Further Education/Training Required and/or Suggested:

A BS in Architectural Science provides a strong foundation, but additional training or certifications may be needed based on career goals:

To Enter the Field:

1. Licensure as an Architect
 - Requires a NAAB-accredited M.Arch, completion of the Architectural Experience Program (AXP), and passing the Architect Registration Examination (ARE).
 - Not required for roles like architectural technologist or draftsman, but proficiency in tools like AutoCAD, Revit, and BIM is essential.
2. Alternative Roles
 - Certifications in software (e.g., Revit, SketchUp) or project management (e.g., PMP) can boost employability.

To Advance:

1. Specialized Certifications:
 - LEED Accreditation (green building expertise).
 - BIM Certification (proficiency in Revit or other modeling software).
 - Construction Management Certifications (e.g., CCM, PMP).
2. Graduate Degrees:
 - An M.Arch, MBA, or MS in Architectural Engineering for leadership or specialized roles.

Professional or Student Associations:

- American Institute of Architectural Students
- Construction Specifications Institute
- Society of Women Engineers
- National Society of Black Engineers