



ARCHITECTURAL INSTITUTE OF BRITISH COLUMBIA

What is an Architectural Technologist all about?

Architecture has been a vital part of human civilization for thousands of years. Our modern buildings may not look like the skin tents our earlier ancestors lived in but they do have several things in common; they incorporate design, are dependant on technology and function. Design, technology, and function; these are at the heart of the job of an Architectural Technologist.

Architectural Technologists are key members of the design team. They play a vital role in turning the design ideas of architects and engineers into practical, workable buildings. Architectural Technologists help research and prepare architectural drawings using special drafting software. They may also research building codes, test building materials for suitability, calculate cost estimates, building models based on architects' designs, and oversee construction projects by monitoring and inspecting the work of builders.

What are the Career Opportunities?

Depending on the local economy, opportunities for Architectural Technologists are varied with the level of activity in the construction industry. Many Architectural Technologists may find work with Architectural firms or construction and development companies. There are also job opportunities with many levels of provincial and municipal governing bodies.

Architectural Technologists perform many tasks of a technological nature as part of the interdisciplinary team of professionals and tradespersons involved in the building design, construction and management process. Architectural Technologists have the advantage of understanding buildings from several perspectives: the architectural and structural elements; the mechanical, plumbing, and electrical systems; the feasibility implications and the contractual and managerial processes.

Architectural Technologists become:

- Senior production personnel
- Job captains
- Specification writers
- Estimators
- Project coordinators and managers
- Building inspectors
- Quantity surveyors
- Developers
- Officials in property management departments
- Appraisers and assessors
- Technologists with builders/developers

- Technical representatives and sales staff for building suppliers and equipment manufacturers

The growing field of Architectural and Building Engineering Technology presents opportunities...

In consulting offices:

- Project director/coordinator
- Job captain
- Project analyst (code, building performance)
- Specification writing
- Contract document production
- Contract administration
- Quantity surveyor
- Value engineering

In the public sector:

- Building inspector
- Plan checker
- Facilities management
- Development services
- Research

With contractors and developers:

- Project coordinator/manager
- Site supervision
- Estimator

With suppliers:

- Technical representative and sales staff
- Product design, development and research

Opportunities may also exist in property management, trade associations and other construction related fields.

What do Architectural Technologists do in practice?

For many years Architectural Technologists have been an integral part of the architectural and construction team, charged with the task of preparing the documents needed to take a building from original concept to completion.

As project complexity has increased, Architectural Technologists have expanded their horizons building upon our understanding of the construction process. The traditional role of working drawing preparation has evolved into a wide variety of fields within the scope of project delivery.

Through the course of a project, and along with the architect, an Architectural Technologist's daily activities may include a variety of tasks, which are listed below. These tasks have been broken into their relevant project delivery phases:

Pre-Design

- Presale condition assessments
- Project due-diligence and feasibility studies
- Rezoning applications

Design

- Preliminary design and design development
- Site documentation and site analysis
- Consultant coordination
- Building code preliminary analysis
- Zoning analysis and preparation of Development Permit applications
- Design document preparation
- Presentation materials
- Consultation with municipal authorities

Permit, Tender, and Construction

- Material / product research and selection
- Building code analysis
- Permit, tender, and construction documentation
- Building science and building envelope studies
- Detail design and development
- Further consultant coordination
- Preparation and coordination of contract documents.
- Costing analysis
- Tendering

Contract Administration

- Field reviews, progress documentation, and reporting
- Shop drawing review
- Liaison with contractor
- Progress claim review
- As-built documentation and project close out

Post Construction

- Maintenance reviews
- Maintenance manual development
- Specific problem investigations
- Warranty period reviews

As Architectural Technologists' careers develop within a firm to a senior level, they may often play an ever-increasing role in the management of a firm and its day to day operations. In this role Architectural Technologists have become involved in activities such as:

- Marketing and business development

- Client consultation
- Fee proposals & project estimations
- Project scheduling
- Liability analysis
- Human resources and team management

In most of the activities listed above, specialists have developed in each field whose focus is on the refinement of any one of these areas. The careers of many Architectural Technologists have further evolved from the traditional role of working directly with an architect to providing services in many of these specializations.

WHAT TALENTS SHOULD YOU HAVE?

To be an effective Architectural Technologist, a combination of technical, communication, design, and business skills are examples of valuable talents that would help you succeed. Architectural Technologists, like people in many other careers, have varying strengths and weaknesses. You might ask yourself a few questions:

- Do you enjoy problem solving?
- Could you make important decisions on site visits?
- Are you able to work as part of a design team?
- Are you creative?
- Are you organized?
- Would you like a wide variety of career options?

You might consider spending some time in an architect's or Architectural Technologist's office observing and asking questions; most Architects and Architectural Technologists will welcome a visit from people interested in the this field. Read all you can about architecture and its technical aspects; surf the internet and consult your local librarian for information. Review professional magazines and trade papers. Contact some of the major organizations in the industry for information about technology in architecture and career options; the Canada Mortgage and Housing Corporation, Canadian Wood Council and the Construction Specifications Canada are a few examples of organizations which could further inform your decision. Visit the technical institutions, like British Columbia Institute of Technology during their terms to help determine if you're ready for the educational commitment.