


7.2.4 Emerging job roles dashboards

Architectural Technologist

 Estimated Time Horizon: Short-term

Trends Impacting This Role

Technology trends i.e., BIM Technology, Digital Twin, Modular Construction, and 5G, IoT & Smart Buildings

Other Considerations

Companies looking to enhance efficiency of and streamline architectural work processes can leverage this specialised job role.

Responsibilities of the Role

The Architectural Technologist is responsible for using their expertise in technology to produce building designs and overcome structural challenges. The job holder collaborates with architects and construction design teams on the infrastructure design process while drafting the design plans. The job holder also builds knowledge of legal processes to manage contracts and apply legal rules during the drafting process.

Job Tasks

- ▶ Leverage technology expertise (e.g., Computer Aided Design Software) to draft structural designs and prototypes, in collaboration with architects and engineers
- ▶ Lead and manage architectural progress by producing building scans that enable architects and engineers to perform their jobs roles efficiently and accurately
- ▶ Devise, lead and oversee the development of technical software and solutions to future potential architectural challenges in the Design & Construction cluster
- ▶ Maintain knowledge of current architectural technical standards, and keep abreast of cutting-edge architectural systems and processes

Technical Skills and Competencies

3D Modelling	Application Support and Enhancement	Architecture Design	Augmented Reality Application
Building Information Modelling Application	Computational Design	Construction Technology	Continuous Improvement Management
Contract Administration and Management	Critical Thinking	Data Collection and Analysis	Design for Maintainability
Design for Manufacturing and Assembly	Design for Safety	Design Sketching	Design Standards and Specification
Design Thinking Practice	Emerging Technology Synthesis	Façade Design	Green Building Strategy Implementation
Integrated Digital Delivery Application	Material Studies and Production Processes	Placemaking and Programming of Spaces	Regulatory Submission and Clearance
Stakeholder Management	Technical Drawing	Technical Presentation	Technology Application

Technology Road Mapping

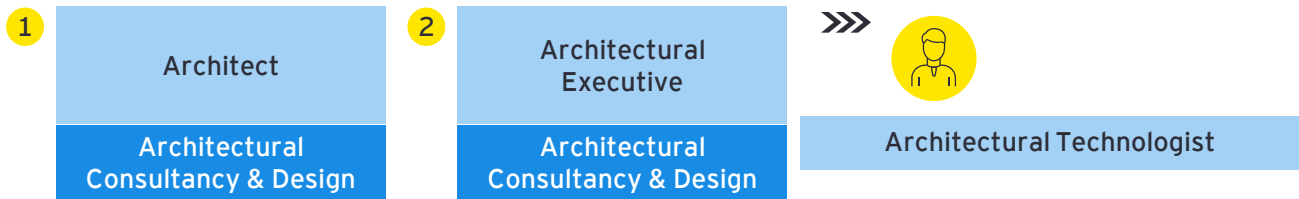
Critical Core Skills

Collaboration Communication Digital Fluency Transdisciplinary Thinking

Note: Skills highlighted are not exhaustive but have been preliminarily identified as potentially most pertinent to the job role and may be adjusted based on individual organisational strategy and needs.

7.2.5 Reskilling roadmaps

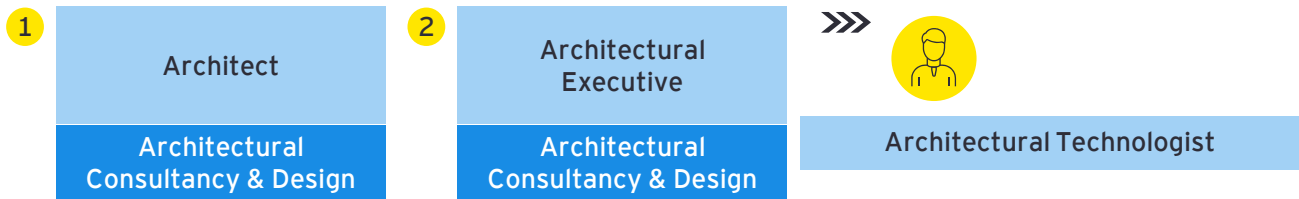
Architectural Technologist



1	Mobility Option	Potential Transferable Skills	Additional Skills to Develop
	<p>Architect</p> <p>Architectural Consultancy & Design</p>	<ul style="list-style-type: none"> ▶ 3D Modelling ▶ Architecture Design ▶ Augmented Reality Application ▶ Building Information Modelling Application ▶ Construction Technology ▶ Continuous Improvement Management ▶ Contract Administration and Management ▶ Critical Thinking ▶ Data Collection and Analysis ▶ Design for Maintainability ▶ Design for Manufacturing and Assembly ▶ Design for Safety ▶ Design Sketching ▶ Design Standards and Specification ▶ Design Thinking Practice ▶ Façade Design ▶ Green Building Strategy Implementation ▶ Integrated Digital Delivery Application ▶ Material Studies and Production Processes ▶ Placemaking and Programming of Spaces ▶ Regulatory Submission and Clearance ▶ Stakeholder Management ▶ Technical Drawing ▶ Technical Presentation ▶ Technology Application 	<ul style="list-style-type: none"> ▶ Application Support and Enhancement ▶ Computational Design ▶ Emerging Technology Synthesis ▶ Technology Road Mapping

7.2.5 Reskilling roadmaps

Architectural Technologist (cont'd)



2	Mobility Option	Potential Transferable Skills	Additional Skills to Develop
	<div style="background-color: #ADD8E6; padding: 20px; text-align: center;"> <p>Architectural Executive</p> </div> <div style="background-color: #0070C0; color: white; padding: 5px; text-align: center; margin-top: 10px;"> <p>Architectural Consultancy & Design</p> </div>	<ul style="list-style-type: none"> ▶ 3D Modelling ▶ Augmented Reality Application ▶ Building Information Modelling Application ▶ Computational Design ▶ Construction Technology ▶ Continuous Improvement Management ▶ Critical Thinking ▶ Design for Maintainability ▶ Design for Manufacturing and Assembly ▶ Design for Safety ▶ Design Thinking Practice ▶ Façade Design ▶ Integrated Digital Delivery Application ▶ Placemaking and Programming of Spaces ▶ Regulatory Submission and Clearance ▶ Stakeholder Management ▶ Technical Drawing ▶ Technical Presentation ▶ Technology Application 	<ul style="list-style-type: none"> ▶ Application Support and Enhancement ▶ Architecture Design ▶ Contract Administration and Management ▶ Data Collection and Analysis ▶ Design Sketching ▶ Design Standards and Specification ▶ Emerging Technology Synthesis ▶ Green Building Strategy Implementation ▶ Material Studies and Production Processes ▶ Technology Road Mapping