

New Zealand Diploma in Design

# **Kitchen Design/ Bathroom Design**

(Level 5)

# **Specifications**

**April 2016**

Programmes leading to the award of the NZ Diploma in Design (Kitchen Design/Bathroom Design) (Level 5) must fully recognise all aspects of these Kitchen and Bathroom Design specifications.

Aspects include:

- Provision of opportunities for learners to demonstrate knowledge and skill to cover all skills sets within the specifications
- An appropriate balance of content to ensure that the scale and proportion of individual specifications and skill sets are met
- Ensuring that the level of complexity of knowledge and skill requirements are those of an industry practitioner demonstrating ability to meet NZQF Level 5 descriptors

# The Kitchen and Bathroom Design (Level 5) Specifications

Welcome to the specifications that set out the content of the New Zealand Diploma in Design (Kitchen Design/Bathroom Design) (Level 5).

The following notes may assist you in reading and interpreting the specifications, especially if you are familiar with qualifications composed of unit standards.

1. The specifications constitute the **prescription** for a qualification. They describe what needs to be learned.
2. Specifications are grouped by topic which is generally determined by the key processes of design.
3. Specifications set out **capability requirements**. They represent what a person must be judged able to do.
4. Specifications avoid duplication. As an example, all theory requirements related to communication are contained in the skill-set and not repeated in the skill-sets where they are applied in practice.
5. Unlike unit standards, specifications are not precise descriptions of what or how to assess. That detail is contained within the programmes that BCITO and polytechnics develop in order to deliver the prescription to apprentices. Guidance documentation sits below these specifications to assist in programme development.

*The context of this qualification is kitchen or bathroom design in residential settings. Individuals awarded this qualification must have achieved the 'core' requirements and at least one of the "Design Development – Kitchen" or the "Design Development – Bathroom" skill sets.*

# Core

Specification: Fundamentals (60 credits)	
Skill Sets:	Covering:
Legislation	Building, health and safety, client protection legislation
Communication	Communication principles, interviewing clients, communicating effectively
Measurement and Calculation	Building geometry, site measurement, design calculations
Construction Knowledge	Building components, construction requirements and considerations, site inspection
Contracts, Tendering, and Quoting	What to include in a contract, tendering processes for design, developing quotes
Research and Analysis	Sourcing and recording information, analysis to develop design solutions, evaluation against design requirements
Project Planning and Administration	Project scheduling, budgeting, time management, documentation administration, quality assurance

# Design Development

Specification: Design development - Kitchen (60 credits)	
Skill Sets:	Covering:
Design	Design principles and theory, space planning, kitchen design brief development, kitchen design solution development, creating working drawings
Products and Materials	Surface materials, fixtures and fittings, hardware, appliances, cabinets and benchtops, lighting, specifying products and materials

Specification: Design development - Bathroom (60 credits)	
Skill Sets:	Covering:
Design	Design principles and theory, space planning, waterproofing and drainage requirements, bathroom design brief development, bathroom design solution development, creating working drawings
Products and Materials	Surface materials, fixtures and fittings, hardware, appliances, cabinets and benchtops, lighting, specifying products and materials

To achieve this fundamentals specification, you must understand the underpinning principles of residential kitchen and bathroom design work and be able to apply them in practice to all areas of kitchen and bathroom design work.

This specification contains these seven skill sets:

- Legislation
- Communication
- Measurement and Calculation
- Construction Knowledge
- Contracts, Tendering and Quoting
- Research and Analysis
- Project Planning and Administration

Each skill set comprises:

***Know***

(the theory that underpins the practical skills)

***Do***

(the practical skills you need to have)

***Comments***

(explanatory notes to clarify specific aspects of knowledge and skill)

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### **Skill Set 1: Legislation**

<b>Know:</b>	The health and safety legislative framework as it applies to the design of kitchens or bathrooms
	The building legislative framework as it applies to the design of kitchens or bathrooms
	The client protection legislative framework as it applies to the design of kitchens or bathrooms
<b>Do:</b>	Assess and apply the relevant legislative frameworks in the context of kitchen or bathroom design
	Implement compliance procedures in the context of kitchen or bathroom design
<b>Comments:</b>	The legislative framework refers to the hierarchy of Acts of Parliament, Regulations, Rules, Codes, Standards, approved codes of practice and best/good practice guidelines
	The level of legislative knowledge required is that of a design practitioner rather than that of an expert with specialist legal knowledge

### **Skill Set 2: Communication**

<b>Know:</b>	The principles of good communication
<b>Do:</b>	Interview clients to establish the requirements for kitchen or bathroom designs
	Communicate effectively with the parties to the kitchen or bathroom design and construction process
<b>Comments:</b>	Design requirements include scope of works, budget, timeframes, materials, fixtures, fittings and accessories
	Parties to the design and construction process include the client, main contractor, subcontractors, suppliers, other designers and compliance bodies
	Communication includes sales communication, marketing communication and negotiation
	Communicating effectively involves written, oral and graphic communications, and includes the ability to discuss and reach conclusions about requirements and solutions

### **Skill Set 3: Measurement and Calculation**

<b>Know:</b>	Different units of measurement and how they are used
	How to calculate area and volume
	Pythagoras' theorem and its application to design
	How to use and apply percentages and ratios to design calculations
<b>Do:</b>	Take and record kitchen or bathroom design project site measurements
	Perform calculations for kitchen or bathroom design development

**Skill Set 4: Construction Knowledge**

**Know:** The components of buildings' service and support systems and their impact on kitchen or bathroom design

Construction requirements and their impact on kitchen or bathroom design

Renovation considerations and their impact on kitchen or bathroom design

**Do:** Perform site inspection for kitchen or bathroom design projects

**Comments:** Components of buildings' service and support systems include electrical systems, plumbing systems, heating and/or extraction systems and insulation

Construction requirements include framing, floors, windows, doors, building interior, linings and finishings

Renovation considerations include adding or removing walls, doors, and/or windows, shifting plumbing or electrical systems and making structural changes

The level of construction knowledge required is that of a design practitioner rather than that of an engineer or builder

**Skill Set 5: Contracts, Tendering, and Quoting**

**Know:** The legal status of a contract and the legal responsibilities of the parties to a contract

What to include in a contract for a kitchen or bathroom design

What to include in a contract for purchase of a kitchen or bathroom

Tendering processes as they apply to kitchen or bathroom design

The difference between estimating and quoting

The quoting process as it applies to kitchen or bathroom design

**Do:** Negotiate, develop and manage contracts for kitchen or bathroom design projects

Develop quotes from a scope of works

**Comments:** Considerations associated with contractual relationships may include hidden commissions, protection of deposits and preferred creditors

**Skill Set 6: Research and Analysis**

**Know:** How to source, record and organise information relevant to the kitchen or bathroom design process

How to analyse information for evaluation against specified requirements

**Do:** Research information to inform development of kitchen or bathroom designs

Analyse information and make decisions to develop design solutions for kitchens or bathrooms

Evaluate potential design solutions against the requirements of a design brief and identify areas for development

**Skill Set 7: Project Planning and Administration**

**Know:** The planning, budgeting, time and scope management and documentation requirements for kitchen or bathroom design projects

**Do:** Research information to inform development of kitchen or bathroom designs  
Analyse information and make decisions to develop design solutions for kitchens or bathrooms  
Evaluate potential design solutions against the requirements of a design brief and identify areas for development

**Comments:** Planning includes processes for monitoring effectiveness and implementing changes where required

Specification:

## Design Development - Kitchen

(60 credits)

To achieve this specification you must understand how to conceptualise, develop, and present designs and product specifications for residential kitchens.

This specification contains two skill sets:

- Design
- Products and Materials

The skill set comprises:

### **Know**

(the theory that underpins the practical skills)

### **Do**

(the practical skills you need to have)

### **Comments**

(explanatory notes to clarify specific aspects of knowledge and skill)

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**Skill Set 1: Design**

<b>Know:</b>	Design principles and elements, their purposes, use and applications to kitchen design
	Types of drawings and their functions
	The terminology and abbreviations, and the drawing conventions used in kitchen design sketches and drawings
	Colour principles
	How the materials used in different regional styles and themes influence kitchen design
	The impact of space planning and ergonomics on kitchen design
	The advantages and disadvantages of different types of kitchen layouts and their impact on design
	The types of mechanical systems used in kitchens, their functions and efficiency and their impact on design
	The purpose and key components of a design brief
<b>Do:</b>	Practically apply design knowledge in everyday kitchen design contexts
	Develop design briefs and concepts for kitchen design projects
	Develop, prepare and present design solutions to meet the design brief for kitchen design projects
	Create working drawings for kitchen design projects
<b>Comments:</b>	Space planning and ergonomic requirements include food flow sequence, work triangle, main appliances, fixtures and fittings, landing spaces and storage requirements, storage systems, vertical heights for major kitchen components and access.
	Mechanical systems include venting, heating, extraction, electrical and plumbing services, integrated systems, sound systems and smart appliances
	Design solutions include supporting documentation, sketches, recommendations, design statement, and amendments to the plan
	Drawings include fully dimensioned floor plans and elevations, concept electrical and lighting plans and mechanical plans
	Drawings must contain all the information required to construct the design

**Skill Set 2: Products and Materials**

<b>Know:</b>	Types, properties, advantages and disadvantages, and impact on design of flooring and surface materials used in kitchens
	Types, properties, advantages and disadvantages, and impact on design of plumbing fixtures and fittings used in kitchens
	Types, properties, advantages and disadvantages, and impact on design of kitchen hardware used in kitchens
	Types, properties, and impact on design of appliances used in kitchens
	Types, properties, construction, and impact on design of cabinets and benchtops used in kitchens
	Types, properties, and impact on design of lighting used in kitchens
<b>Do:</b>	Advise clients on product and material options to assist with development of design solutions
	Specify and source products and materials for kitchen design projects
	Create a set of specifications for kitchen design
<b>Comments:</b>	Kitchen design includes design for residential spaces
	Surface materials include materials for surfaces of benches, doors and drawers, and walls and ceilings
	Properties are context and material dependent and may include durability, material lifespan, water resistance/proofing, ease of cleaning, impact resistance, sound transfer, porosity and/or stain resistance

Specification:

## Design Development - Bathroom

(60 credits)

To achieve this specification you must understand how to conceptualise, develop, and present designs and product specifications for residential bathrooms.

This specification contains two skill sets:

- Design
- Products and Materials

The skill set comprises:

***Know***

(the theory that underpins the practical skills)

***Do***

(the practical skills you need to have)

***Comments***

(explanatory notes to clarify specific aspects of knowledge and skill)

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**Skill Set 1: Design**

<b>Know:</b>	Design principles and elements, their purposes, uses, and applications to bathroom design
	Types of drawings and their functions
	The terminology and abbreviations, and drawing conventions used in bathroom design sketches and drawings
	Colour principles
	How the materials used in different regional styles and themes influence bathroom design
	The impact of waterproofing and drainage requirements on bathroom design
	The impact of space planning and ergonomics on bathroom design
	The advantages and disadvantages of different types of bathroom layouts and their impact on design
	The types of mechanical systems used in bathrooms, their functions and efficiency, and their impact on design
	The purpose and key components of a design brief
<b>Do:</b>	Practically apply design knowledge in everyday bathroom design contexts
	Develop design briefs and concepts for bathroom design projects
	Develop, prepare and present design solutions in accordance with a design brief for bathroom design projects
	Create working drawings for bathroom design projects
<b>Comments:</b>	Space planning and ergonomics requirements include flow sequence, fixtures and fittings, landing spaces and storage requirements, storage systems, vertical heights for major bathroom components and access
	Mechanical systems include venting, heating, extraction, electrical and plumbing services, integrated systems, sound systems and smart appliances
	Design solutions include supporting documentation, sketches, recommendations, design statements and amendments to the plan
	Drawings include fully dimensioned floor plans and elevations, concept electrical and lighting plans and mechanical plans

**Skill Set2: Products and Materials**

<b>Know:</b>	Types, properties, advantages and disadvantages, and impact on design of flooring and surface materials used in bathrooms
	Types, properties, and impact on design of fixtures, fittings, and accessories used in bathrooms
	Types, properties, construction, and impact on design of cabinets used in bathrooms
	Types, properties, and impact on design of lighting used in bathrooms
	Types, functions, and properties of technology options used in bathrooms
<b>Do:</b>	Advise clients on product and material options to assist with development of design briefs
	Specify and source products and materials for bathroom design projects
	Create a set of specifications for bathroom design
<b>Comments:</b>	Surface materials include materials for the surfaces of benches, doors and drawers, and walls and ceilings
	Properties are context and material dependent and may include durability, material lifespan, water resistance/proofing, ease of cleaning, impact resistance, sound transfer, porosity and stain resistance
	Fixtures are items that hold water, fittings are items that water passes through, accessories are items that make a bathroom functional
	Technology options include sound systems and integrated systems and technologies



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