

NATIONAL CERTIFICATE IN BOATBUILDING MARINE CABINETMAKING (Level 4)

250 CREDITS Version 5

An apprentice completing this NZQA registered qualification will gain the knowledge and skills required to be Marine Industry recognized and qualified as a competent **Marine Cabinetmaker**.

This qualification is for apprentices in the Marine Industry who specialise in marine cabinetmaking, rather than the construction of boats.

In this qualification, apprentices gain a knowledge of boat drawings and basic boatbuilding skills including lofting, calculations and safety. Apprentices also study the interior fitting out of boats, the use of specialised machinery, how to finish timber (staining, polishing etc.) and how to correctly laminate and join timber. They also gain a detailed understanding of the exterior components such as hatches, vents etc.

All medium to large boats, regardless of the material from which they are built will require furniture to be built and installed, and all owners require that their wood working skills be of the highest standard and finish. This is where the skills of the marine cabinetmakers are put to the test - skills around timber selection, machining, interpreting plans, knowledge of glues and adhesives finishing, and their overall eye for detail and quality.

This qualification takes, on average 3 to 4 years to complete.

Continued on next page

Michael Shieffelbein



Michael Shieffelbein completed his National Certificate in Boatbuilding (Marine Cabinetmaking) Level 4 in 2009. While still an apprentice he represented New Zealand in the World Skills Competition in Canada, coming a very creditable 14th in the world.

He is currently working at Superyacht Interiors New Zealand Ltd and recently spent six months in England installing interiors. He is off to Spain shortly, for the same reason.

His plans for the future include staying involved with the World Skills Competition (he has been invited to be a judge at the next one) and moving up to a team leader's position.

Continued from previous page

NATIONAL CERTIFICATE IN BOATBUILDING (MARINE CABINETMAKING) Level 4 (Version 5)

Unit Standard Content

Unit Number	Unit Title	Level	Credit Value
414	Demonstrate knowledge of the distribution environment	2	4
2201	Design and construct an assembly jig for wooden furniture	3	2
2241	Match, join, and press veneer overlay for furniture making	4	5
5433	Demonstrate knowledge of electrical and electronic applications for marine use	4	8
9913	Demonstrate a knowledge of the New Zealand marine industry	2	3
9917	Demonstrate knowledge of boatbuilding methods	2	4
9922	Produce templates and patterns used in boatbuilding	3	4
9923	Install internal and external boat hardware fittings	4	4
9932	Install interior boat cabinetry	4	10
9935	Construct interior boat cabinetry in timber	4	20
10836	Produce scale drawings of boat surfaces from corrected offsets	2	6
10841	Produce a half model of a small craft to scale	4	10
17740	Rectify faults in furniture surfaces for furniture finishing	2	4
18158	Select, use and care for hand tools used in boatbuilding	2	5
18159	Select, use and care for portable power tools used in boatbuilding	2	5
18160	Operate mechanical plant used in boatbuilding	2	12
18161	Perform measurements and calculations used in boatbuilding	2	5
18162	Calculate quantities and costs for boatbuilding projects	3	4
18163	Demonstrate a knowledge of boatbuilding construction drawings and produce related freehand sketches	3	2
18164	Demonstrate knowledge of insulation and install insulation in boats	3	2
18165	Demonstrate knowledge of computer technology used in the boating industry	3	6
18166	Participate in a project team in the boating industry	2	4
18169	Laminate and join timber materials used in boatbuilding	3	4
18170	Contribute to a project team in the boating industry	3	3
18896	Manufacture laminated, shaped furniture components	4	5
18897	Edge joint materials used in furniture making to make a flat panel	3	3
23041	Demonstrate knowledge of abrasives and equipment used in marine painting	3	3
23047	Demonstrate knowledge of clear marine finishes and application	3	4
23241	Loft a boat hull	4	10
23242	Loft full sized decks and superstructures	4	6
23243	Identify and explain the causes and prevention of material deterioration in the marine environment	4	8
23244	Identify and apply health and safety procedures for the boatbuilding industry	3	4
25117	Demonstrate knowledge of timber used in boatbuilding	3	4
25118	Demonstrate knowledge of adhesives used in boatbuilding	3	3
25154	Prepare for and apply a marine interior coating system	4	8
25343	Identify boat fittings and fastenings	2	4
25344	Demonstrate knowledge of marine trades and expectations of employees	2	3
25345	Demonstrate knowledge of terminology used in the marine industry	2	6
25532	Assemble non-show wood dining chair seat frames	2	2
25533	Assemble non-show wood lounge chair or settee frames	3	5
25546	Produce a cutting list for furniture making	4	4
25547	Calculate material quantities from a cutting list or furniture drawing	4	4
26542	Demonstrate basic knowledge of the operation of recreational craft by day	2	6

NATIONAL CERTIFICATE IN BOATBUILDING (MARINE CABINETMAKING) Level 4 (Version 5)

Elective Unit Standard Content Plus at least **25** credits from the following list:

Unit Number	Unit Title	Level	Credit Value
2203	Repair wooden furniture ready for finishing	4	5
2229	Operate Computer Numerical Controlled (CNC) machine to produce furniture components	3	4
3170	Produce a laminate by vacuum bagging for composites	4	2
3171	Produce a cored laminate for composites	3	3
9931	Overlay boat deck with teak	4	15
9934	Construct interior wooden support structures for boats	4	15
9936	Construct exterior boat joinery in timber	4	20
10843	Mark out full sized boat components from loftings and computer generated mylars	3	2
14996	Construct working drawings for use in furniture making	3	5
23049	Demonstrate knowledge of composite technology for boatbuilding	4	6
25115	Describe, install and test plumbing systems in boats	3	6
25152	Apply 2D CAD/CAM in boatbuilding	4	5
25155	Fair boat surfaces	3	4
25156	Fill boat surfaces	3	6
25527	Set up and maintain conventional spray equipment for furniture finishing	3	6
25528	Set up and maintain air-assisted spray equipment for furniture finishing	3	5

