

Colour cover

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Working with Timber is a regional Pacific project commissioned by The Commonwealth of Learning.

The course is a part of the Pacific programme of Basic Trades training for small island nations. This programme is initiated and supported by the Pacific Association for Technical and Vocational Education and Training (PATVET) and the Commonwealth of Learning.

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Modules

- Choosing timber
- Using woodworking tools
- Measurement and plans
- Joining timber

Student checklist

Credits

The idea of a Basic Trades programme was originally proposed at the PATVET Institute in 2002 and then explored and documented at a workshop held in Suva, Fiji in June 2003. This workshop involved ideas and input from representatives of mainly smaller island nations in PATVET:

Kiribati	Taeboa Tabanga
Nauru	Ande Dubuae
Niue	Charlie Tohovaka
Tuvalu	Lapana Ene
Fiji (FIT)	Joeaia Vinali and Viliame Ramici

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Betio Shipyard, Tarawa
The construction workers at the new Betio Island Council building, Tarawa
Capelle's Store, Nauru
Students and staff at Fiji Institute of Technology

What is this course for?

This course is a basic introduction to working with timber, tools and plans. It helps you:

- think about some of the good and bad things about different timbers and how to choose the right timber for a job.
- practise using simple tools to make basic joints and frames.

The course looks at timber used in building rather than the finer work in cabinet making. The focus is on 'western' style construction rather than traditional or custom building methods.

You will work with timber that is available locally and use common, simple hand-tools.

The course is intended for school leavers and community groups who have very limited knowledge of choosing and working with timber.

When you have finished this course you should be able to work on simple projects on your own. You will still need to work with a skilled tradesperson for more difficult construction — such as those involving structural work, safety or compliance with building standards.



What does the course cover?

Working with Timber has four modules. They are:



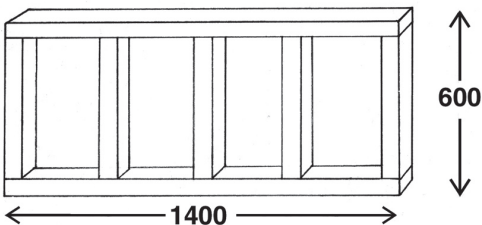
Choosing timber

You learn about timber, where timber comes from and the good and bad things about different timbers. You get to know the types of timber available and choose suitable timber for a job.



Using woodworking tools

You will learn about basic woodworking tools and their parts, choose the best tool for a job and learn how to correctly use the tools for simple jobs. The module covers measuring & marking tools, saws, hammers, chisels, clamps & vices.



Measurement and plans

You will learn to read and work with basic plans. You will take basic measurements and measure and mark out timber. You will also work out quantities and costs.



Joining timber


You learn about the common types of timber-joint and choose the correct joint for a job. You make simple joints correctly and choose the best fixings. The modules covers butt, housing and lap joints, nails, screws and bolts.

Students' Workbook

Your Workbook has exercises, pictures and explanations as well as space to make your own notes.

Hammers

This worksheet is about hammers that you use to hit nails.



What you will learn

When you have finished this worksheet, you should be able to:

- Hammer a nail correctly.
- Pull out a nail correctly.

Note

There is also a **Nails** Worksheet that gives more information about ways to place, position and drive nails to make strong joints.

Things you need before you start

Materials

You will need some scrap timber and nails to work on.

Tools or equipment

A hammer

Nails

Course resources

Course video, Video player

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Your Workbook also has a copy of a Worksheet for each tool, fixing and joint. Your tutor will work through each worksheet with you, talking about the tools and fixings and showing you how to use them.

The worksheets should not be used by students learning on their own.

Video

The video shows common tools being used to work timber – saws, tape measures, hammers, chisels, clamps and vices.

It also shows you some typical forests, how trees are logged and sawn and how timber is processed into the form you can buy.



The role of the Tutor

Your tutor for this course is a competent tradesperson with knowledge of timbers and construction methods and skills in using wood working tools. They will show you how to use tools correctly and tell you how well your skills are developing.

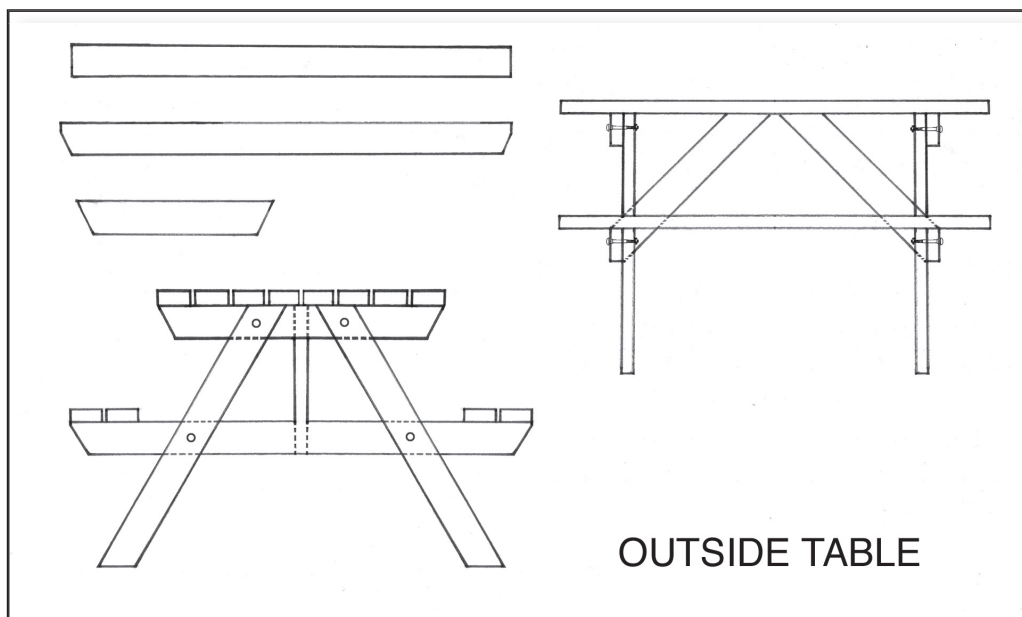
Your tutor will:

- Have timber samples, tools and benches for you to work with
- Lead you through the material
- Explain and the written material
- Show you types of timber and plans
- Show you how to use tools correctly and safely
- Watch you work and tell you how you are doing
- Complete your student checklist to record the work you have done.

Projects

At the end of the course you will work on a project that uses the skills you have learned. You will get to make something like:

- a simple frame construction,
- a workbench,
- a saw-horse,
- an outside (BBQ) table.
- or something similar.



This course tells you a lot about timber and tools, but you need to be able to **use** the tools — not just talk about them.

The course books and your tutor can show you how to use a saw, but you need lots of practise to develop any skill with the saw. Take plenty of time for practice.

Whenever you can, work with two or three students. You can

- watch and give each other feedback on how you are doing
- learn from watching them.