

# Materials Technology Wood (MTW)



Materials Technology Wood (MTW) is one of the technology subjects offered at junior cycle. In MTW you will learn to design small projects and the skills required to use tools and equipment to make your designs. You will work mainly with wood but also with other materials. You will learn about wood as a material and how it is produced.

### What will I learn in MTW?

Some of the things you will learn include:

- how to design a project given a brief description of what you are to make
- how to use the internet for research purposes
- how to use freehand sketching to communicate your ideas
- how to prepare a design drawing/plan of a project you design
- how to read design drawings and make small projects from these drawings
- how to safely use a range of hand and power tools in producing your design.

### How will I learn MTW in school?

Some of the things you may do with your teacher and your classmates are:

- examine trees, their leaves and seeds and be able to recognise their varying characteristics
- investigate how trees affect the environment around us
- learn to sketch freehand
- learn how to problem solve and use a design process to design projects
- develop your craft skills to allow you to make projects
- prepare a design folder to accompany your project.

### How can I learn more about MTW outside of school?

Some of the things you may do are:

- rather than just looking at trees, try to recognise the different species and their features
- examine how pieces of furniture are put together and why they are so strong
- use the internet to find information on design, wood, plastics and woodworking skills
- talk to people involved in the woodworking industry, for example carpenters or cabinet makers.



## How will I know how I am getting on?

Your teacher will let you know:

- what you have done well
- how you can improve your work.

Other things you may do are:

- look at each project you make to see what skills you need to improve on the next time
- compare projects you did in first and second year with recent ones to see how your skills have developed over time
- revise theory work regularly to see how much you can remember.

## What is the MTW Junior Certificate exam like?

There are two parts to the exam:

- coursework – you will design a project based on a given design brief (instructions). You will then make the project and prepare a project folder to accompany it (66%).
- written examination – there will be a two hour written paper which examines the woodwork theory you have learned over the three years (33%).

You can take the exam at Higher or at Ordinary level. When the time comes to decide, your teacher will help you choose the level that suits you best.

## Is learning MTW anything like what I did in primary school?

You will be building upon the drawing work you did in Visual Arts. You may already have learned a lot about wood as a material as part of your work in Science. You may also have learned about trees as part of the natural environment and as a habitat in both Geography and Science. The skills you developed when designing and making things in Science will also be very helpful in MTW. You will also use your mathematical skills quite a lot.

## Will MTW have anything to do with other subjects I will be studying?

Yes. Materials Technology Wood will be useful to you in the study of any of the other three technology subjects, Technical Graphics, Metalwork and Technology. Many of the skills involved in this subject are also used in the other subjects. MTW is also related to some of the topics covered in Science and Art, Craft, Design.

## How will MTW be useful to me?

- You will know the correct procedures to follow when developing an idea into a finished artefact e.g. a piece of furniture or a child's toy etc.
- You will be able to identify different trees, recognise their importance to us and our environment
- You will also have the skills to make objects from wood and know how to apply appropriate finishes to them, e.g. paint, varnish, stain or polish.

## Will MTW be very different after the Junior Certificate?

MTW develops into Construction Studies (Architectural Technology) in senior cycle. In this subject:

- the emphasis is on the principles behind building and construction
- there is a large amount of practical work involved in the course
- drawing skills learned in MTW will be further developed.



For more information about the MTW course

[www.curriculumonline.ie](http://www.curriculumonline.ie)

For more information about the Junior Certificate exam

[www.examinations.ie](http://www.examinations.ie)

For more information about MTW

[www.scoilnet.ie](http://www.scoilnet.ie)

[www.technologystudent.com](http://www.technologystudent.com)

This fact sheet and other fact sheets are available to download from [www.ncca.ie](http://www.ncca.ie)

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An Chomhairle Náisiúnta Curaclaim agus Measúnachta

24 Merrion Square, Dublin 2 | Tel: + 353-1-6617177