

# Exploring Careers Through Technical Routes

## Carpentry and Joinery



### The Industry

Carpenters and joiners make and build a range of wood fixtures and fittings for buildings. They can either work as: residential carpenters specialising in home new builds, repairs and restorations; commercial carpenters on larger projects such as office buildings, hospitals, hotels, schools, and shopping centres; industrial carpenters employed on projects such as tunnels, bridges or power plants.

Day-to-day tasks can include:

- Discussing technical drawings and following instructions
- Measuring, cutting or shaping wood, plastic and other materials
- Constructing building frameworks including walls, floors and doorframes
- Installing structures and fixtures such as doors, staircases, roof timbers and window frames
- Building temporary wooden supports to hold setting concrete in place.

Construction Skills Network <https://www.goconstruct.org>  
British Woodworking Federation <http://www.bwf.org.uk/training/apprenticeships>

### Skills and Requirements

You need to be meticulous and precise in your work, and be able to follow technical drawings and plans. You will also need:

- Technical ability to make accurate measurements
- Numeracy skills to calculate quantities and angles
- The ability to read technical documents and drawings
- Creativity to design interiors such as kitchens
- Manual dexterity with good hand-eye co-ordination to use tools safely
- Physical stamina and physical strength to lift tools and materials while standing, climbing or bending for long periods as many are heavy
- Problem-solving skills with an ability to adjust project plans as a project progresses
- An ability to follow safety guidelines at all times
- Business skills as many carpenters and joiners are self-employed.

You may have to get a Construction Skills Certification Scheme (CSCS) card as many building contractors require their workers to have one.

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## Working and Learning in Carpentry and Joinery



### Progression

#### Study Programme

##### Level 2

Wood Machining for Joinery Manufacture.

##### Levels 2 and 3

Site Carpentry.  
Bench Joinery.  
Shopfitting Joinery.



#### Apprenticeships

##### Levels 2 and 3

Carpentry and Joinery.



#### Further study

##### FdSc and

**BSc (Hons)**  
Construction Management.

Business start up course.



#### Career roles

Occupational supervisor.  
Team leader.  
Self employed contractor/subcontractor.  
Contracts/Project Manager.  
Specialist e.g.kitchen fitter, shop fitter or joiner.



### Calculation including problem solving

#### Tasks:

- When building a hallway make an opening for a doorway at the central point.
- Calculate and measure the length of a rafter where the roof rise and run measurements are in feet and inches.
- Measure a room to order the correct amount of subflooring.

#### GCSE maths links:

- Number** (whole numbers - addition, multiplication, subtraction, using a calculator).
- Geometry and measure** (Pythagoras' theorem - calculating the length of the hypoteneuse, solving problems using Pythagoras).
- Geometry and measure** (2-dimensional shapes - areas of rectangles and compound shapes).

#### Functional skills maths L2 links:

- Number**  
**N/L2.2** Carry out calculations with numbers.
- Measure, shape and space**  
**MSS/L2.3** Calculate perimeters and areas of 2-D shapes including triangles and circles.
- Measure, shape and space**  
**MSS/L2.9** Calculate values of angles and/or coordinates with 2-D and 3-D shapes.

### Communication, all forms

#### Tasks:

- Provide a client with regular work updates and progress reports to prevent any stressful situations.
- Prepare a written estimate for a potential customer that will also allow you to create a contract if the job goes ahead.
- Attend a meeting at the beginning of the work shift to receive and discuss updates about supplies, work conditions, scheduling and possible safety issues.

#### GCSE English links:

- Spoken language** (speaking and listening - purpose, individual presentation; personal presence - body language; voice - tone).
- Writing** (context, audience and purpose; writing non-fiction - a document; planning - a structure; vocabulary - use precise verbs).
- Spoken language** (speaking and listening - discussion skills, listening to others).

#### Functional skills English L2 links:

- Speaking, listening and communicating**  
**SLC/L2.6** Use language that is effective, accurate and appropriate to context and situation.
- Spelling, punctuation and grammar**  
**SPAG/L2.3** Spell words used in work, study and daily life, including a range of specialist words.
- Speaking, listening and communicating**  
**SLC/L2.7** Make relevant and constructive contributions to move discussion forward.