Unit 108: Wood occupations

# Sample scheme of work

This sample scheme of work covers both classroom and workshop-based learning for Unit 108. It is based on variable hours per session for 50 sessions. It is an example only of a possible scheme of work and is based on theory and practical within an FE centre, but can be amended to suit all learning facilities with the necessary adjustments to meet individual learners’ needs.

**You can use the sample scheme of work as it is, adjust it or extract content to create a scheme of work to suit your delivery needs. It can also be adjusted by adding theory and practical workshops to support learners who have/need additional learning time.**

Centres should also incorporate the following themes, where appropriate, as strands running through each of the sections within the qualification. Although they are not specifically referred to in the section content section, City & Guilds regards these as essential in the teaching of the qualification:

* health and safety considerations, in particular the need to impress upon learners the fact that they must preserve the health and safety of others as well as themselves
* Essential Skills (Application of Number, Communication, Digital Literacy and Employability)
* extension tasks and differentiation, inclusion, entitlement and equality issues
* spiritual, moral, social and cultural issues
* environmental education and related European issues
* British Values
* use of information learning technology (ILT).

Unit 108: Wood occupations

# Sample scheme of work

**Course/qualification:** Foundation in Construction and Building Services Engineering **Tutor’s name:** Enter the tutor’s name here

**Number of sessions**:47 **Delivery hours**: 140 **Venue**:Enter the venue here **Group**: Enter the group here

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| --- |
| **Learning outcomes**   1. Know the underlying principles used in wood occupations 2. Know how to plan and produce a sequence of work 3. Be able to complete common wood working tasks 4. Understand performance criteria and methods of evaluating performance |

| Session | Objectives/learning outcomes **The learner will:** | Activities and resources | Skills check |
| --- | --- | --- | --- |
| **1/2**  6 hours | 1. **Know the underlying principles used in wood occupations**   1.1 The main roles and tasks undertaken | Classroom activities:   * Entrance activities. * Class discussion and questioning regarding wood occupations. * Show and discuss PowerPoint 1 on specialisms and job roles. * SetWorksheets 1–3. * Online research.   Resources:   * **PowerPoint 1: Specialisms and job roles** * **Worksheet 1: Job roles** * **Worksheet 2: Site carpentry activities** * **Worksheet 3: Trades that work with site carpenters** | Classroom discussion  **Worksheets 1, 2 and 3**  Question and answer feedback to monitor understanding |
| **3/4**  6 hours | 1. **Be able to complete common wood working tasks** | Classroom activities:   * Classroom research. * Class discussion and questioning regarding health and safety. * Show and discuss PowerPoint 2: Health and safety. * Set Worksheets 4 and 5.   **Workshop activities:**   * Workshop induction. * Hand tool introduction and practice. * Risk assessments.   Resources:   * **PowerPoint 2 Health and safety** * **Worksheet 4: Signage** * **Worksheet 5: Health and safety** * Blank risk assessments | Classroom discussion  **Worksheets 4 and 5**  Risk assessments  Question and answer feedback to monitor understanding |
| **5/6**  6 hours | 1. **Know the underlying principles used in wood occupations**   1.2 Materials used | Classroom activities:   * Discussion and questioning regarding materials. * Show and discuss PowerPoint 3 on materials and fixings. * Online research. * Worksheets 6 and 7.   Resources:   * **PowerPoint 3: Materials** * **Worksheet 6: Types of materials** * **Worksheet 7: Fixings and adhesives** | Classroom discussion  **Worksheets 6 and 7**  Question and answer feedback to monitor understanding |
| **7/8/9**  9 hours | 1. **Know the underlying principles used in wood occupations**   1.2 Materials used | Classroom activities:   * Discussion and questioning regarding materials. * Show and discuss PowerPoint 4 on the journey of timber. * Online research. * SetWorksheets 8 and 9.   Workshop activities:   * Workshop recap. * Stress testing offcuts in vice and completing qualities table.   Resources:   * **PowerPoint 4: The journey of timber** * **Worksheet 8: Wood machining** * **Worksheet 9: Timber defects** * 25mm × 600mm x 18mm different types of OSB, MDF, ply and chipboard offcuts * Timber | **Worksheets 8 and 9**  Qualities table  Classroom discussion  Question and answer feedback to monitor understanding |
| **10/11/12**  9 hours | 1. **Know the underlying principles used in wood occupations**   1.3 Hand tools used | Classroom activities:   * Discussion and questioning regarding hand tools. * Show and discuss PowerPoint 5: Hand tools. * Set Worksheets 10–13. * Self-evaluation 1/2.   Workshop activities:   * Sharpen blades using a combination stone. * Assemble and maintain a plane. * Use cramps to secure workpiece. * Planing, smoothing, squaring face and edge practice. * Mark out a mortice and tenon joint. * Cut a mortice and tenon joint. * Assemble a mortice and tenon joint.   Resources:   * **PowerPoint 5: Hand tools** * **Worksheet 10: Hand tools** * **Worksheet 11: Hand tool problems** * **Worksheet 12: Self-evaluation 1** * **Worksheet 13: Self-evaluation 2** * Timber | **Worksheets 10–13**  Classroom discussion  Question and answer feedback to monitor understanding  Check timber flat, square and smooth after planing  Check joint for fit |
| **13/14/15**  9 hours | 1. **Know the underlying principles used in wood occupations**   1.4 Power tools used | Classroom activities:   * Show and discuss PowerPoint 6: Power tools. * SetWorksheets 14 and 15. * Online research.   Workshop activities:   * Demonstrate how to maintain and use tools. * Demonstrate and explain how to visually check power tools. * Explain how to risk assess power tools. * Demonstrate and discuss how to maintain a drill, including changing drill bits and understanding drill settings. * Demonstrate and discuss how to maintain a circular saw, including how to change a blade.   Resources:   * **PowerPoint 6: Power tools** * **Worksheet 14: Power tools** * **Worksheet 15: Power tools hazards** | Classroom discussion  Question and answer feedback to monitor understanding  Risk assessment  **Worksheets 14 and 15** |
| **16/17/18**  9 hours | 1. **Know how to plan and produce a sequence of work**   2.1 Planning a sequence of work | Classroom activities:   * Classroom discussion: ask learners to name any documents that are used in the wood occupations. * Show and discussPowerPoint 7: Drawing and documents. * Set Worksheets 16 and 17. * Produce a scale drawing of a simple workbench with front and side elevations. * Produce a cutting list from the drawing. * Produce a proposed time scale for each stage of production. * Produce a risk assessment for the process.   Resources:   * **PowerPoint 7: Drawings and documents** * **Worksheet 16: Documents** * **Worksheet 17: Producing a work bench** * Risk assessment | **Worksheets 16 and 17**  Classroom discussion  **Self-evaluation**  **Peer evaluation**  Risk assessment  Question and answer feedback to monitor understanding |
| **19/20/21**  9 hours | 1. **Know how to plan and produce a sequence of work**   2.1 Planning a sequence of work   1. **Be able to complete common wood working tasks** 3.5 Working safely 2. **Understand performance criteria and methods of evaluating performance**   4.1 Evaluation against set standards | Classroom activities:   * Producing scale drawings of joint details. * Dowelled butt, half lap, bridle, mortice and tenon. * Show and discussPowerPoints 7 and 8. * Set Worksheets 18 and 19. * Producing a schedule containing each stage of the production process. * Producing a risk assessment for the production process * Self-evaluation 3.   **Workshop activities:**   * Mark and cut out board stock for a rod. * Check cut for square and parallel.   Resources:   * **12mm board for setting out rod (min 600mm x 400mm)** * **PowerPoint 7: Drawings and documents** * **PowerPoint 8: Joinery** * **Worksheets 18: Producing a frame** * **Worksheet 19: Drawings** * **Worksheet 20: Self-evaluation 3** * Risk assessment | **Worksheets 18 and 19**  Classroom discussion  **Worksheet 20**  Risk assessment  Question and answer feedback to monitor understanding |
| **22/23/24**  9 hours | 1. **Know how to plan and produce a sequence of work**   2.2 Producing a sequence of work   **3. Be able to complete common wood working tasks**  3.5 Working safely   1. **Understand performance criteria and methods of evaluating performance**   4.1 Evaluation against set standards | Classroom activities:   * Show and discuss PowerPoint 9: Planning and setting out. * Produce a cutting list for the frame. * Produce a resources list for the task. * Produce a tool list for the task. * Know how to check frames for square. * Set Worksheets 21 and 22. * Self-evaluation.   **Workshop activities:**   * Mark and cut out board stock for a rod min 600mm x 400mm. * Check cut for square and parallel. * Workshop demonstration. * Produce setting out rod. * Use a selection of tools to carry out practical activities as listed in the objectives.   **Resources:**   * **PowerPoint 9: Planning and setting out** * **Worksheet 21: Planning studwork** * **Worksheet 22: Planning to hang a door** * Self-evaluations | **Worksheets 21 and 22**  Classroom discussion  **Self-evaluation**  Question and answer feedback to monitor understanding |
| **25/26/27**  9 hours | 1. **Be able to complete common wood working tasks**  3.1 Preparation of timber   3.5 Working safely   1. **Understand performance criteria and methods of evaluating performance**   4.1 Evaluation against set standards | Classroom activities:   * Revisit PowerPoint 9: Planning and setting out. * Self-evaluation.   **Workshop activities:**   * Sharpening and assembling plane. * Cramping timber securely. * Planing and square edging 1.8m of rough sawn 50mm × 35mm. * Timber face selection and marking. * Marking and cutting joints. * Use a combination square to run parallel marks on timber. * Marking and chamfering a length of 70 × 20mm PSE to be used as skirting in sessions 44/45/46/47. * Peer evaluation.   Resources:   * **PowerPoint 9: Planning and setting out** * Rough sawn timber * PSE * Self-evaluation * Peer evaluation | Check finished PSE  Tidy work area  Select and use correct PPE  Self-evaluation  Peer evaluation  Question and answer feedback to monitor understanding |
| **28/29/30/31**  12 hours | 1. **Be able to complete common wood working tasks** 3.2 Production of wood working joints   3.5 Working safely   1. **Understand performance criteria and methods of evaluating performance**   4.1 Evaluation against set standards  4.2 Performance analysis | Classroom activities:   * Show and discuss PowerPoint 10: Basic calculations and squaring off. * Set Worksheets 23 and 24. * Self-evaluation. * Action plan.   Workshop activities:   * Mark up joints from rod. * Select and use correct PPE. * Cut joints using hand tools. * Assemble square frame. * Clean up and finish. * Check for square. * Check tolerances. * Peer evaluation.   Resources:   * Rough sawn timber * **PowerPoint: 10 Basic calculations and squaring off** * **Worksheet 23: Arithmetic area and cube** * **Worksheet 24: Pythagoras** * Self-evaluations * Peer evaluations * Action plan | **Worksheets 23 and 24**  Finished frame  Tidy work area  Select and use correct PPE  Check tolerances  Check square  Check twist  Self-evaluation  Peer evaluation  Action plan  Question and answer feedback to monitor understanding |
| **32/33/34/35**  12 hours | 1. **Be able to complete common wood working tasks**   3.3 Constructing common wood working tasks  3.5 Working safely   1. **Understand performance criteria and methods of evaluating performance**   4.1 Evaluation against set standards  4.2 Performance analysis | * **Classroom activities:** * Show PowerPoints 10 and 11. * Cross cut saw risk assessment. * Portable circular saw risk assessment. * SetWorksheets 25 and 26. * Self-evaluation. * Action plan. * Risk assessment.   **Workshop activities:**   * Workshop demonstration. * Cross cut a butted frame with a crosscut or chop saw. * Use a portable circular saw to cut a piece of board for use as a corner brace. * Peer evaluation.   Resources:   * **PowerPoint 10: Basic calculations, squaring off and basic geometry** * **PowerPoint 11: Structural and first fix activities** * **Worksheet 25: First fix** * **Worksheet 26: First and second fix activities** * Drawings * Self-evaluation * Peer evaluation * Timber and fixings * Risk assessment | **Worksheets 25 and 26**  Self-evaluation  Peer evaluation  Action plan  Risk assessment  Question and answer feedback to monitor understanding |
| **36/37/38/39**  12 hours | 1. **Be able to complete common wood working tasks**   3.3 Constructing common wood working tasks  3.5 Working safely   1. **Understand performance criteria and methods of evaluating performance**   4.1 Evaluation against set standards  4.2 Performance analysis | Classroom activities:   * Cross cut saw risk assessment. * Continue Worksheet 25. * Continue Worksheet 26. * Self-evaluation. * Action plan.   Workshop activities:   * Workshop demonstration. * Cut butt joints safely and accurately on crosscut or chop saw. * Square up frames using 3/4/5 checking with a squaring rod. * Assemble and fix studwork with nails and screws. * Assemble and fit lining. * Peer evaluation. * Check and record tolerances.   Resources:   * **Worksheet 25: First fix** * **Worksheet 26: First and second fix activities** * Drawings * Timber and fixings * Self-evaluation * Peer evaluation * Action plan | Select and use correct PPE  Safe use of tools  Tidy work area  Self-evaluation  Peer evaluation  Action plan  Check for square  Check tolerances  Question and answer feedback to monitor understanding |
| **40/41/42/43**  12 Hours | 1. **Be able to complete common wood working tasks**  3.4 Installing mouldings   3.5 Working safely   1. **Understand performance criteria and methods of evaluating performance**   4.1 Evaluation against set standards  4.2 Performance analysis | Classroom activities:   * Show and discuss PowerPoint 12: Second fix, finals and snagging activities. * Show and discuss PowerPoint 13: Mouldings. * SetWorksheet 27. * Mitre saw risk assessment. * Jigsaw risk assessment. * Self-evaluation. * Peer evaluation. * Action plan.   Workshop activities:   * Workshop demonstration. * Mark out a mitre and a scribe on torus skirting. * Cut an external mitre to skirting by hand. * Cut a mitre to architrave by hand. * Cut a scribe to detailed skirting by hand. * Cut a mitred return moulding to skirting. * Fit skirting and architrave to partition and lining. * Check and record tolerances.   Resources:   * **PowerPoint 12: Second fix, finals and snagging activities** * **PowerPoint 13: Mouldings** * **Worksheet 27: Second fix** * Lengths of skirting (pencil, chamfer, torus) * Check mitres for square * Self-evaluation * Peer evaluation * Action plan | **Worksheet 27**  Risk assessment  Select and use correct PPE  Safe use of tools  Tidy work area  Check mitres for square  Check return moulding for gaps  Check tolerances  Self-evaluation  Peer evaluation  Action plan  Question and answer feedback to monitor understanding |
| **44/45/46/47**  12 hours | 1. **Be able to complete common wood working tasks**   3.4 Installing mouldings   1. **Know the underlying principles used in wood occupations**   1.4 Power tools used   1. **Be able to complete common wood working tasks**   3.5 Working safely   1. **Understand performance criteria and methods of evaluating performance**   4.1 Evaluation against set standards 4.2 Performance analysis | Classroom activities:   * Mitre saw risk assessment. * Jigsaw risk assessment. * Use setting out rod used as a panel to scribe to an uneven wall using a scribing block. * Self-evaluation. * Peer evaluation. * Action plan.   Resources:   * Chamfered skirting from sessions 25/26/27 * Lengths of skirting (pencil, chamfer, torus) * Setting out rod to use as a panel to scribe to an uneven wall using a scribing block   Workshop activities:   * Mark out mitres and scribes. * Cut mitre joints using compound mitre saw. * Use setting out rod as a panel to scribe to an uneven wall using a scribing block. * Cut scribe joint to a panel using jigsaw. * Mitre a 90⁰ moulding return to a length of torus skirting. * Check mitres for square. * Check and record tolerances. | Select and use correct PPE  Safe use of tools  Tidy work area  Check mitres for square  Check tolerances  Self-evaluation  Peer evaluation  Action plan  Question and answer feedback to monitor understanding |
| **48**  3 hours | 1. **Understand performance criteria and methods of evaluating performance**  4.1 Evaluation against set standards   4.2 Performance analysis | Activities:   * Compile feedback, self-evaluations and peer evaluations of tasks in course diary. * Complete a thorough summative self-evaluation of your current skills and knowledge. * Complete a progression plan and decide which specialism suits the skills and knowledge developed.   Resources:   * Self-evaluation skills and safety. * Self-evaluation knowledge. * Self-evaluation working to timescales. * Progression plan.   Classroom activities:   * 1:1 discussion to evaluate performance and agree suitable route of progression. * Create a personal improvement plan.   Resources:   * Personal improvement plan | Self evaluation  Progression plan |
| **49**  3 hours | **All** | Classroom activities:   * Multiple choice questions.   Resources:   * **Multiple choice questions** | **Multiple choice questions** |
| **50**  3 hours | **All** | Workshop activities:   * Practical skills test. | Practical skills test |