



# Technical Skills Masterclass Lesson Plan

**SUITABLE FOR** Students and apprentices from Level 2 – 3

**Skills:** problem solving, time management, self-reflection, planning, organisation, lean principles, confidence, independence.

### Introduction

Designed for students and apprentices working towards technical and vocational specialisms from Level 2 - 3.

Automotive Body Repair | Automotive Refinishing | Beauty Therapy | Bricklaying | Butchery | Cabinet Making | CNC Milling | CNC Turning | Construction Metal Work | Culinary Arts | Cyber Security | Digital Construction | Electronics | Floristry | Hairdressing | Heavy Vehicle Braking Systems | Heavy Vehicle Engine Diagnostics | Heavy Vehicle Suspension | Industry 4.0 | Joinery | Light Vehicle Braking Systems | Light Vehicle Engine Diagnostics | Light Vehicle Electrics | Light Vehicle Wheels & Tyres | Manufacturing Team Challenge | Mechanical Engineering CAD | Mechatronics | Restaurant Services | Stonemasonry

### **Learning outcomes**

- learners will be introduced to new skills to carry out tasks to high standards of technical competence and quality
- learners will understand the process of lean principles and be able to demonstrate the importance of improving efficiency, waste management and work organisation
- learners will develop practical problem-solving skills and critical reflection on experience, including learning from mistakes.

More information

## Length of programme

There are over 25 interactive Technical Masterclasses from beginner to advanced levels varying in length from 30 – 90 mins. If delivering to a group, we anticipate a further 4 + hours.

#### **Resources needed**

- 1. Introduction and getting started for learners video
- 2. Introduction to Developing Excellence Framework that underpin the Technical Skills Masterclasses
  - For learners (video)
  - For educators (video)
- 3. Introduction to lean principles video

## **Digital Credential**

If a learner completes the programme of Technical Skills Masterclasses independently, they will receive a digital credential.

### Accessing the free learning materials

You and / or your learners must be registered to access the Masterclasses. There are two ways of registering yourself and your learners.

- 1. Register individually here.
- Register your learners in bulk by completing this excel template and sending it to skillsdevelopmenthub@worldskillsuk.org using WeTransfer.

## **Guidance for delivery**

Educators will find Technical Masterclasses offer the flexibility to be delivered in short blocks or as week-long programme of development, alternatively completing the programme independently will add more value to your learner's development.

This lesson plan is to support the general overview and based on delivering to a small or large group and can be easily tailored to suit your planned delivery, and is suitable for:

- ✓ Large groups
- ✓ Small groups
- X Tutorials
- ✓ Independent learning

## How to access the educator pack

If delivering to a group – you should have accessed and downloaded the tools and resources from the Technical Skills Masterclass educator module

- access the Technical Skills Masterclasses from the main dashboard
- select the specialism and open the educator's version which hosts the tools and resources needed to plan and deliver
- tools and resources for each masterclass consist of a brief, marking scheme, videos/ animations, feedback forms and a lesson plan to support your planned model of delivery.

PCDES LESSONS	TIMINGS*	KEY LEARNING AND DISCUSSION POINTS
Introduction to the Technical Skills Masterclass	10 minutes	Introduce the WorldSkills UK Technical Masterclass and how this will support their development and play the introductory video.
Discuss the Developing Excellence Framework and 7-step process	15 minutes	Play the video and discuss the steps of the process they will complete as part of the Technical Skills Masterclass:
		<ol> <li>Engage standards - a clear understanding of what is expected of the student or apprentice and the standard at which they are expected to perform, behave or carry out a task.</li> </ol>
		2. <b>Demonstrate</b> - observing the desired process or outcome is an important part of this step to master techniques and / or practices.
		3. <b>Practice</b> - carrying out the task to apply and adopt the demonstrated techniques and / or practices.
		<ol> <li>Assess - measuring performance against the standard through self-assessment using a marking scheme.</li> </ol>
		5. <b>Reflect</b> - looking back on the experience, reviewing successes, failures, re-setting and action planning next steps.
		<b>6. Feedback</b> - two-way communication between educator and student or apprentice reviewing performance against the standards to support improved practice in future.
		<ol><li>Repeat - developing technical excellence through practice of continuous improvement.</li></ol>
Introduce and discuss lean principles	10 minutes	Play the lean principle video and discuss what this means to learners in developing their craft or practice.
		Introduction to lean principles - video.
Explore the principles of work organisation and waste management by sectors	15 minutes	Play one of the sector videos to support facilitate a discussion and raise awareness of how this applies in practice by sector or industry
		Lean principles in Engineering - video
		Lean principles in Construction - video
		Lean principles in IT & Digital - video
		Lean principles in Hospitality and Lifestyle - video
		Lean principles in Creative Industries - video.
Step 1 - engaging the standard	15 minutes	As the first step of the process, it's important to ensure learners have a clear understanding of what is expected and the standard at which they are required to perform, behave or carry out the task.
		At this point share the brief/ task and assessment criteria to provide an opportunity to discuss and answer questions.
Step 2 - demonstrate the standards, process, and task / activity	dependent on the task	After you have shared and discussed the expected standard, it's important to demonstrate the process or outcome. You can either showcase this yourself or play the videos available to support this step.
Step 3 - practice the task / activity	dependent on the task	There is a lesson plan for each masterclass, use this to support carry out the task or activity. This can be accessed via the educator pack within the Skills Development Hub.

Step 4 - assess the task / activity	30 minutes	Use the marking scheme to assess the completed task – to deepen a learner's understanding, we encourage self-assessment or peer assessment.
Step 5 - reflect on the task / activity	30 minutes	As a valuable part of the development process, either independently or in groups ask learners to evaluate on their performance in undertaking the task/ activity to reflect on the successes, failures supporting them re-set and plan their next steps.
		discuss areas for further development
		explore what they will do differently.
		Use the Realistic Performance Evaluation template to facilitate this part of the process and can be used as part of your tutorial.
Step 6 - feedback on the task / activity	30 minutes	Feedback is a valuable improvement mechanism to support, coach and progress a learner's development. Ask learners to talk you through their Realistic Performance Evaluation form to facilitate this part of the process as part of a tutorial.
		If learners are finding the pressure of education, work and life a challenge we have developed a set of Mindset Masterclasses to support young people. This is a complimentary learning resource to the Technical Skills Masterclasses.
Step 7 – repeat the task / activity	dependent on the task	Technical capability and expertise are underpinned by continuous practice, to advance learners repeat the process from steps 3 – 6 applying the lessons learnt from first attempt.
		To add stretch and challenge for learners, you can change the complexity of the task by reducing the time, tolerances, or criteria for assessment.
Complete the evaluation form	5 minutes	As part of continual process to ensure our resources and materials meet needs of educators and learners – please complete a short evaluation form:  educators educators educators evaluation form evaluation form

<sup>\*</sup>Timings are indicative and may take longer in group settings

# If you enjoyed this, please access more learning for your students and apprentices using the QR code.



If you have any questions or require support, please contact skillsdevelopmenthub@worldskillsuk.org or call 0800 612 0742.