## **LESSON PLAN**

LESSON PLAN NUMBER: 7

Department: AMA Phase 2 Core Mechanical

Aim: To gain knowledge and understanding of Machine Shop Appreciation CME29

Topic: Phase 2 ROA Core Mechanical – Machine Shop Appreciation CME29

**Previous Knowledge**: Phase 1

Target	Record of				Resources		
Time	Achievement Reference	Objectives/Content	Tutor Activity	Learner Activity	Handouts	Equipment	Assessment
Session 1 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 Machineshop Appreciation Machining a Turned shaft - Limits& Fits, Surface Finish, Specific Tolerances	Practical Session Objective 1– ( <i>Keyed Shaft</i> ) Turning stepped diameters Roughing	Set out the days objectives  Re-cap planning  Tool-Box Talk  Explain the risks  Explanation  Demonstration  Technical support	Check the machine Re-cap plan safe operation of the lathe Interim inspection	<u>Drawing</u>	Workshop tools Precision measuring tools	Observation Product
Session 2 1.40 hrs  (Subject to TTE Lunch & Break Rota)	CME29 Machineshop Appreciation Machining a Turned shaft Cont'd	Practical Session Objective 2– ( <i>Keyed Shaft</i> ) Turning stepped diameters finishing	Recap/ Bridge last session Explanation Demonstration Technical support	Check the machine Re-cap plan safe operation of the lathe Interim inspection	<u>Drawing</u>	Workshop tools Precision measuring tools	Observation Product
Session 3 1.40 hrs (Subject to TTE Lunch & Break Rota)	CME29 Machineshop Appreciation Machining a Turned Hub - Turning Limits& Fits, Surface Finish, Specific Tolerances	Practical Session Objective 3 - (Keyed Hub) Turning Facing Chamfers Boring Chamfering	Recap/ Bridge last session Explanation Demonstration Technical support	safe operation of the lathe turning operations Final inspection	<u>Drawing</u>	Workshop tools Precision measuring tools	Observation Product
Session 4 1.40 hrs  (Subject to TTE Lunch & Break Rota)	CME29 Machineshop Appreciation Machining a Turned Hub Cont'd	Practical Session Objective 4 - ( <i>Keyed Hub</i> ) Turning, Facing, Chamfers	Recap/ Bridge last session, intro this session Technical support Examination of product feedback	safe operation of the lathe turning operations Final inspection	<u>Drawing</u>	Workshop tools Precision measuring tools	Observation Product

Equality & Diversity	Differentiated Learning Activities (Highlight or tick where applicable)							
<b>Challenge stereotypes by:</b>	• Mix of individual, paired and group work. □							
• Using non discriminatory language.	■ Variety of activities for different learning styles. □							
• Using diverse images, names & scenarios.	• Learner support. □							
Promote a positive learning environment by:	• Targeted differentiated questioning to check learning with prompts/leads to support less able learners.							
• Being a positive role model.	Specific Differentiation activities:  • By Extension □							
• Encouraging collaborative work.	(For example additional practical tasks after completion of ROA content for the most able)							
• Valuing individual characteristics and experiences.	<ul> <li>By Group Work □</li> <li>(For example grouping learners of mixed ability y to support each other within the peer group)</li> <li>By Content. □</li> </ul>							
• Encouraging learners to participate.								
• Nurturing mutual respect.	(For example study different materials within the same topic area)							
• Promoting positive behaviour.	By Activities. □							
<b>Promote inclusion by:</b>	<ul> <li>(For example study the same content but do different activities)</li> <li>▶ By Gradation □</li> <li>(for example the same information and activities are given as the activity becomes progressively more difficult</li> </ul>							
• Anticipating and addressing potential barriers to learning.								
• Using accessible resources.	only the more able complete the difficult tasks)							
Individual Learner / Group Targeted Needs / Strategies								
(List details where applicable)								