

## Year 9 Design & Technology - Architecture CAD

### Learning Programme 5

The LORIC skill focus for his LP is: COMMUNICATION. The Moral Virtues focus for this LP are: COURAGE and HUMILITY. Courage - Acting with bravery and overcoming fears. Humility - Having a modest view of oneself. <b>What will I be learning about in this Learning Programme?</b> To analyse the work of past and present designers. To communicate building design ideas in 2D and 3D, using sketches and 3D CAD software.  <b>Where have I seen this learning before?</b> In Year 7 and 8 you will have developed your 2D and 3D drawing skills. You will have used 2D CAD software in Year 8 to design a Night Light.  <b>What could I use it for?</b> You will apply these CAD skills extensively when designing and modelling your ideas for your GCSE Design and Technology non-examined assessment.		<b>Literacy:</b> <ul style="list-style-type: none"><li>• Capital letters must be used at the start of sentences and for the first letter of proper nouns</li><li>• Full stops must be used at the end of a sentence</li><li>• Question marks must be used at the end of a question</li><li>• Apostrophes should only be used for possession or omission</li><li>• Days of the week and months must be spelled correctly</li><li>• Key words must be spelled correctly</li></ul>	
<b>In LP5.1, I will know:</b>	<b>12/05/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
what style of buildings & facilities Ellesmere Port currently has; how to present a technical drawing in 2D orthographic projection.		Orthographic	Research task on local architecture.
<b>In LP5.2, I will know:</b>	<b>19/05/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to convert an orthographic drawing into an isometric projection.		Isometric	Isometric drawing task.
<b>LP5 RLW, I will:</b>			
review my learning, recalling and applying key knowledge, and focus on closing any gaps in my knowledge.		Revision	Use revision techniques to prepare for the summative assessment.
<b>In LP5.3, I will know:</b>	<b>09/05/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to draw the 3D graphical techniques of one point and two point perspective; the difference between computer aided design (CAD) and traditional drawing methods.		Perspective	One point perspective drawing task.
Extended Task.			
<b>In LP5.4, I will know:</b>	<b>16/06/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
the work of past and present designers; the timeline of important design movements.		Architecture	Two point perspective drawing task.
<b>In LP5.5, I will know:</b>	<b>23/06/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to apply a range of CAD tools in SketchUp.		Orbit	Create a floor plan and calculate the area.
<b>In LP5.6, I will know:</b>	<b>30/06/25 - (WK 1)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to use 3D CAD to render my building using a variety of different materials.		Presentation	Convert orthographic drawing to isometric drawing.
Extended Task.			
<b>In LP5.7, I will know:</b>	<b>07/06/25 - (WK 2)</b>	<b>Key Vocabulary</b>	<b>Homework</b>
how to present my architectural building project to my peers for feedback; how to evaluate my final design and identify improvements.		Evaluation	Use knowledge organiser to complete a learning review task.
<b>Resources to support learning:</b> The following websites contain extensive revision material and information to increase design & technology subject knowledge: <a href="http://www.technologystudent.com">www.technologystudent.com</a> ; <a href="http://www.mr-dt.com">www.mr-dt.com</a> ; <a href="http://www.bbc.co.uk/bitesize">www.bbc.co.uk/bitesize</a> .			
<b>FFET Award Challenge for this Learning Programme:</b> Complete a two minute oral presentation to showcase your building design to your peers.			

PRT Task 1

PRT Task 2