

Year 9 Design & Technology - Architecture CAD

Learning Programme 1

The LORIC skill focus for his LP is: LEADERSHIP The Moral Virtues focus for this LP are: COURAGE and HUMILITY.			Literacy Non-Negotiables: • Capital letters must be used at the start of sentences and for the first letter of proper nouns • Full stops must be used at the end of a sentence • Question marks must be used at the end of a question • Apostrophes should only be used for possession or omission • Days of the week and months must be spelled correctly • Key words must be spelled correctly • Vocabulary to be taught using the Frayer model	
Courage - Acting with bravery and overcoming fears. I will show courage by answering a question in class even when I'm not 100% sure of the answer. Humility - Having a modest view of oneself. I will show humility by admitting mistakes and asking for help when needed.				
What will I be learning about in this Learning Programme? To analyse the work of past and present designers. To communicate building design ideas in 2D and 3D, using sketches and 3D CAD software.				
Where have I seen this learning before? 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. What could I use it for? You will apply these CAD skills extensively when designing and modelling your ideas for your GCSE Design and Technology non-examined assessment.				
In LP1.1, I will know: what style of buildings & facilities Ellesmere Port currently has; how to present a technical drawing in 2D orthographic projection.		01/09/26 - (WK 1)	Key Vocabulary Orthographic	Homework Research task on local architecture.
In LP1.2, I will know: how to convert an orthographic drawing into an isometric projection.		07/09/26 - (WK 2)	Key Vocabulary Isometric	Homework Isometric drawing task.
In LP1.3, I will know: how to draw the 3D graphical techniques of two point perspective; the difference between computer aided design (CAD) and traditional drawing methods. Extended Task.		14/09/26 - (WK 1)	Key Vocabulary Perspective	Homework One point perspective drawing task.
In LP1.4, I will know: the work of past and present designers.		21/09/26 - (WK 2)	Key Vocabulary Architecture	Homework Two point perspective drawing task.
In LP1.5, I will know: how to convert a selected building idea into 3D on Sketch Up; how to apply a range of CAD tools in Sketch Up.		28/09/26 - (WK 1)	Key Vocabulary Orbit	Homework Create a floor plan and calculate the area.
In LP1.6, I will know: how to use 3D CAD to render my building using a variety of different materials. Extended Task.		05/10/26 - (WK 2)	Key Vocabulary Rendering	Homework Convert isometric drawing to orthographic drawing.
In LP1.7, I will know: how to present my architectural building project to my peers for feedback; how to evaluate my final design and identify improvements.		12/10/26 - (WK 1)	Key Vocabulary Presentation	Homework Learning Review Task.
Resources to support learning: The following websites contain extensive revision material and information to increase design & technology subject knowledge: www.mr-dt.com; www.bbc.co.uk/bitesize.				
FEET Award Challenge for this Learning Programme: Complete a two minute oral presentation to showcase your building design to your peers.				

