The Ellesmere Port C of E College

Part of the Frank Field Education Trust

Year 9 Design & Technology - Architecture CAD
Learning Programme 4

The LORIC skill focus for this LP is: INITIATIVE.
The Moral Virtues focus for this LP are: INTEGRITY and GRATITUDE.

Integrity - Having strong moral principles. I will show integrity by taking responsibility for my actions.
Gratitude - Feeling and expressing thanks. I will show gratitude by saying please and thank you.

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.

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

In LP4.1, I will know: 09/03/26 - (WK 2)	Frayer Model Words	Homework
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.
In LP4.2, I will know: 16/03/26 - (WK 1)	**Frayer Model Words**	**Homework**
how to convert an orthographic drawing into an isometric projection.	Isometric	Isometric drawing task.
In LP4.3, I will know: 23/03/26 - (WK 2)	**Frayer Model Words**	**Homework**
how to draw the 3D graphical techniques of two point perspective; the difference between computer aided design (CAD) and traditional drawing methods. Extended Task.	Perspective	One point perspective drawing task.
In LP4.4, I will know: 13/04/26 - (WK 1)	**Frayer Model Words**	**Homework**
the work of past and present designers.	Architecture	Two point perspective drawing task.
In LP4.5, I will know: 20/04/26 - (WK 2)	**Frayer Model Words**	**Homework**
how to convert a selected building idea into 3D on Sketch Up; how to apply a range of CAD tools in Sketch Up.	Orbit	Create a floor plan and calculate the area.
In LP4.6, I will know: 27/04/26 - (WK 1)	**Frayer Model Words**	**Homework**
how to use 3D CAD to render my building using a variety of different materials. Extended Task.	Rendering	Convert isometric drawing to orthographic drawing.
In LP4.7, I will know: 04/05/26 - (WK 2)	**Frayer Model Words**	**Homework**
how to present my architectural building project to my peers for feedback; how to evaluate my final design and identify improvements.	Presentation	Learning Review Task.

PRT Task 1

PRT Task 2

Resources to support learning:

The following websites contain extensive revision material and information to increase design & technology subject knowledge:
www.technologystudent.com;
www.mr-dt.com;
www.bbc.co.uk/bitesize.

FFET Award Challenge for this Learning Programme:

Complete a two minute oral presentation to showcase your building design to your peers.