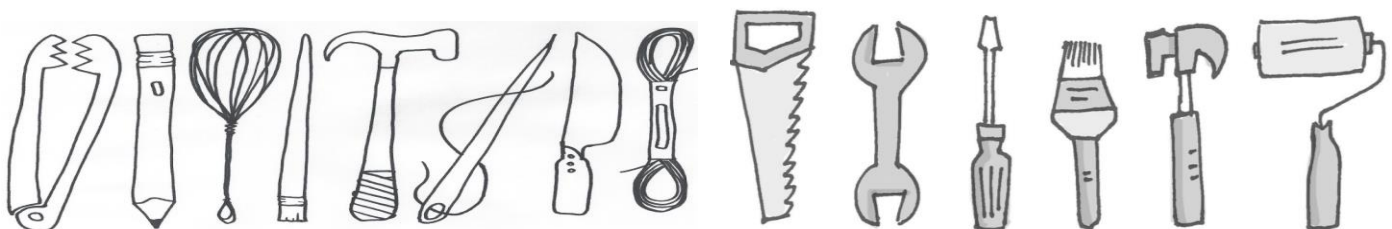


# ERDINGTON ACADEMY

## Design and Technology including Food Vision Statement

**"To offer every student in Erdington Academy the opportunity to *develop their creativity, practical knowledge and skills in preparation for our rapidly changing technological world*"**



# KS3 D&T including Food subject learning journey

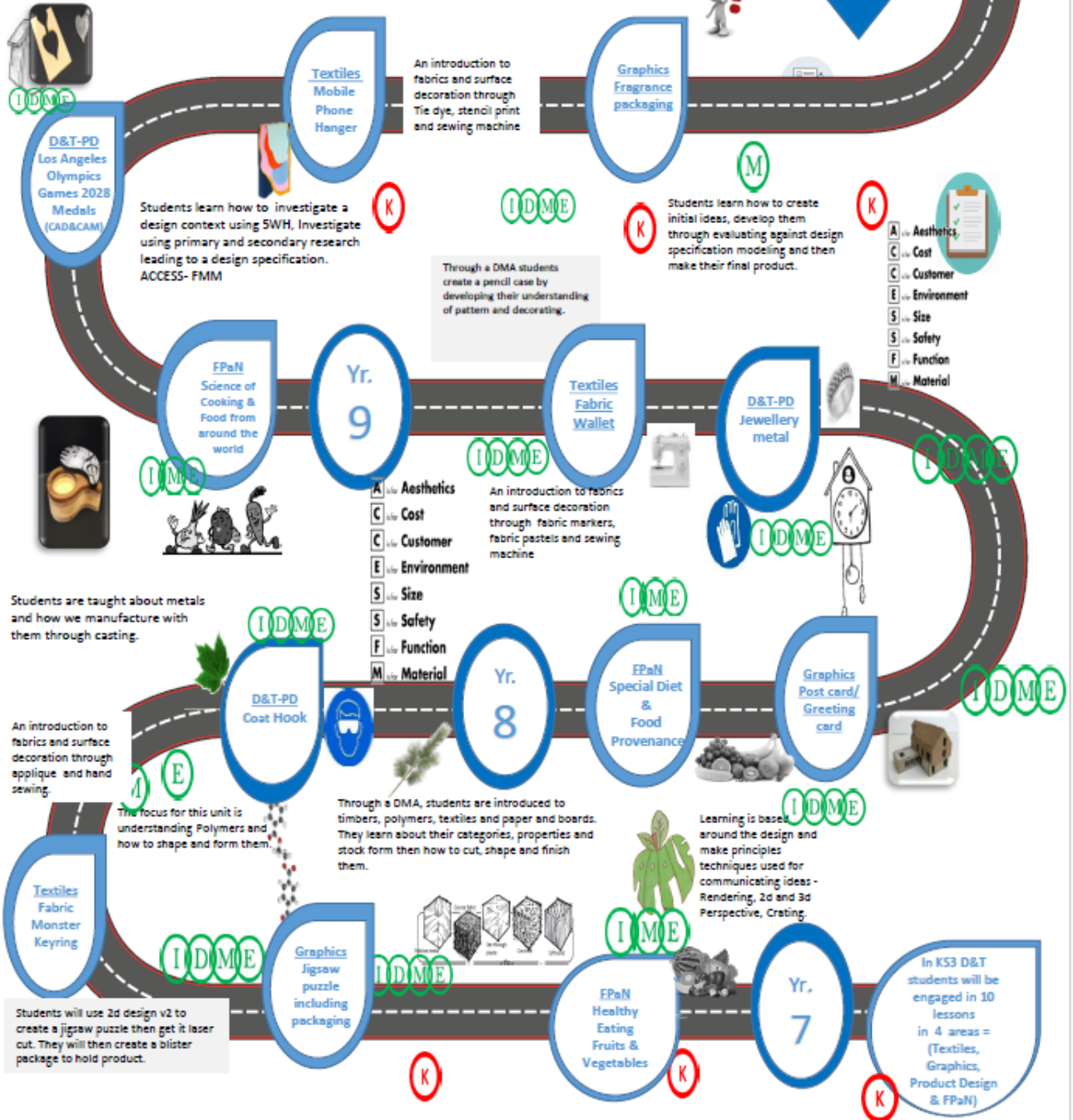
ENRICHING LIVES; TRANSFORMING FUTURES

Key: I=investigate, D=design, M=make, E=evaluate

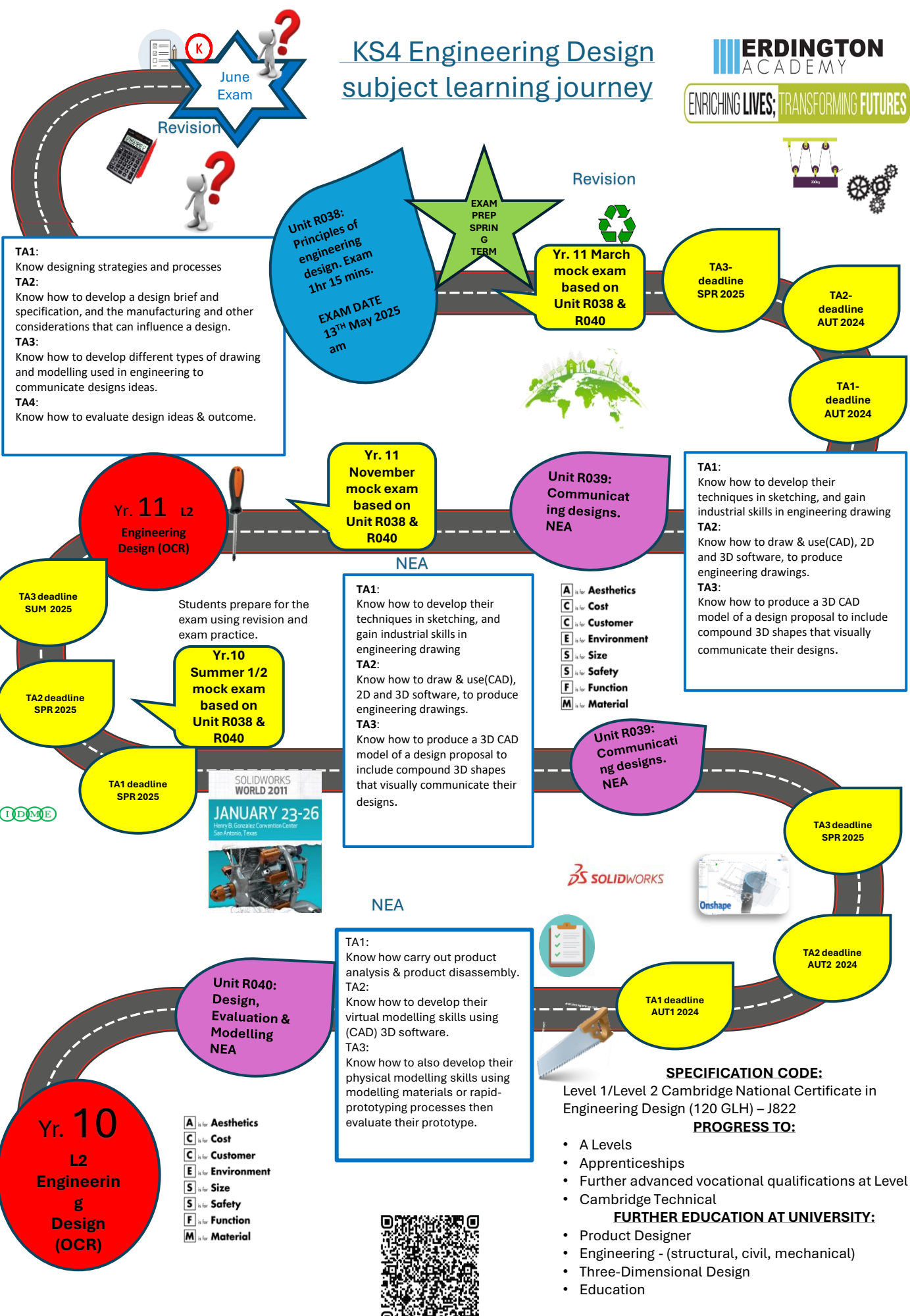
## KS4 Possible Pathways:

- FOOD PREPARATION & NUTRITION
- ENGINEERING DESIGN
- ART & DESIGN
- PHOTOGRAPHY
- ART & DESIGN

- A -> Aesthetics
- C -> Cost
- C -> Customer
- E -> Environment
- S -> Size
- S -> Safety
- F -> Function
- M -> Material



# KS4 Engineering Design subject learning journey



**TA1:**  
Know designing strategies and processes

**TA2:**  
Know how to develop a design brief and specification, and the manufacturing and other considerations that can influence a design.

**TA3:**  
Know how to develop different types of drawing and modelling used in engineering to communicate designs ideas.

**TA4:**  
Know how to evaluate design ideas & outcome.

**Unit R038:**  
Principles of engineering design. Exam 1hr 15 mins.

**EXAM DATE**  
13<sup>TH</sup> May 2025 am

**Yr. 11 March mock exam based on Unit R038 & R040**

**TA3-**  
deadline  
SPR 2025

**TA2-**  
deadline  
AUT 2024

**TA1-**  
deadline  
AUT 2024

**Yr. 11 November mock exam based on Unit R038 & R040**

**Unit R039:**  
Communicating designs.  
NEA

**TA1:**  
Know how to develop their techniques in sketching, and gain industrial skills in engineering drawing

**TA2:**  
Know how to draw & use(CAD), 2D and 3D software, to produce engineering drawings.

**TA3:**  
Know how to produce a 3D CAD model of a design proposal to include compound 3D shapes that visually communicate their designs.

**Yr. 11 L2 Engineering Design (OCR)**

Students prepare for the exam using revision and exam practice.

**TA3 deadline**  
SUM 2025

**TA2 deadline**  
SPR 2025

**TA1 deadline**  
SPR 2025

**Yr. 10 Summer 1/2 mock exam based on Unit R038 & R040**

**TA1:**  
Know how to develop their techniques in sketching, and gain industrial skills in engineering drawing

**TA2:**  
Know how to draw & use(CAD), 2D and 3D software, to produce engineering drawings.

**TA3:**  
Know how to produce a 3D CAD model of a design proposal to include compound 3D shapes that visually communicate their designs.

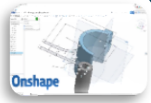
- A** for Aesthetics
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**Unit R039:**  
Communicating designs.  
NEA

**TA3 deadline**  
SPR 2025



NEA



**Yr. 10 L2 Engineering Design (OCR)**

- A** for Aesthetics
- C** for Cost
- C** for Customer
- E** for Environment
- S** for Size
- S** for Safety
- F** for Function
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**TA1:**  
Know how carry out product analysis & product disassembly.

**TA2:**  
Know how to develop their virtual modelling skills using (CAD) 3D software.

**TA3:**  
Know how to also develop their physical modelling skills using modelling materials or rapid-prototyping processes then evaluate their prototype.



**TA1 deadline**  
AUT1 2024

**TA2 deadline**  
AUT2 2024

**SPECIFICATION CODE:**  
Level 1/Level 2 Cambridge National Certificate in Engineering Design (120 GLH) – J822

**PROGRESS TO:**

- A Levels
  - Apprenticeships
  - Further advanced vocational qualifications at Level 3
  - Cambridge Technical
- FURTHER EDUCATION AT UNIVERSITY:**
- Product Designer
  - Engineering - (structural, civil, mechanical)
  - Three-Dimensional Design
  - Education



Scan me OCR