

S5-6 Course Choice

Technology department



Course choices

We offer three discrete subjects in S5-6.

- Creative Thinking (Level 6*)
- Engineering Science (N5 & Higher)
- Graphic Communication (N5 & Higher)

Each subject is different and provides pupils with unique learning opportunities that lead towards employment, college and university.

*Level 6 is the equivalent of Higher

Daydream Believers Creative Thinking Qualification

Overview

Creative thinking is at the heart of the innovative process, and is an essential skill for everyone in this fourth industrial revolution.

Daydream Believers Creative Thinking qualification has 24 SCQF credits at level 5 & 6. The level 6 has also got UCAS tariff points. It is suitable for learners aged 15 and above. The learning and teaching takes place across an academic year in approx six timetabled hours a week.

Creative Thinking



Creative Thinking



Future-proofed learning

Critical thinking and problem-solving top the list of skills employers believe will grow in prominence in the next five years. Our resources develop these meta-skills which will enable our learners to succeed in a rapidly changing employment landscape.



Real world content

We have had the privilege to work alongside dedicated professionals and passionate educators to create up to date, industry-relevant teaching materials. These are designed to scaffold the skills needed in the future workforce.



Designed to be used

Our mantra is "trust the teacher". Our resources are easy to use and adapt to suit your needs and the needs of the learner. They follow a user-centric design process to make sure they are classroom-ready.

Creative Thinking

5-point framework

Based on a simple creative process, our qualification has 5 broad learning outcomes which are clearly mapped to our resources and assessment. This emphasises the process rather than the product, highlighting the importance of the learners' journey and encouraging them to reflect on the strategies they have used to think creatively.



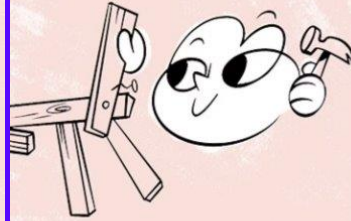
Research

Learn to find information to explore a problem. Demonstrate use of two or more research methods and be able to draw conclusions from the outcomes.



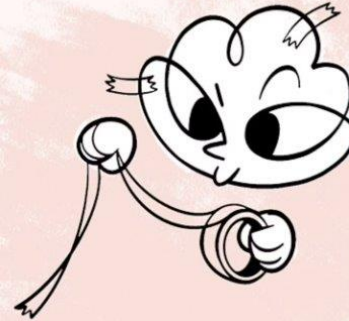
Conceptualise

Propose imaginative and creative concepts, which demonstrate understanding of the research outcomes.



Fail & Fix

Test and improve initial ideas. Compare, contrast and develop solutions to deal with a problem, situation, or issue.



Communicate

Independently select and use appropriate media to clearly and creatively communicate ideas and potential solutions.



Evaluate

Demonstrate creative bravery in the evaluation of independent work and show awareness of roles and potential for improvement in own practices and performance.

Creative Thinking

Assessment Tools

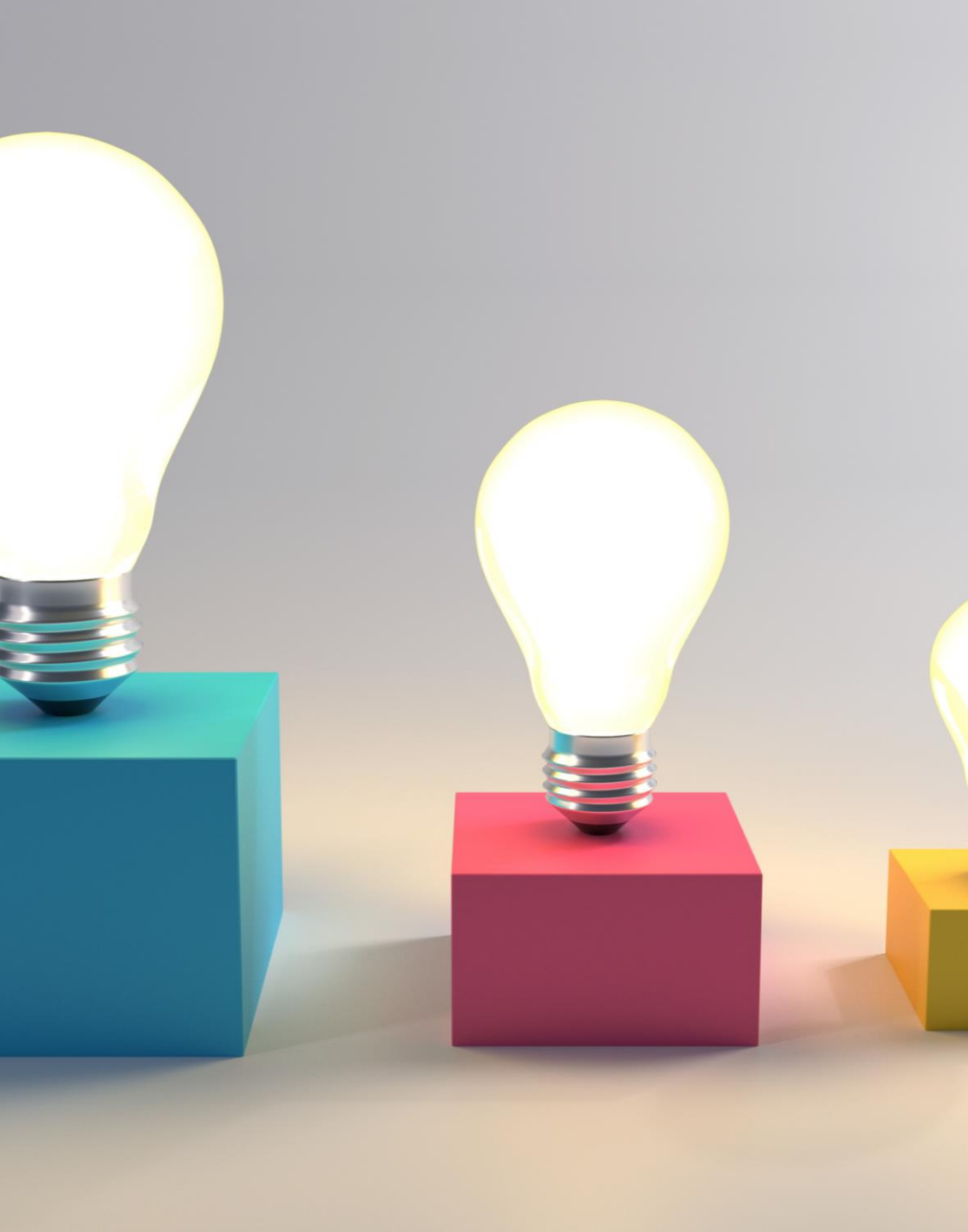
Assessment is never easy and all too often prevents creativity rather than promoting it. We have developed two simple tools which encourage participants to focus on process over outcome. This transparent approach reduces learner anxiety and encourages creative bravery and resilience. Our system is very simple. Learners undertake one of our challenges, which is clearly mapped to our five learning outcomes.

FOR MORE INFORMATION, VISIT THE [DAYDREAM BELIEVERS WEBSITE.](#)

Receiving the Qualification

On successfully completing our qualification in Creative Thinking Learners will receive a certificate which details their level and overall grade.





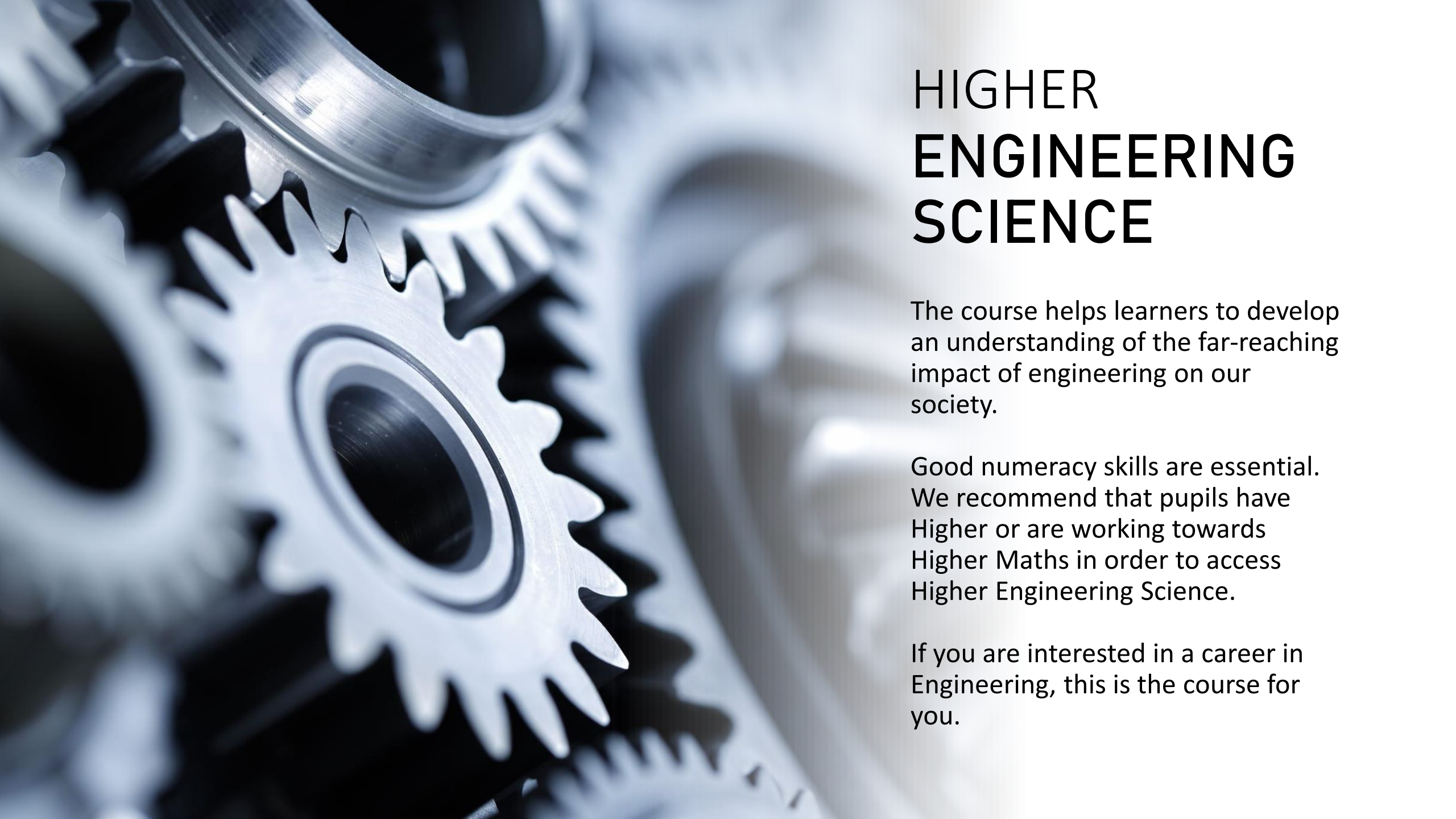
Creative Thinking

WHAT PRIOR LEARNING DO YOU NEED FOR CREATIVE THINKING?

Creative Thinking is a level 6 qualification, which is equal to a Higher. Good literacy skills are necessary to access the course content and prior experience in creative subjects would be beneficial but not vital.

- N5/Higher Art & Design
- N5/Higher Graphic Communication
- N5/Higher Music
- N5/Higher Drama
- N5/Higher English

There is no exam for Creative Thinking. Pupils are assessed throughout the year in their coursework, which makes this an attractive qualification for those who want to build a portfolio for art and design related pathways. As well as other who want to broaden their qualifications.



HIGHER ENGINEERING SCIENCE

The course helps learners to develop an understanding of the far-reaching impact of engineering on our society.

Good numeracy skills are essential. We recommend that pupils have Higher or are working towards Higher Maths in order to access Higher Engineering Science.

If you are interested in a career in Engineering, this is the course for you.



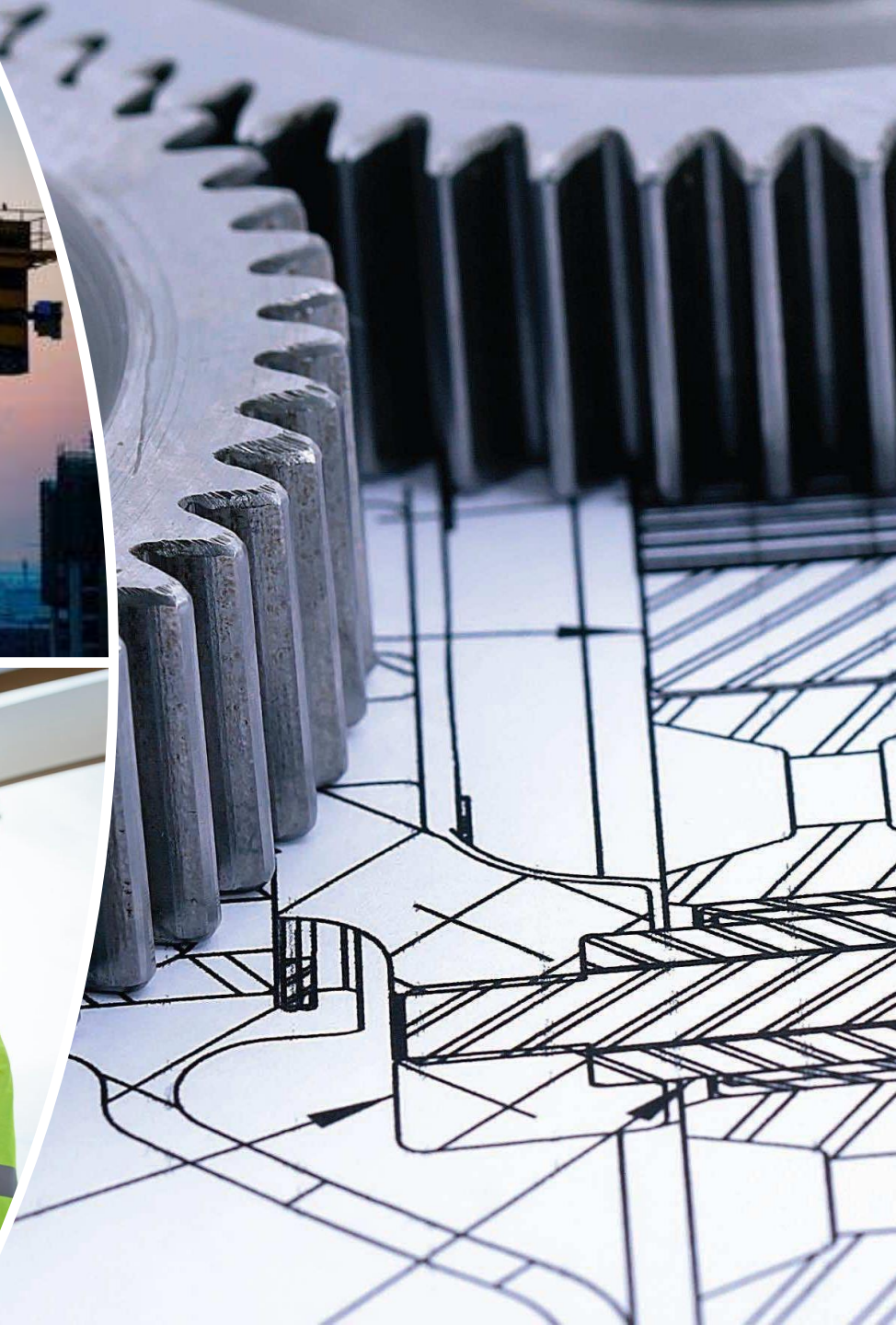
HIGHER ENGINEERING SCIENCE

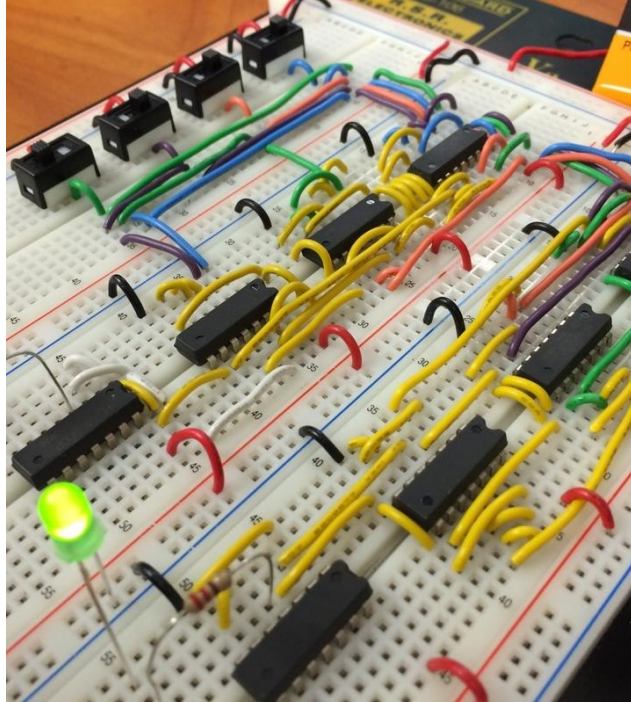
Skills I will develop in Higher Engineering Science

- Designing, developing, simulating, building, testing and evaluating engineering solutions
- Investigating and evaluating existing and emerging technologies
- Knowledge of the many types of engineering
- Knowledge of the wide role and impact of engineering on society and the environment
- Knowledge and understanding of electronics, mechanisms, structures and pneumatics.
- Knowledge of the relevance of energy, efficiency and sustainability

Careers related to Engineering Science

- Mechanical engineer
- Civil engineer
- Structural engineer
- Electrical engineer
- Aerospace engineer
- Environmental engineer
- And many more...





Engineering Science course

Engineering Contexts & Challenges

- Impacts of engineering and technology
- The systems approach
- Energy

Electronics & Control

- Analogue electronic components, circuit building & calculations
- Logic
- Programming microcontrollers

Mechanisms & Structures

- Motion & gears
- Pneumatics
- Structures, vectors & moments calculations
- Properties of materials, stress & strain calculations





HIGHER ENGINEERING SCIENCE

WHAT PRIOR LEARNING DO YOU NEED FOR HIGHER ENGINEERING SCIENCE?

- N5 Engineering Science in S4 (recommended)
- N5 or Higher Maths* (recommended)
- N5/Higher Physics (optional)

***Pupils who have not yet attained N5 Maths will find large elements of Higher Engineering Science difficult.**



Higher GRAPHIC COMMUNICATION

Graphic Communication is a creative subject that also has a strong technical element.

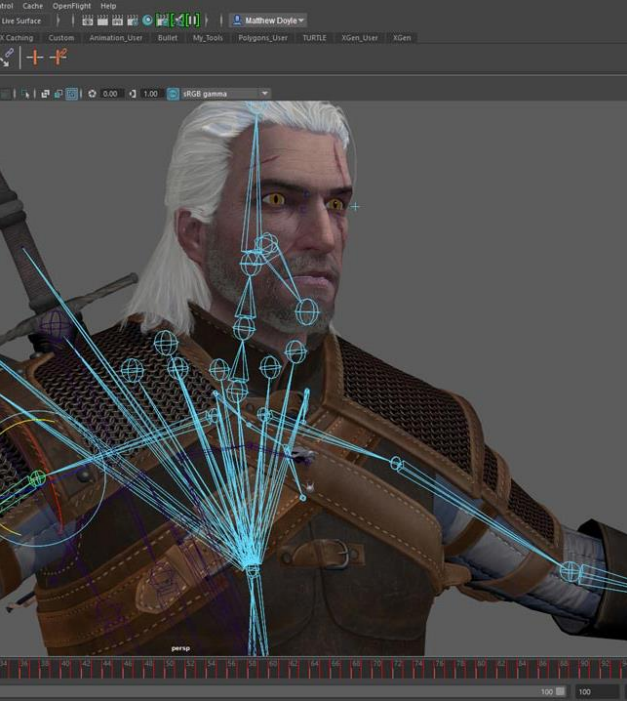
The main areas of the course are 3D CAD modelling and desktop publishing. A lot of the subject is computer based but there is also an element of manual graphics (sketching and rendering.)



GRAPHIC COMMUNICATION

Skills I will develop in Graphic Communication

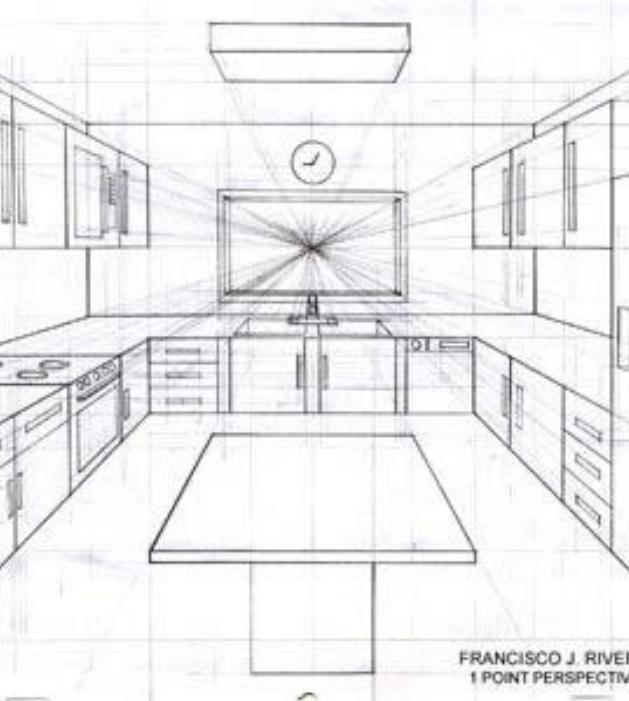
- Skills in 2D and 3D graphics
- The ability to create 3D objects on CAD software
- The ability to read, interpret and create production drawings
- Knowledge of desk top publishing techniques and practice
- Knowledge of colour and presentation techniques
- An awareness of graphic communication as an international language



Careers related to **GRAPHIC COMMUNICATION**

- Engineering
- Product design
- Architecture
- Building and construction
- Illustration
- Manufacturing
- Web design
- Automotive design
- Computer game design





GRAPHIC COMMUNICATION course

Manual graphics

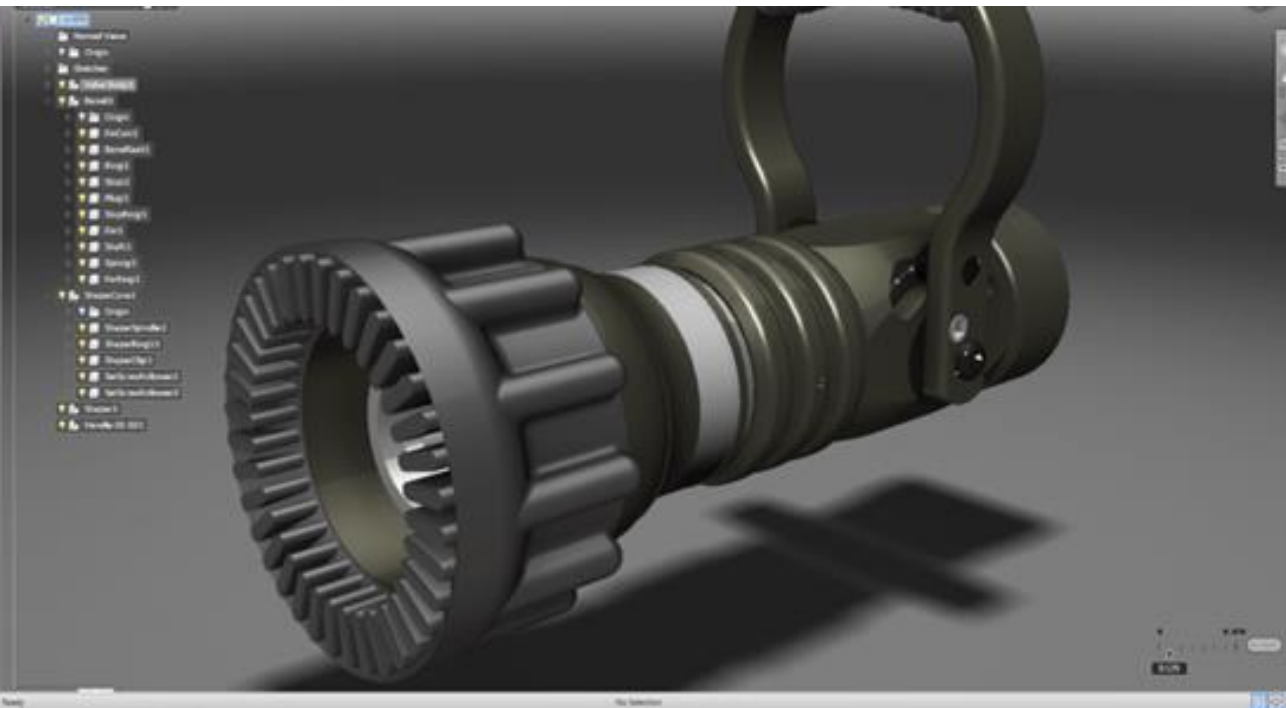
- Orthographic sketching
- Pictorial sketching
- Pencil rendering

Desktop publishing

- Preliminary thumbnails
- 2D graphic layouts

3D CAD

- 3D modelling
- Production drawings





HIGHER GRAPHIC COMMUNICATION

WHAT PRIOR LEARNING DO YOU NEED FOR HIGHER GRAPHIC COMMUNICATION?

- N5 Graphic Communication in S4 (recommended)
- N5 or Higher Art & Design* (optional)
- N5 Design & Manufacture (optional)

Pupils who have limited experience in design based subjects can still do well as a crash Higher in Graphic Communication. There is also the option of doing National 5 Graphic Communication instead.

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