# 13+ Design, Engineering and Technology (DET) Scholarship September 2025 entry

## Scholarship Overview

We are proud to offer a DET Scholarship to pupils who demonstrate a strong passion for, and proven track record in, design, engineering, or related technologies. We seek candidates who have a deep interest in a specific area of the curriculum or broader fields within these disciplines, and who show significant potential for growth and achievement.

As part of the Scholarship process, candidates will complete three key components:

1.  **Aptitude Paper: A 45-minute written test designed to assess technical knowledge, problem-solving abilities, and creative thinking.**

In the aptitude paper, pupils will be expected to engage in product analysis and develop a drawn and annotated solution based on one out of a selection of design briefs. Candidates will be assessed on their ability to effectively communicate ideas on paper, critically evaluate their own concepts, and demonstrate their understanding of technical knowledge and terminology. The practicality and feasibility of the proposed solution will also be key factors in the evaluation process.

**2. Practical Assessment: A 45-minute hands-on task where pupils will demonstrate their practical skills and innovative approach to a given brief.**

During the practical assessment, pupils will have the opportunity to demonstrate their skills by using simple, common hand tools to create a prototype that addresses a given design brief.

This assessment will focus on key factors including time management, effective use of materials and tools, and the overall creativity and vision behind their design solution. Additionally, we will evaluate the quality and craftsmanship of the final prototype.

**3. Portfolio Presentation and Interview: A 15-minute interview with the Head of Design, Engineering, and Technology, where pupils will present a portfolio showcasing their work, answering a selection of questions along the way.**

Each candidate will have the opportunity to present a carefully curated portfolio, either digital or physical, that highlights a diverse range of design and practical projects completed over the past three academic years (Years 6–8). The portfolio should be concise, with a maximum of ten pages, and should demonstrate a balance between curriculum-based and independent work. We strongly encourage the inclusion of projects

undertaken outside of school hours and beyond the standard curriculum. This is an opportunity to showcase creativity, innovation, and dedication to craft beyond the classroom.

To give you an idea of the type of work we're excited to see, previous successful portfolios have featured projects such as:

- Technological developments in electronics or programming e.g. BBC Microbit.
- Computer-Aided Design (CAD) and Manufacture projects.
- Creative problem-solving initiatives.
- Graphic design.
- Self-designed / constructed drones and radio-controlled vehicles (excluding kits).
- Furniture design.
- Architectural pieces.

These three assessment components are designed to evaluate the holistic capabilities and potential of each candidate. We consider not only technical skill and the quality of work presented, but also enthusiasm for the subject and the potential for future success.

Successful Scholars are expected to pursue Design, Engineering, and Technology through at least GCSE level and actively engage in the complementary curriculum offered at The Patrick Engineering Centre.

## Portfolio advice for your pupils

**Presentation:** Ensure your portfolio is clear, well-organised, and easy to navigate. Start with your most compelling work to make a strong first impression.

**Work Selection:** Choose projects that highlight your skills and experiences across various aspects of design, engineering, or technology. Aim to demonstrate versatility and depth in your abilities.

**Visual Documentation:** If you have larger practical projects that cannot be brought to the interview, include high-quality photographs in your portfolio. You may bring smaller items to the interview if you wish, though this is optional.

**Format:** Your portfolio can be presented digitally or in print (A4 or A3). Short videos are also acceptable, especially to showcase project testing or functionality. Please keep the total duration of all videos combined to under 1 minute and 30 seconds.

**Jon Baker**
Director of the Patrick Engineering Centre

*September 2024*