https://thesbr.org.uk/job/heritage-waterwheel-project-assistant-2-2/

STREAM Engineering & Systems Technician Assistant Exploring Engineering

Description

The STREAM Engineering & Systems Technician supports the development, testing, and implementation of engineering-related systems across the Growforward site. This role gives students hands-on exposure to real-world engineering thinking through the STREAM lens (**Science, Technology, Restoration, Engineering, Arts, Mathematics**), helping them understand how small systems contribute to sustainable site operations.

The student will assist with surveying existing site infrastructure, exploring simple engineering solutions, supporting prototype development, and documenting small systems that help Growforward operate more efficiently. This may include water-flow observations, energy-use mapping, small-scale structural assessments, and contributing to the early design thinking around site improvements. The role emphasis curiosity, safe experimentation, and gentle problem-solving.

Key Responsibilities

- Support basic engineering surveys (pathways, drainage, waterwheel)
- Assist with simple prototype testing (non-mechanical, low-risk systems)
- Contribute to STREAM-aligned design thinking sessions
- Document engineering observations and produce clear diagrams or digital notes
- Help map small systems such as water flow, site gradients, or energy use
- Work with staff to identify gentle improvements to site infrastructure
- Maintain accurate logs and follow safe engineering practice
- Uphold SBR's values of safety, curiosity, and respectful experimentation

Project Components

Six modules:

1. Research
2. Surveying
3. Design for Manufacturing
4. Electrical Engineering and coding
5. Software – Design
6. Product development and prototyping

Including:

- STREAM engineering exploration
- Site infrastructure surveying
- Systems mapping
- Prototype testing
- Digital documentation

Employment Type

Part-time, Intern, Volunteer

Working Hours

24–30 hours total (4–5 weeks × 1 day per week)

Duration of employment

Optional extension to 120 hours across the academic year

Experience

No Previous Experience Required

Reporting Line

Reports to: Sustainable Business Resource Ecology Coordinator

Secondary support: Growforward Environmental Lead

Expected Outputs

- A short engineering report or presentation on each of the six modules
- Diagrams or digital notes mapping product development and systems thinking
- A simple prototype test record (if applicable)
- Contribution to Growforward's STREAM development archive

Skills Gained

- Basic engineering surveying
- Systems thinking and STREAM methodology
- Prototype testing and documentation
- Diagramming and digital recording
- Teamwork and gentle leadership
- Understanding of sustainable engineering principles

Date posted
November 4, 2026

Safeguarding & Safety Notes

- No mechanical engineering or high-risk tasks
- All prototype work supervised
- Clear boundaries around tools, water systems, and site utilities
- Emphasis on emotional safety, confidence-building, and supported experimentation