

**Engineering Tripos Part IIB**  
**Project Planning Form 2023/24**

**Students** should submit this form to Group Administrators by **Friday 9 June 2023**. If plans evolve over the summer, please update and resubmit.

Name of student: **Lorcan Nicholls**

Email: **ln356@cam.ac.uk**

College: **Girton**

Director of Studies: **Dr Shaun Fitzgerald**

Project is: Type (a) ~~Type (b)~~ (delete as appropriate)

**sdf10@cam.ac.uk**

Name of supervisor: **Dr Shery Huang**

Short title of project: **3D Printing of Multi-Material Hydrogels**

Project reference code (e.g. B-ANO22-1 / B-ANO22-type(b)): **C-yysh2-3**

Aims of project:

To develop a 3D printing system which can handle the embedded printing of filaments containing hydrogel composites and/or multiple biocompatible hydrogels.

Preparatory work for the long vacation:

1. Undertake UROP with Dr Fumiya Iida involving hydrogels for soft robots
2. Read research papers covering the materials science of hydrogels and printing

Workshop/laboratory facilities needed:

**Nanoscience Centre**

Any special safety implications:

**Undertake bio-lab hazard safety training**

Signature of student: *LNicholls*

Signature of supervisor: *Shery Huang*