- Both in room L 050 check it in advance!
- Labs start in Week 4
- All labs on Thursday afternoons 2pm-5pm
- Online pre-lab interactive (Structures only) to be completed beforehand !!!
- Detailed group timetables to be issued by Week 2
- Labs supervised by post-graduate teaching assistants:
 - Structures: Tamas Rev (<u>tamas.rev@bristol.ac.uk</u>)
 - Materials: Arjun Radhakrishnan (<u>arjun.radhakrishnan@bristol.ac.uk</u>)





Woodland Rd entrance to the New Wing



Finding Lab L 0.50









Up to **Ground Floor**



Finding Lab **L 050**













- Five experiments:
 - 2D pin-jointed truss
 - Shear force and bending moment in a beam
 - Bending deflection of rectangular section beams
 - Direct stresses in a T-section beam
 - Buckling of struts
- Mandatory pre-lab online demo and quiz !!!
- Experiments demonstrate theory taught in lectures
- Assessment: online test in week 17



- Tensile testing of three different materials
 - Aluminium alloy
 - Polyamide 6
 - High-density polyethylene
- Extraction of basic material properties
 - Young's modulus
 - Yield stress / Proof stress
 - Ultimate tensile strength
- Discussion
 - Relationship between structure and properties
 - Implications for materials selection assignment
- Assessment: online test in week 14

