



## **Module Specification**

### **Glass and Glazing**

Version: 2023-24, v2.0, 07 Aug 2023

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## Part 1: Information

**Module title:** Glass and Glazing

**Module code:** UBLMG6-15-M

**Level:** Level 7

**For implementation from:** 2023-24

**UWE credit rating:** 15

**ECTS credit rating:** 7.5

**College:** Faculty of Environment & Technology

**School:** FET Dept of Architecture & Built Environ

**Partner institutions:** None

**Field:** Architecture and the Built Environment

**Module type:** Module

**Pre-requisites:** None

**Excluded combinations:** None

**Co-requisites:** Introduction to Facade Systems 2023-24

**Continuing professional development:** No

**Professional, statutory or regulatory body requirements:** None

## Part 2: Description

**Overview:** Co-requisites: Students must have already completed or be currently enrolled in UBLLYS-15-M Introduction to Facade Systems. This requirement is compulsory for FT and PT students. Advisory for CPD students who only intend to take an individual module.

**Features:** Not applicable

**Educational aims:** To give a comprehensive overview of glass types, environmental and structural performance, safe use, and risk assessment.

**Outline syllabus:** Content:

The use of glass in Facades has increased dramatically since the development of the float process in the 1950s. The wider use of glass has brought problems such as overheating and safety and processes have been developed to mitigate these problems.

This module begins with lectures to describe the manufacture and properties of glass.

It goes on to look at the various different processing options that may be used to give a glass with improved properties and performance.

The use of glass has a significant impact on the appearance of a facade, and the processing that is undertaken will influence this appearance.

Glass often determines the acoustic performance of a facade. This unit introduces facade acoustics in general, and then focuses on the glazing, the factors that affect the performance, and how the performance may be improved.

Overheating in highly glazed buildings is a real concern. In addition to the consideration of environmental control glasses, this unit will also introduce shading in more general terms.

Safe use of glass is of paramount importance, and correct glass selection is a complex process. This module introduces the idea of a risk assessment based selection process being used to ensure all the relevant factors are considered during this stage of the facade design.

Finally the module looks at more advanced/novel uses of glass, such as the structural use of glass and threat resistance.

### **Part 3: Teaching and learning methods**

**Teaching and learning methods:** The module will be delivered by means of:

Lectures and seminars which enable students to support their own independent learning by exploring deeper issues pertaining to Façade Engineering, visiting speakers will be used to provide up to date material and context to the applications of the subject area.

Directed reading examining the key principles and relevant criteria relating to a number of topics of importance to Façade Engineering.

Contact Hours:

The module is delivered by way of five study days for face to face teaching.

**Module Learning outcomes:** On successful completion of this module students will achieve the following learning outcomes.

**MO1** Demonstrate a knowledge of glass production processes and performance (Component A, B)

**MO2** Identify and rank the primary performance requirements for the glass in a typical facade project (Component B)

**MO3** Understand those factors which affect the visual appearance of glass in a facade (Component A).

**MO4** Understand and critically evaluate different ways to fix glass to a building (Component A,B)

**MO5** Perform a risk assessment to select an appropriate glass. (Component A B)

**Hours to be allocated:** 150

**Contact hours:**

Independent study/self-guided study = 118 hours

Face-to-face learning = 32 hours

Total = 150

**Reading list:** The reading list for this module can be accessed at [readinglists.uwe.ac.uk](https://uwe.rl.talis.com/modules/ublmg6-15-m.html) via the following link <https://uwe.rl.talis.com/modules/ublmg6-15-m.html>

## Part 4: Assessment

**Assessment strategy:** assessment will be through a presentation and report. The presentation will be assessed via a Video Presentation (7-10 mins) based upon a real world model, requiring a professional in depth analysis of glazing systems.

The report will be assessed via a Glass Performance/Appearance and Risk Assessment Report

Resit strategy consists on having to rework the failed components so that the students can improve according to the feedback received.

### Assessment tasks:

#### Presentation (First Sit)

Description: Video Presentation on glazing systems (7-10 mins)

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO3, MO4, MO5

#### Report (First Sit)

Description: Report on Glass Risk Assessment (2,500 words)

Weighting: 75 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO4, MO5

**Presentation (Resit)**

Description: Video Presentation on glazing systems (7-10 mins)

Weighting: 25 %

Final assessment: No

Group work: No

Learning outcomes tested: MO1, MO3, MO4, MO5

**Report (Resit)**

Description: Report on Glass Risk Assessment (2,500 words)

Weighting: 75 %

Final assessment: Yes

Group work: No

Learning outcomes tested: MO1, MO2, MO4, MO5

**Part 5: Contributes towards**

This module contributes towards the following programmes of study:

Façade Engineering [Frenchay] MSc 2023-24

Façade Engineering [Frenchay] MSc 2023-24

Façade Engineering [Frenchay] MSc 2022-23