

### **MODULE SPECIFICATION**

Part 1: Information						
Module Title	Glass and Glazing					
Module Code	UBLMG6-15-M	Level	Level 7			
For implementation from	2018-19					
UWE Credit Rating	15	ECTS Credit Rating	7.5			
Faculty	Faculty of Environment & Technology	Field	Architecture and the Built Environment			
Department	FET Dept of Architecture & Built Environ					
Contributes towards	Façade Engineering [Sep][PT][Frenchay][2yrs] MSc 2018-19 Façade Engineering [Sep][FT][Frenchay][1yr] MSc 2018-19					
Module type:	Standard					
Pre-requisites None						
Excluded Combinations	None	ne				
Co- requisites	Introduction to Facad	ntroduction to Facade Systems 2018-19				
Module Entry requireme	nts None	None				

## Part 2: Description

**Overview**: Co-requisites: Students must have already completed or be currentlyenrolled 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.

**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.

#### STUDENT AND ACADEMIC SERVICES

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 unit 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.

**Teaching and Learning Methods:** The module is delivered by way of five study days for face to face teaching. Recorded lectures and the use of email discussion groups in the virtual learning environment (VLE) and other technology-aided means are also employed.

The module will be delivered by means of a series of lectures, seminars and tutorials.

Lectures and seminars will be used to enable students to support their own independent learning by exploring deeper issues pertaining to Facade Engineering and receiving formative feedback. Occasional speakers will be used to provide up to date material and context to the applications of the subject area.

A series of tutorials are designed to provide knowledge and practical skills relevant to Facade Engineering.

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

#### Part 3: Assessment

Component A will be assessed via an online 7-10 minute Video Presentation and a written Report. The Report provides the formal technical evidence to support the presention – this dual format is based upon a realistic model of how a professional would need to present this kind of indepth analysis.

A preparatory exercise ensures all students start at the same basic level of knowledge when starting the intensive week of contact for the module. (Component B1)

The Case Study Report is based on a real world practical activity which a professional Facade Engineer would need to undertake, modelled around realistic case studies. (Component B2)

First Sit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B	<b>✓</b>	30 %	Preparatory submission
Report - Component B		45 %	Case study report (2000 words)
Portfolio - Component A		25 %	Video presentation (7-10 minutes) and report (1500 words)

# STUDENT AND ACADEMIC SERVICES

Resit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B	✓	30 %	Preparatory submission
Report - Component B		45 %	Case study report (2000 words)
Portfolio - Component A		25 %	Video presentation (7-10 minutes) and report (1500 words)

Part 4: Teaching and Learning Methods							
Learning Outcomes	On successful completion of this module students will be able to:						
	Module Learning Outcomes						
	MO1	of glass performance and					
		Façades					
		f glass and resolve design					
		conflicts Perform a risk assessment to select a	an appropriate glass				
Contact Hours	Contact Hours						
	Independent Study Hours:						
	Independent study/self-	118					
		Total Independent Study Hours:	118				
	Scheduled Learning and Teaching Hours:						
	Face-to-face learning	32					
	Total Schedu	uled Learning and Teaching Hours:	32				
	Hours to be allocated	150					
	Allocated Hours		150				
Reading List	The reading list for this module can https://uwe.rl.talis.com/modules/u	an be accessed via the following link: blmg6-15-m.html					