STUDENT AND ACADEMIC SERVICES

UWE Bristol | University of the West of England

MODULE SPECIFICATION

Part 1: Information			
Module Title	Advanced Facades		
Module Code	UBLMJP-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		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
Overview: Pre-requisites: PT students are strongly recommended to take this module as the last of the eight 15 credit modules. **Educational Aims:** This unit looks at several areas of development and technology that are likely to play an ever increasing role in future façade design. **Outline Syllabus:** The use of natural ventilation in new buildings is increasing as we look for ways to reduce energy use. In order to provide comfortable conditions and meet the need ofoccupants, the use of automated Façades are becoming more common. How this is achieved? How are automated Façades specified, installed and commissioned? What functions can they provide? How are they controlled? Do we incorporate and integrate automated shading devices? What role can double Façades play? Since July 2016, BIM level 2 has been required for all government funding building in the UK.

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What does this mean for the façade? What information is required? By who, and when? What level of detail? Who owns the information and how is it updated? Fire performance of Façades is an area of great interest, especially after numerous recent large-scale fires in the Middle East. This unit will discuss the principles of fire spread and how they relate to the façade. Fire testing and the regulatory requirements will be discussed.

The final section on interfaces and practical details will look at how the different performance characteristics discussed during the course can all be satisfied.

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 Façade 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 façade engineering.

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

Part 3: Assessment

A formative preparatory exercise allows all students to start at the same basic level of knowledge when starting the intensive week of contact for the module.

The Fire and Automated Façades exercises are based on a real world practical activity which a professional Façade Engineer would need to undertake, modelled around realistic case studies.

The Automated Façades exercise will be assessed via an online 7-10 minute presentation (eg Kaltura or similar) and a written submission. The written submission which provides the formal technical evidence to support the presentation – this dual format is based upon a realistic model of how a professional would need to present this kind of in-depth analysis.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B	✓	37 %	Essay fire (2000 words)
Set Exercise - Component B		25 %	Preparatory submission
Portfolio - Component A		38 %	Kaltura presentation and essay - automated facades (1500 words)
Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B	✓	37 %	Essay fire (2000 words)
Set Exercise - Component B		25 %	Preparatory submission
Portfolio - Component A		38 %	Kaltura presentation and essay - automated facades (1500 words)

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Part 4: Teaching and Learning Methods		
Learning Outcomes	On successful completion of this module students will be able to:	
		Module Learning Outcomes
	MO1	Critically analyse the design, specification and control of automated façade systems
	MO2	Calculate the effectiveness of shading devices
	MO3	Critically evaluate the Façade in a BIM environment.
	MO4	Assess the risk of fire spread in a façade system
Contact Hours	**Contact Hours**	
	Independent Study Hours:	
	Independent study/self-guided study	118
	Total Independent Study Hours:	118
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	32
	Total Scheduled Learning and Teaching Hours:	32
	Hours to be allocated	150
	Allocated Hours	150
Reading List	*The reading list for this module can be accessed via the following link:*	
	https://uwe.rl.talis.com/modules/ublmjp-15-m.html	