

# WM9B2-15 Big Data & Marketing Technology

**21/22**

**Department**

WMG

**Level**

Taught Postgraduate Level

**Module leader**

Liping Zheng

**Credit value**

15

**Module duration**

2 weeks

**Assessment**

Multiple

**Study locations**

University of Warwick main campus, Coventry Primary

Distance or Online Delivery

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## Description

### Introductory description

Modern digital marketing practice is as much dependent on a suite of technologies and information systems, as it is on strategies and marketing technique. Commonly these include a mixture of digital and data technologies that underpin each stage of the marketing lifecycle, from initial research through to campaign analysis and customer retention. Inevitably, any discussion of marketing technology in today's market, also necessitates a focus on big data and the associated analytics methods. The utilisation of such data and techniques has become an essential toolkit for implementing and optimising modern digital marketing strategy.

### Module aims

The module aims to expose participants to the latest in marketing and big data technologies, and apply them to a range of digital marketing scenarios. To do this module seeks to provide digital marketing students with an overview and first-hand experience of a range of these technologies, including:

- data visualisation,

- customer analytics tools,
- social media analytics,
- marketing automation,
- artificial intelligence,
- cloud computing,
- mobility
- internet of things.

## Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

### 1. What is marketing technology?

- Marketing technology fundamentals
- Information architecture
- Marketing automation

### 1. Big data

- Data architecture for marketing
- Social media, internet of things and APIs
- Artificial intelligence and machine learning

### 1. Analytics

- Marketing analytics
- Data visualisation & dashboards
- Customer segmentation technologies
- Social media analytics

### 1. Marketing automation & mobility

- Mobile technology and location marketing
- Multivariate and A/B testing
- Chatbots and personalisation
- Automation technologies

### 1. Cloud computing

- Cloud fundamentals
- Cloud migration
- Cloud native computing

### 1. A practical simulation of the above topics

## Learning outcomes

By the end of the module, students should be able to:

- Demonstrate a comprehensive understanding of the uses of big data and marketing technologies in modern business
- Critically analyse the systematic and operational risk associated with a business' information architecture, and develop appropriate mitigation and management strategies
- Critically evaluate a range of real-world marketing technology solutions, and determine their applicability and suitability to a range of different use cases
- Interpret complex business requirements and develop appropriate, higher-level solutions and designs

## Indicative reading list

[View reading list on Talis Aspire](#)

## Interdisciplinary

A mixture of technology/computing topics and business topics

## International

Topics are of high international demand

## Subject specific skills

Big data, clustering, visualisation, cloud computing, IT architecture

## Transferable skills

Presentation skills, data analysis, research, teamwork, IT architecture, critical thinking

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## Study

### Study time

Type	Required
Lectures	14 sessions of 1 hour 30 minutes (14%)
Seminars	12 sessions of 1 hour 30 minutes (12%)
Online learning (independent)	4 sessions of 1 hour 30 minutes (4%)
Assessment	105 hours (70%)
Total	150 hours

## Private study description

No private study requirements defined for this module.

## Costs

No further costs have been identified for this module.

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## Assessment

You do not need to pass all assessment components to pass the module.

### Assessment group A

	<b>Weighting</b>	<b>Study time</b>	<b>Eligible for self-certification</b>
Technology Presentation	20%	15 hours	No
A group presentation on an appropriate technology stack for a client casestudy			
Post Module Assignment	80%	90 hours	Yes (extension)
A business-style report discussing core topics in big data and marketing technology			

### Assessment group R

	<b>Weighting</b>	<b>Study time</b>	<b>Eligible for self-certification</b>
Post Module Assignment	100%		Yes (extension)
A business-style report discussing core topics in big data and marketing technology			

## Feedback on assessment

Verbal feedback for in-module element. Written feedback and annotated scripts for post-module element

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## Availability

## Courses

This module is Optional for:

- Year 1 of TWMS-H1S4 Postgraduate Taught e-Business Management (Full-time)