



澳門旅遊大學  
UNIVERSIDADE DE TURISMO DE MACAU  
Macao University of Tourism

# Master of Science (MSc) in Digital Marketing and Analytics

## Programme Description

The Master of Science (MSc) in Digital Marketing and Analytics focus on the core areas of marketing and retail business management in the context of digital transition. They are designed to prepare students to advance their career in tourism, luxury retail and other related high-end service businesses, through solid training on the competencies of digital marketing and business analytics.

## Programme Aims

The programme aims to provide higher education with an emphasis on knowledge discovery about state-of-the-art information technology and high-level data science skills that are innovating the traditional marketing practices of tourism, luxury retail and other related high-end service businesses. Graduates, equipped with advanced digital media communication and data analytical skills, are expected to have confidence in working in a technology-enabled and data-driven service industry environment and play a leadership role in key marketing-related positions.

## Programme Highlights

- ✓ Possibility of taking up to 9 credit hours of taught courses from selected postgraduate programmes offered by higher education institutions recognised by UTM.

# Modules and Courses

Course Category	Credit (Total: 30 credits)
<b>Core (3 credits/ course)</b> <ul style="list-style-type: none"> <li>• Smart Marketing</li> <li>• Advanced Topics in Digital Content Creation</li> <li>• Consumer Behaviour in the Digital World</li> <li>• Data Analytics and Visualisation</li> <li>• Luxury Retail in the Digital World</li> <li>• Big Data Analysis</li> </ul>	18
<b>Elective (3 credits/ course, choose any two courses below)</b> <ul style="list-style-type: none"> <li>• AIoT and Robotics</li> <li>• Geographic Information Systems</li> <li>• Seminar in Emerging Technologies</li> <li>• Research Methods</li> <li>• Finance and Accounting</li> <li>• Strategic Management</li> </ul>	6
<b>Project Report <u>OR</u> Internship &amp; Report* (6 credits/ 6 credits)</b>	6

\* The Project Report OR Internship & Report must be related to the programme, and should be conducted after the successful completion of all taught courses. If students choose Internship & Report, the internship duration is 600 training hours.

## Remarks:

- For those who passed all courses but fail to complete / pass the Project Report or Internship & Report will be awarded a postgraduate diploma upon fulfilling the corresponding credit requirement.
- The course content is application-oriented and of practical relevance. Applicants from various disciplines are welcomed to apply.
- Some course materials may be co-delivered by a third-party collaborator whereas UTM assumes the primary responsibility of its teaching quality and excellence.

# Course Description

Module	Course Title	Course Description
Core	Smart Marketing	This course reviews the role of traditional marketing channels, its relationship with smart technologies, and the shift to a next-generation marketing mindset driven by information technology. The course also teaches practical skills to undertake a digital transformation in marketing. After this course, students will be able to address different marketing needs with digital means.
	Advanced Topics in Digital Content Creation	Producing effective and distinctive content on different digital platforms such as social media is a crucial part of digital marketing. This course is designed to introduce the latest topics of digital content creation in the field of digital marketing. It will cover topics such as theories that are applicable to content marketing, content styles, content effectiveness, content marketing scenarios and strategies. In addition, popular concepts such as viral marketing will be introduced and how content is used on social media to develop communities and build a powerful brand.
	Consumer Behaviour in the Digital World	Consumers are engaged in different digital platforms due to today's fast changing business environments. This course is designed to reveal consumer behavioural change in the digital world and the relevant impact on marketing logistics. The course is intended to provide students with a theoretical introduction to the field of consumer behaviour. As their theoretical understanding of consumer behaviour develops during the semester, concurrent relation to important marketing issues, especially digital marketing and marketing logistics issues, will be discussed. By the end of this course, students will be able to understand the behaviour of consumers in the digital world from a psycho-social perspective.
	Data Analytics and Visualisation	In this course, students will learn fundamental techniques to collect and process data from different sources, apply suitable analytic methods, and to finally decode and describe the hidden meanings behind the data with an optimum presentation format to tackle different issues. Topics include most up-to-date software tools for data visualisation.
	Luxury Retail in the Digital World	Luxury retail operators have been progressively implementing various digital technologies due to its growing importance in the modern retail business environment. This course is designed to understand how luxury retail operators adopt digital technologies to cope with digital transformation. The course will also cover the concept of omni-channel marketing and new retail concepts. After completing this course, students will understand and apply retail principles in the digital environment, evaluate digital retail solutions and develop digital retail strategies.
	Big Data Analysis	While conventional technologies provide users the ease of handling structured data, it is also important to develop a competence in understanding and making use of unstructured data to stay ahead of the competition. This course introduces the fundamentals of data analysis in a big data spectrum. Students will gain practical cloud based big data analytics experience through the use of mainstream cloud platforms. Upon completion, students may consider participating in optional exams for additional certifications in the big data analysis field.

Module	Course Title	Course Description
Elective	AIoT and Robotics	The tourism industry is often a "boot camp" for introducing new technologies to revolutionize its operations. This course aims at introducing the principle of AI with Internet of Things (AIoT) and Robotics. In addition, practical robotics case studies and solutions will be reviewed. Students will gain experience in designing and deploying smart technologies in this fast-changing industry and generate new ideas for businesses.
	Geographic Information System	This course is designed to familiarize students with the fundamentals of geographic information system (GIS) and how geodata can be applied to solve local and regional problems, where "locations" matter the most. Major topics include computer representation of geodata, the creation and maintenance of GIS databases, spatial analysis, and presentation of data outputs on digital maps. Case studies, management implications, and relevant GIS research papers are also discussed to complement the practical use of GIS applications.
	Seminar in Emerging Technologies	This course explores how technology has reshaped the hospitality and tourism landscape. Being a crucial part of today's tourism and travel industry, technology continues to improve customer experience to a new height. This course aims to deliver concepts, knowledge and skills relevant to emerging technologies and to share insights on their applications and managerial implications. Relevant case studies, challenges, and legal and governance issues related to the latest technology in the tourism industry will also be discussed.
	Research Methods	This course aims to develop students' intermediate levels of knowledge and skills that enable them to apply different methods of research to address broad real-life management problems and in specific contexts of tourism, luxury retail and other related high-end service businesses. At the end of the course, students will be expected to have obtained the necessary knowledge and confidence in applying the most established research methodologies, following the basic framework of identifying research problems, formulating appropriate research design, conducting scientific data collection and analysis, as well as interpreting, presenting, and communicating research findings.
	Finance and Accounting	This course helps students understand the principles of financial and efficiency analysis, and demonstrates their importance in management decision-making. The course will enable students to apply accounting approaches and analyses in making decisions to procure technologies and assess their performance. Students will also be able to understand, analyse, and interpret financial information to aid management decisions. The concepts of conventional and green finance will be covered.
	Strategic Management	This course provides students an opportunity to understand, apply, develop, and critically evaluate business strategies. It also offers them an understanding and critical evaluation of the factors that contribute to successful strategic management. The ultimate goal is to equip these future managers with knowledge, skills, and tools to think strategically and creatively, and effectively create a portfolio of competitive methods / strategies that will ensure long-term prosperity for the business and its main stakeholders.

Module	Course Title	Course Description
Project Report <i>OR</i> Internship & Report	Project Report	The purpose of this course is to help students build and demonstrate their abilities to conduct an independent applied project using appropriate research techniques. Students have to identify a business or industry problem, conduct research and propose practical solutions or create new applications for business/industry development in general or for enterprises in particular.
	Internship & Report	Applying the principles of experiential learning, this course provides students an extended opportunity to connect theoretical knowledge and practical learning through training in a real work environment. After the internship, students need to complete a report to deeply reflect on the gains from the training in knowledge, skills, attitudes and values, and make suggestions for improving business practices.