

MASTER OF SCIENCE IN TRAVEL TECHNOLOGY AND ANALYTICS



Jointly offered by the College of Engineering and Computer Science and the Rosen College of Hospitality Management

TRAVEL TECHNOLOGY AND ANALYTICS AT UCF

With rapid changes in technology and analytics, the global travel and tourism industry is undergoing a profound transformation. The College of Engineering and Computer Science and the Rosen College of Hospitality Management have come together to design a program that meets the future needs of the global travel and tourism industry.

The Master of Science in Travel Technology and Analytics will forge a new path in interdisciplinary education and contribute to burgeoning interdisciplinary research encompassing engineering, science, and management contextualized by the global travel industry. Diverging from traditional business/management degrees, the M.S. in Travel Technology and Analytics will focus on prescriptive and predictive techniques to anticipate and solve problems in a forwardlooking approach. The first of its kind program in the nation will develop leaders in the multibillion travel and tourism industry.

WHY UCF?

The University of Central Florida is located in Orlando, which provides a unique advantage for the M.S. in Travel Technology and Analytics. Students will have access to a world-class tourist destination that will serve as a testbed for learning from existing industry practices and testing proposed innovations. Further, the various global travel analytics companies located in Orlando provide the program with access to leaders in the industry.

CAREER OPPORTUNITIES

The travel and tourism industry with \$8.3 trillion in economic benefits globally is being transformed by rapidly increasing technological innovations and advances and is adapting to these changes by creating new employment opportunities to match. The dynamic nature of the industry and technological advances reveal the need for a workforce with advanced skills:

- fluency in data science and analytics
- understanding of complex travel systems
- strategic problem solving
- big-picture thinking
- technical knowledge
- practical skills aligned with technological advances

The changing nature of travel and tourism employment reveals emerging positions in areas of:

- online travel agencies
- global distribution systems
 - data analytics
 - data architecture
 - predictive analytics
 - mobile devices
 - travel apps
 - geolocation
 - data visualization
 - data translation
 - programming, interface design
 - virtual reality
 - augmented reality
 - hologram technology
 - travel click technology
 - business intelligence
 - social media management
 - SMART-city design and development
 - SMART-technologies and travel systems

WHO SHOULD APPLY?

Candidates for the program should have a strong quantitative background and a strong interest in working at the intersection of emerging technologies and the travel industry.

ADMISSIONS REQUIREMENTS

A bachelor's degree in a STEM-related discipline from an accredited institution. Depending on the degree completed, one or more prerequisite courses may be required, namely:

- STA 2023: Statistical Methods and
- STA 3032: Probability and Statistics for Engineers *or*
- CAP 4630: Artificial Intelligence



APPLICATION DEADLINES AND PROCEDURES

M.S. in Travel Technology and Analytics	*Fall Priority	Fall	Spring	Summer
Domestic Applicants		July 1		
International Applicants		Jan. 15		

*Applicants who plan to enroll full time in a degree program and who wish to be considered for university fellowships or assistantships should apply by the fall priority date.

For information on general UCF graduate admissions requirements that apply to all prospective students, please visit the admissions section of the Graduate Catalog. Applicants must apply online. All requested materials must be submitted by the established deadline.

PROGRAM REQUIREMENTS

The program will require 30 credit hours for completion, which includes eighteen credit hours of core required courses and 12 credit hours of electives. There will be no thesis requirement; however, a semester-long applied capstone project that involves the industry and is approved by the program director will be required.

The curriculum includes six required courses that ensure students have skills in algorithms and statistical techniques for extracting information, as well as awareness of the global travel and tourism industry. Although courses can generally be taken in any order, the first two required courses serve as pre-requisites for all remaining courses in the program.

Required courses – 18 credit hours

HMG 6449: Smart Travel and Tourism HMG 6710: International Tourism Management ESI 6261: Service System Quality Engineering TTE 6667: Discrete Choice Modeling in Transportation

TTE 6608: Algorithms and Models for Smart Cities

TTE 6910: Travel Technology and Analytics Capstone Course

Electives - 12 credit hours

Students will take four electives from a set of 16 courses that provide more depth and specialization.

BEST VALUE

The University of Central Florida is a thriving preeminent research university located in metropolitan Orlando. With more than 68,000 students, UCF is one of the largest universities in the U.S. In addition to its size and strength, UCF is ranked a best value university by Kiplinger, as well as one of the nation's most affordable colleges by *Forbes*. It is also among the nation's "most innovative universities" alongside Harvard, MIT, Stanford, Duke and Georgia Tech, according to U.S. News and World Report's Best Colleges.

COLLEGE HIGHLIGHTS

College of Engineering and Computer Science

The College of Engineering and Computer Science strives to create new solutions to real-world problems through partnerships with some of the biggest names in technology, including NASA, Lockheed Martin, Boeing, Siemens and Walt Disney World. Its vision is to be among the nation's top producers of engineering and computer science workforce talent in terms of scale and excellence.

Rosen College of Hospitality Management

Rosen College's campus is the largest, most modern facility ever built for hospitality management education. UCF Rosen College is committed to providing an environment where the diverse backgrounds of students and faculty enrich learning and fostering applied research and active service to the university, alumni and community.

In 2017, the travel and tourism industry globally employed 292 million people — one in 10 jobs — which is expected to become 380 million by 2027.

"Companies like ours, and also the industry leaders like Expedia, Priceline and Booking.com, will welcome and benefit from professionals with a Master of Travel Technology and Analytics."

-Kim Andreello, president, AVIA Travel Services LTD

"I do believe there is a need for an M.S. program in the area of travel technology and analytics. Hospitality, tourism and travel companies that embrace technology and analytics will continue to capture a bigger share of the market."

-Libardo Lambrano, senior manager of marketing performance and insights, Hilton

"The amount of data in the travel space is the main reason why McKinsey & Company stated that travel and transportation should be the No. 1 influenced sector by embracing the revolution of data and artificial intelligence."

-Shane O'Flaherty, global director of travel, transportation and hospitality, Microsoft

FOR MORE INFORMATION:

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