



ONLINE MASTER'S OF SCIENCE AEROSPACE ENGINEERING



UNIVERSITY OF CENTRAL FLORIDA • ORLANDO, FLORIDA

PROGRAM AT A GLANCE

CREDIT HOURS

30

IN-STATE TUITION

\$327.32
per credit hour

OUT-OF-STATE TUITION

\$1,234.15
per credit hour

PROGRAM CONTACT

MAE Advising
MAEAdvising@ucf.edu

PROGRAM HIGHLIGHTS

- 30 Credit Hours
- Fully Online
- Complete your degree in as little as 2 years, full time
- Thesis and Nonthesis options



WELCOME

Aerospace engineering takes the world to new heights. Engineers in this field design and develop aircraft and spacecraft including missiles, rockets and satellites. They test prototypes, evaluate designs and proposals, conduct research, and ensure that their products meet quality standards. Their job is to engineer new technology and vehicles that allow humans to fly safely and swiftly through the sky.

AEROSPACE ENGINEERING AT UCF

At the graduate level, UCF offers a Master of Science in Aerospace Engineering through the Department of Mechanical and Aerospace Engineering. Students enrolled in the M.S.AE can choose to pursue one of three tracks:

Guidance Control and Dynamics Track

This track was developed with strong emphasis in courses related to guidance control and dynamics with applications in aerospace engineering.

Space Systems Design Track

The track includes the fields of space environment, instrumentation and communications, structures and materials, thermal analysis, and design.

Thermofluid Aerodynamic Systems Design and Engineering Track

The track is suitable for students interested in an aerospace engineering career that focuses on the fields of aerodynamics, propulsion, thermal analysis, and design.

APPLICATION DEADLINES

Fall:
July 1

Spring:
November 1

Application deadlines subject to change, see graduate catalog for up-to-date deadlines.

<http://www.ucf.edu/catalog>



ONLINE MASTER'S OF SCIENCE AEROSPACE ENGINEERING

ADMISSIONS REQUIREMENTS

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.

In addition to the general UCF graduate application requirements, applicants to this program must provide:

One official transcript (in a sealed envelope) from each college/university attended. Bachelor's degree in Aerospace Engineering or closely related discipline.

Résumé. Statement of educational, research, and professional career objectives. Applicants applying to this program who have attended a college/university outside the United States must provide a course-by-course credential evaluation with GPA calculation.

Credential evaluations are accepted from World Education Services (WES) or Josef Silny and Associates, Inc. only.

Faculty members may choose to conduct face-to-face or telephone interviews before accepting an applicant into their research program.

Additional courses may be required to correct deficiencies. Students should contact the MSAE graduate program director for further information.

Updated 08/2025

CURRICULUM

COURSES INCLUDE

- EAS 5123: Intermediate Aerodynamics
- EAS 6315: Rocket Propulsions
- EAS 5211: Aeroelasticity
- EAS 6185: Turbulent Flow
- EAS 6415: Guidance, Navigation and Control
- EML 6131: Combustion Phenomena

THESIS/NONTHESIS OPTION

Thesis option:

- A final defense of the thesis is required. In addition, the College of Engineering and Computer Science requires that all thesis defense announcements be approved by the student's advisor and posted on the college's website and on the university-wide Events Calendar at the College of Graduate Studies website at least two weeks before the defense date.

Nonthesis option:

- Nonthesis students must complete 6 additional credit hours of electives from the lists above or other courses as approved by the student's adviser and must include EML6085 - Research Methods in Mechanical and Aerospace Engineering.



ONLINE MASTER OF ARTS INSTRUCTIONAL DESIGN AND TECHNOLOGY

ADMISSIONS REQUIREMENTS

General UCF admission requirements must be met.

Updated 08/2024

CURRICULUM

PROGRAM REQUIREMENTS (36 CREDIT HOURS)

All three tracks of the Instructional Design & Technology MA require a minimum of 36 credit hours beyond the bachelor's degree.

Instructional technology core courses (12 credit hours)

- EME 6055 - Current Trends in Instructional Technology (3 Credit Hours)
- EME 6062 - Research in Instructional Technology (3 Credit Hours)
- EME 6613 - Instructional System Design (3 Credit Hours)
- EDF 6432 - Measurement and Evaluation in Education (3 Credit Hours)
or EDF 6401 - Statistics for Educational Data (3 Credit Hours)
or EDF 6481 - Fundamentals of Graduate Research in Education (3 Credit Hours) or EDF 6472 - Data-Driven Decision-Making for Instruction (3 Credit Hours)

Professional Specialization (12 credit hours)

Instructional Systems Track

- EME6226: Instr Dev & Eval
- EME6507: MM for Ed/Train
- EME6607: Planned Change
- EME6705: Administration of IS

Educational Technology Track

- EME6053: Tchng & Lrnng w/ Emerg Tech
- EME6405: Adapt & Int Innov. Tech in Ed
- EME6507: MM for Ed/Train.
- EME6602: Int Tech into Lrnng Environ.

e-Learning Track

- EME6507: MM for Ed/Train
- EME6417: Interactive Online & Virt. Tch Env
- EME6457: Distance Education
- EME6458: Virtual Teaching & Dig Educ

Electives (9 credit hours)

Practicum (3 credit hours)

Updated 08/2024



ONLINE BACHELOR OF ART OR BACHELOR OF SCIENCE EMERGENCY MANAGEMENT

ADMISSIONS REQUIREMENTS

State University System foreign language admission requirement: two years in high school or one year of college instruction in a single foreign language. (This requirement applies to those students admitted to the University without the required two units of foreign language in high school.)

Updated 08/2024

CURRICULUM

REQUIRED COURSES

Advanced Requirements (21-24 credit hours)

Complete at least 1 of the following:

- PAD4204 - Fiscal Management (3)
- PAD4390 - Hazard Mitigation and Preparedness (3)
- PAD4392 - Emergency Management and Homeland Security (3)
- PAD4395 - Disaster Response and Recovery (3)
- PAD4712 - Information Systems for Public Managers and Planners (3)
- PAD4822 - Intergovernmental Administration (3)
- PAD4942 - School of Public Administration Internship Orientation
- PAD4941 - Public Administration Internship (3 - 6)

Concentration Area (12 credit hours)

Earn at least 12 credits from the following types of courses. Students must complete 18 credit hours of PAD courses in one of the following concentration areas:

- Public Service Certificate
- Public Administration Certificate
- Nonprofit Fiscal & Resource Development
- Instructional Systems Track

Restricted Electives (9 credit hours)

Complete at least 3 of the following:

- CJT3803 - Security Management (3)
- DSC4012 - Terrorism (3)
- DSC4013 - Homeland Security and Criminal Justice (3)
- INR4074 - Immigration Policy (3)
- INR4084 - Politics of International Terrorism (3)
- Practicum (3 credit hours)

BA/BS Option (6 credit hours)

Earn at least 6 credits from the following types of courses. Students pursuing the BA degree must demonstrate proficiency in a foreign language equivalent to one year in college. ASL I, II can also be used to fulfill this requirement. Students pursuing the B.S. degree must complete the following two courses (courses used to fulfill this category must not be used to satisfy other parts of the degree program).

- PAD 3733 - Professional Administrative Writing in the Public Sector (3)
- PAD 4720 - Research Methods in Public Administration (3)

Capstone Requirements (3 credit hours)

Complete the following:

- PAD4371 - Capstone: Resiliency in Emergency Management (3)

Updated 08/2024