CECS Virtual Graduate Programs Open House: Doctoral Programs

Survey

Summer 2021
Welcome International and US Prospective Students
Welcome Floridian Prospective Students
Today’s Goals

• Learn more about UCF’s College of Engineering and Computer Science
• Connect you to Directors of the Graduate Program(s) that interest you
• Learn about the application process and about funding strategies
• Answer your questions
CECS Graduate Open House Overview

Welcome

Program Overviews (10min each)

Application Process

Closing & Survey

During this session, submit your privately questions via chat to:
Ms. Heather Houser

All times ET

Not to scale
The University of Central Florida was founded in 1963 as Florida Technological University, with the mission of supporting the growing United States space program at nearby Kennedy Space Center and Cape Canaveral Air Force Station. The motto, “Reach for the Stars,” represented the university’s promising aerospace education in engineering, electronics and other technological professions.
UCF’s Neighbors
College of Engineering and Computer Science

Fast Facts

First Destination Survey Results

Graduate Summer 2019 - Fall 2019

80% Full-time or Part-Time Employment
14% Attending Graduate or Professional School
6% Other

61% Accepted offers of employment
5% Denied or dropped offers
4% Withdrawn

Top Companies For students who reported full-time or part-time employment, 85 percent were employed by full-time employment, and 68 percent were employed in Florida. Students were asked to rank their field of study.

UCF Facts

UCF College of Engineering and Computer Science Facts 2020-21

Faculty and Staff
1,063

Degree Programs
15

UCF Facts

The University of Central Florida, founded in 1963, is located in Orlando, FL, and is the largest public research university in the nation. UCF College of Engineering and Computer Science offers 34 undergraduate degrees and 34 doctoral programs. Students come from 50 states and 144 countries.

For more information, visit cecs.ucf.edu

Graduate Programs and Modalities

PhD
- Dissertation
  - 72 credit hours

MS
- Non-Thesis
- Thesis
  - 30 credit hours

Certificate
- Non-Thesis
  - 9-15 credit hours

Thesis: 24 hours + 6 hours of research

Credit hour requirements for each degree
CECS Graduate Programs

Graduate Certificate (GC) Programs (13)
- Computer Forensics
- Construction Engineering
- Data Analytics
- **FinTech**
- Guidance Controls and Dynamics
- Healthcare Systems Engineering
- Mixed Reality Engineering
- Project Engineering
- Quality Assurance
- Structural Engineering
- Systems Engineering
- Technologies for Smart Communities
- Transportation Engineering

Master's of Science (MS) Degree Programs (20)
- Aerospace Engineering
- Biomedical Engineering
- **Civil Engineering**
- Computer Engineering
- **Computer Vision**
- Computer Science
- Cybersecurity and Privacy
- Data Analytics
- Digital Forensics
- Electrical Engineering
- Engineering Management
- Environmental Engineering
- **FinTech**
- Industrial Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Modeling and Simulation
- Systems Engineering
- Travel Technology and Analytics

Specialty Graduate Programs
- MS in Engineering Management, Professional Engineering Management (PEM) Track (a cohort-based program)
- MS in Data Analytics
- Graduate Certificate in Data Analytics
- **MS in Healthcare Systems Engineering Track**

Doctoral (PhD) Degree Programs (12)
- Aerospace Engineering
- Big Data Analytics
- **Biomedical Engineering**
- Civil Engineering
- Computer Engineering
- Computer Science
- Electrical Engineering
- Environmental Engineering
- Industrial Engineering
- Materials Science and Engineering
- Mechanical Engineering
- Modeling and Simulation

New | Expected 2022 | Also offered as fully online | *Interdisciplinary program

- MS in Engineering Management, Professional Engineering Management (PEM) Track (a cohort-based program)
- MS in Data Analytics
- Graduate Certificate in Data Analytics

**MS in Healthcare Systems Engineering Track**
Program Overviews
Brief Program Overviews (~9 min each)

• Computer Science – Dr. Wang (Liqiang.Wang@ucf.edu)

• Civil, Environmental and Construction Engineering – Dr. Randall (Andrew.Randall@ucf.edu)

• Electrical and Computer Engineering – Dr. Sundaram (Kalpathy.Sundaram@ucf.edu)

• Industrial Engineering and Management Systems – Mr. Scuotto (Ricardo.Scutoo@ucf.edu)

• Materials Science and Engineering – Dr. Fang (Jiyu.Fang@ucf.edu)

• Mechanical and Aerospace Engineering – Dr. Gou (Jihua.Gou@ucf.edu)

Some Topics:
• Benefits
• Eligibility
• Application Requirements (e.g., GRE)
• Department Activities
• What you can do
• Next Steps
College of Graduate Studies: Application Process and Funding
Application and Funding – Mr. Leben Goldman

• Associate Director of Recruiting in the College of Graduate Studies
• Admissions and Recruiting
• Key lead on all Graduate Recruitment for UCF, recruitment event planning for graduate fairs, travel to represent UCF and its graduate programs at national conferences, design of relevant recruitment materials for UCF graduate programs
• Joined UCF in 2014
• Degrees from UCF and FSU
Benefits of a Graduate Degree

- Advanced skillset
- Improved communication skills
- Access to leadership roles
- Enhanced network
- Personal achievement
- And more ...
• **Program of Study:** PhD in Materials Science and Engineering (Summer 2020)

• **Dissertation:** Investigation of Via Extrusion and The Effect of Cap Layer for 3D Integrated Circuits

• **Advisor(s):** Dr. Tengfei Jiang

• **Research Lab:** Microelectronics Fabrication and Reliability Lab

• **Selected Awards & Recognitions:**
  • Order of Pegasus nominee of the College of Engineering and Computer Science, class of 2020.
  • Exemplary presentation award, UCF-GRF 2019.
  • Robert Blewer outstanding student paper, AMC2017
  • Second best poster award, IMPAPS 2017

• **Community Activities:**
  • Graduate grade appeal committee member.
  • Founding member of IMAPS student chapter at UCF.
  • Founding member of MSE-student advisory board (SAC).

Selected Publications:


“...[T]here is strong evidence that advanced education levels continue to be associated with higher salaries. A study by the Georgetown Center on Education and the Workforce showed that across the fields examined, individuals with a graduate degree earned an average of 38.3% more than those with a bachelor’s degree in the same field. The expected lifetime earnings for someone with a bachelor’s degree, $2.3 million; with a master’s degree, $2.7 million; and with a doctoral degree (excluding professional degrees), $3.3 million. Other data indicate that the overall unemployment rate for individuals who hold graduate degrees is far lower than for those who hold just an undergraduate degree.”

- Pathways Through Graduate School and Into Careers, Council of Graduate Schools (CGS) and Educational Testing Service (ETS), pg. 3.
College of Engineering and Computer Science

Software Access

- National Instruments
- ptc mathcad
- SOLIDWORKS
- MATLAB
- ANSYS
- Office
- Autodesk
- Siemens NX

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College of Engineering and Computer Science

Professional Development

UPCOMING PATHWAYS EVENTS

2020-2021 Graduate Student
PROFESSIONAL DEVELOPMENT SERIES

- Fellowship and CV Workshop
  Wednesday, September 2, 2020 at 5:00 - 7:00 p.m.
- Professional Job Search
  Wednesday, October 7, 2020 at 5:00 - 7:00 p.m.
- Ph.D. Alumni Panel
  Wednesday, November 4, 2020 at 5:00 - 7:00 p.m.
- Topic Selected by CECS Grad Students
  Wednesday, December 3, 2020 at 5:00 - 7:00 p.m.
- Pursuing a Postdoc
  Wednesday, January 27, 2021 at 5:00 - 7:00 p.m.
- Salary Negotiation
  Wednesday, February 3, 2021 at 5:00 - 7:00 p.m.
- Women's Alumni Panel Research
  Wednesday, March 3, 2021 at 5:00 - 7:00 p.m.
- Joint CECS Alumni Association and CECS Graduate Affairs Workshop on Entrepreneurism
  Wednesday, April 21, 2021 at 5:00 - 7:00 p.m.

University-wide

CECS-specific

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http://cecs.ucf.edu/gradday
Graduate Fellowships

• **Internal** – ORCGS, Presidential, Trustees, McKnight, McNair, etc.

• **External** – NSF, DoD SMART, DoD NDSEG, NASA, GEM, etc.

• Apply early
  • For Fall 2021 – November time frame

• Contact prospective faculty advisor early

• Most funding is geared towards PhD students

https://graduate.ucf.edu/fellowships/
**Closing**

- Getting admitted to graduate school takes effort
- Identify your motivation(s)
- Communicate with your graduate program’s director
- Develop a personal roadmap and execute your plan
- You can do this!!!
Thanks for Your Attention

Special Thanks:
CECS:
Bel Huston, Kimberly Lewis, Paul Sepulveda, Mansooreh Mollaghasemi, Andrew Randall, Kalpathy Sundaram, Jihua “Jan” Gou, Liqiang Wang, Jiyu Fang, and Michael Georgiopoulos

CGS:
Leben Goldman, Jennifer Parham, and Elizabeth Klonoff

Future CECS Grad Days:
- Fall: first week of October,
- Spring: last week of February,
- Summer: First week of June