

Board of Trustees University of Central Florida Educational Programs Committee March 24, 2016, 10:30 – 11:45 a.m. *FAIRWINDS* Alumni Center Conference call-in phone #800-442-5794, passcode 463796

AGENDA

I. CALL TO ORDER

Robert Garvy Chair, Educational Programs Committee

II. ROLL CALL

Susan Tracy Senior Administrative Assistant

- **III. MEETING MINUTES**
 - Approval of the January 28, 2016, Educational Programs Committee meeting minutes

IV. NEW BUSINESS

- Conferral of Degrees (EPC-1)
- 2018-19 Proposed Academic Calendar (EPC-2)

Chair Garvy

A. Dale Whittaker Provost and Executive Vice President

Maribeth Ehasz Vice President for Student Development and Enrollment Services DeLaine Priest Associate Vice President for Student Development and Enrollment Services

- New Degree Programs
 - Master of Science in Biomedical Engineering (EPC-3a)
 - Master of Science in Data Analytics (EPC-3b)
 - Bachelor of Science in Entertainment Management (EPC-3c)

Mubarak Shah Interim Vice Provost and Dean of the College of Graduate Studies Elizabeth Dooley Dean of the College of Undergraduate Studies and Vice Provost for Teaching and Learning

- Advancing Student Success Through the Use of Predictive Analytics (INFO-1)
- College of Medicine Milestones (INFO-2)
- Programs for Students with Unique Abilities Report (INFO-3)

Maribeth Ehasz Elizabeth Dooley

Deborah German Vice President for Medical Affairs and Dean of the College of Medicine

Adam Meyer Executive Director for Student Accessibility Services and Inclusive Education Services Pamela Carroll Dean of the College of Education and Human Performance

A. Dale Whittaker

- Provost's update
- V. OTHER BUSINESS



MINUTES Educational Programs Committee University of Central Florida Board of Trustees January 28, 2016 FAIRWINDS Alumni Center Conference call-in #800-442-5794, passcode 463796

CALL TO ORDER

Trustee Robert Garvy, chair of the Educational Programs Committee, called the meeting to order at 10:50 a.m. Committee members Keith Koons and Cait Zona were present. Also present were Board of Trustees Chairman Marcos Marchena and trustees Joseph Conte, Alex Martins, and William Yeargan. Trustee John Sprouls attended via teleconference.

MINUTES

The minutes from the November 19, 2015, meeting were approved as written.

NEW BUSINESS

Amendment to University Regulation UCF-2.001 Undergraduate Admissions and University Regulation UCF-2.003 Admission of Graduate Students (EPC-1)

Youndy Cook, Deputy General Counsel, requested approval to amend University Regulations UCF-2.001 and UCF-2.003. 2.001 is being amended to update immunization requirements for undergraduate students and 2.003 updates the immunization requirements for graduate students. The committee unanimously approved the amendments as presented.

Centers and Institutes Review Results - Florida Solar Energy Center (INFO-1)

Diane Z. Chase, Vice Provost for Academic Program Quality, described the various mechanics UCF has to assure the quality of academic programs and centers, and she shared the results of the reviews of the Florida Solar Energy Center that took place during 2015. The committee asked for additional information about the center at a future meeting.

2013-14 College of Education and Human Performance Academic Program Review Recommendation Implementation Status (INFO-2)

Pamela Carroll, Dean of the College of Education and Human Performance, reported on the implementation status of the recommendations made for the programs that were reviewed in 2013-14. She provided examples of the changes that have taken place as a result of those reviews. The committee requested additional data on graduate employment, salaries, and trends.

Status of New Degrees (INFO-3)

Mubarak Shah, Interim Vice Provost and Dean for the College of Graduate Studies, and Elizabeth Dooley, Dean of the College of Undergraduate Studies and Vice Provost for Teaching and Learning, provided the committee with data about the graduate and undergraduate degree programs approved by the Board of Trustees since 2012. Information shared for each degree program included the number of applications, program challenges and successes, and the number of degrees granted.

Provost's Update

Whittaker provided the following updates

- Faculty Recognition Whittaker introduced Dr. Anastasia Salter, an assistant professor in Digital Media. Dr. Salter's research focuses on interactive games and digital narratives as they relate to learning, social engagement, and participatory culture. Salter provided an overview on how the use of computer games in the classroom is changing the way people think about the use of technology in education and how people learn.
- UCF Downtown Whittaker thanked Board of Trustee members for 100 percent participation in giving to UCF Downtown, and he also thanked university leaders, the Orlando Magic, CFE Federal Credit Union, Orange County, and Valencia College for their cash gifts. Community support has provided more than \$9 million of the \$20 million UCF intends to raise for UCF Downtown. Plans for UCF Downtown will be presented to the Board of Governors at an upcoming meeting.
- Florida Center for Students With Unique Abilities A bill was signed last week by the governor for the Florida Center for Students With Unique Abilities that will be based at UCF, but will support all of Florida's state universities with resources to develop their own programs. Whittaker thanked Andy Gardiner for his wisdom and vision; UCF's for its commitment, the College of Education and Human Performance and Student Development and Enrollment Services for their partnership, and Adam Meyer and the Inclusive Education Team. Whittaker also noted that the number of students in the UCF pilot program has increased from six to 10 since UCF launched the program last year.
- Strategic Planning Whittaker thanked Board of Trustees Chairman Marcos Marchena and Trustee Alan Florez for their guidance during this strategic planning process. More than 500 stakeholders on and off campus have been engaged in the process. A strategic plan is expected to be presented to the Board of Trustees in May 2016.
- Graduate and Research Evaluation Whittaker stated that a three-person team of
 research and graduate education leaders from other institutions is scheduled to visit
 campus in March to explore how graduate education and research can be expanded at
 UCF.
- Faculty Hiring In addition to the 200 new faculty members hired in Fall 2015, UCF is currently involved in a national hiring campaign for 100 new positions to start in Fall 2016. These positions will include 33 interdisciplinary teaching and research cluster positions, and approximately 17 hires will be part of a new Targeted Opportunity Program.

The Office of Faculty Excellence has launched new mentorship and professional development programs for new faculty members to promote a culture of excellence in research, teaching, and service.

Trustee Garvy adjourned the joint committee meeting at 12:00 p.m.

3/10/16

Respectfully submitted:

A. Dale Whittaker Provost and Executive Vice President

ITEM: EPC-1

EDUCATIONAL PROGRAMS COMMITTEE

University of Central Florida

SUBJECT: Conferral of Degrees

DATE: March 24, 2016

PROPOSED BOARD ACTION

Approval: Conferral of degrees at the Spring 2016 commencement ceremonies.

BACKGROUND INFORMATION

UCF expects to award the following degrees at the Spring 2016 commencement ceremonies on May 5, 6, and 7, 2016:

6,814 baccalaureate degrees
1,146 master's degrees
183 doctoral and specialist degrees
8,143 Total

Supporting documentation: Attachment A: Registrar's Graduation Count

Prepared by: Brian Boyd, University Registrar, Registrar's Office

Submitted by: A. Dale Whittaker, Provost and Executive Vice President

Attachment A

UCF Spring 2016 Commencement Note: Procession of graduates begins 20 minutes prior to each ceremony. *Projected Attending (Baccalaureate only) is an estimate based on 70% attending rate

College	Baccalaureate			Master's				Doctorate					
	Intent to	Projected*	Picked-up	Head-	Degree	Intent to	Indicated	Picked-up	Head-	Intent to	Indicated	Picked-up	Head-
	graduate	attending	cap and	count	award	graduate	attending	cap and	count	graduate	attending	cap and	count
			gown					gown				gown	
Thursday, 5/5, 9:00 a.m.									1			1	-
College of Arts and Humanities	700	490				66	66			4	4		
College of Engineering and Computer Science	731	512				210	210			59	59		
College of Optics and Photonics	6	4				13	13			6	6		
College Totals:	1,437	1006	-	-	-	289	289	-	-	69	69	0	0
Total Students Anticipated in Attendance:	1,364												
Thursday, 5/5, 2:30 p.m.													
College of Health and Public Affairs	1,075	753				268	268			38	38		
College Totals:	1,075	753	-	-	-	268	268	-	-	38	38	0	0
Total Students Anticipated in Attendance:	1,059												
Friday, 5/6, 9:00 a.m.													
College of Sciences	1,523	1,066				105	105			25	25		
College Totals:	1,523	1,066	-	-	-	105	105	-	-	25	25	0	0
Total Students Anticipated in Attendance:	1,196		-										
Friday, 5/6, 2:30 p.m.													
College of Education and Human Performance	633	443				236	236			32	32		
* Education Specialists		-				20	20				-		
College of Nursing	290	203				37	37			8	8		
College Totals:	923	646	-	-	-	293	293	-	-	40	40	0	0
Total Students Anticipated in Attendance:	979	•	-					•					
Saturday, 5/7, 9:00 a.m.													
College of Business Administration	856	599				172	172			3	3		
College Totals:	856	599	0	0	0	172	172	0	0	3	3	0	0
Total Students Anticipated in Attendance:	774												
Saturday, 5/7, 2:30 p.m.													
College of Graduate Studies	-	-				9	9			-	-		
College of Medicine	247	173				8	8			3	3		
Office of Undergraduate Studies	348	244				-	-			-			
Rosen College of Hospitality Management	405	284				2	2			5	5		
College Totals:	1,000	700	0	0	0	19	19	0	0	8	8	0	0
Total Students Anticipated in Attendance:	727												
Degree level ITG totals:	6,814					1,146				183			
Combined ITG submissions:	8,143												
All ceremony projected* attending:	6,099	74.9%	of all ITG's										
Anticipated attendance - cap/gown pickup:	0		of all ITG's										
Headcount totals:	0		of all ITG's										
Undergraduate degrees awarded:	0		of all UGRE) ITG's									

ITEM: <u>EPC-2</u>

EDUCATIONAL PROGRAMS COMMITTEE

University of Central Florida

SUBJECT: 2018-19 Academic Calendar

DATE: March 24, 2016

PROPOSED BOARD ACTION:

Approval of 2018-19 UCF academic calendar.

BACKGROUND INFORMATION:

The Board of Governors requires that the Board of Trustees approve the university's academic calendar. The attached 2018-19 calendar developed by the UCF Academic Calendar Committee has been approved by Provost Whittaker.

Supporting documentation: Attachment A: 2018-19 Proposed Academic Calendar

Prepared by: Maribeth Ehasz, Vice President for Student Development and Enrollment Services and DeLaine Priest, Associate Vice President for Student Development and Enrollment Services

Submitted by: A. Dale Whittaker, Provost and Executive Vice President

Educational Programs Committee - New Business University of Central Florida Proposed

Academic Calendar 2018-19

Attachment A

EVENT	Fall 2018	Spring 2019	SU A (6 wks) 2019	B (6 wks) 2019	C (12 wks) 2019	D (8 wks) 2019	Holidays		
Classes Begin	20-Aug	7-Jan	13-May	24-Jun	13-May	13-May	Labor Day	Monday	9/3/201
Add Deadline	24-Aug	10-Jan	16-May	27-Jun	16-May	16-May	Veterans Day	Friday	11/12/201
Drop Deadline	23-Aug	11-Jan	17-May	28-Jun	17-May	17-May	Thanksgiving	Thurs-Sat	11/22-11/2
Academic Activity or Attendance Due	29-Aug	16-Jan	22-May	5-Jul	22-May	22-May	MLK	Monday	1/21/201
Withdraw Date	26-Oct	20-Mar	6-Jun	18-Jul	5-Jul	21-Jun	Spring Break	Mon-Sat	3/11-3/1
Last Day of Class	1-Dec	22-Apr	21-Jun	2-Aug	2-Aug	12-Jul	Memorial Day	Monday	5/27/201
Study Day	N/A	23-Apr	-	-	-	-	4th of July	Thursday	7/4/201
Final Exams	12/3 - 12/8	4/24-4/30	-	-	-	-			
Grades Due	12-Dec	3-May	26-Jun	7-Aug	7-Aug	17-Jul			
Degree Conferral Date	14-Dec	2-May	3-Aug	3-Aug	3-Aug	3-Aug			
Certifications	15-Dec	6-May	9-Aug	9-Aug	9-Aug	9-Aug			
Commencement	12/14-12/15	5/2-5/4	3-Aug	3-Aug	3-Aug	3-Aug			
Number of Class Days	78	77	29	29	58	43			
Number of Final Exam Days	6	6	-	-	-				
Total Number of Instructional Days	84	83	29	29	58	43	1		
Grand Total Number of Instructional Days	225						1		
Total Instructional Days*	Fall 2018	Spring 2019	SU A (6 wks) 2019	B (6 wks) 2019	C (12 wks) 2019	D (8 wks) 2019	1		
August	10.5	-	-	-	-	-			
September	21.5	-	-	-	-	-			
October	25	-	-	-	-	-			
November	20.5	-	-	-	-	-			
December	6.5	-	-	-	-	-			
January	-	19.5	-	-	-	-			
February	-	22	-	-	-	-			
March	-	18	-	-	-	-			
April	-	23.5	-	-	-	-			
Мау	-	0	14	-	14	14			
June	-	-	15	5	20	20			
July	-	-	-	22	22	9			
August	-	-	-	2	2	0			
Totals	84	83	29	29	58	43	1		
Class Meeting Days**	Fall 2018	Spring 2019	A (6 weeks)	B (6 weeks)	C (12 weeks)	D (8 wks) 2019			
M-W-F	42	41	17	18	34	26			
M-T-W-R	57	56	23	23	46	34			
M-T-W-R-F	71	70	29	29	58	43			
M-W	28	28	11	11	22	17			
T-R	29	30	12	12	23	16			
Μ	13	14	5	6	11	8			
Т	15	14	6	5	12	8			
W	15	14	6	6	12	9			
R	14	14	6	6	12	9			
F	14	14	6	6	12	9			
S#	13 (6.5)	14 (7)	-		-	-			

* Does include final exam days ** Does not include final exams

Saturday is counted as one-half an instructional day

ITEM: EPC-3a

EDUCATIONAL PROGRAMS COMMITTEE University of Central Florida

SUBJECT: Master of Science in Biomedical Engineering

DATE: March 24, 2016

PROPOSED BOARD ACTION

Approval of a master of science degree in biomedical engineering.

BACKGROUND INFORMATION

The Department of Mechanical and Aerospace Engineering in the College of Engineering and Computer Science proposes to establish a master of science degree in biomedical engineering.

Biomedical engineering (BME) is an interdisciplinary field that involves the development of new technologies in healthcare from managing patient information, to improving diagnostic equipment, to designing therapeutic solutions that treat disease and injury. An increasing aging population in the U.S. along with a growing demand for more sophisticated medical equipment and procedures has driven and will continue to drive the demand for biomedical engineers. According to the Bureau of Labor Statistics, biomedical engineering is the fastest growing engineering discipline in the U.S. with an increase of 25 percent in employment in BME industries nationwide in the past four years (<u>http://www.bls.gov/ooh/architecture-and-engineering/biomedical-engineers.htm</u>). As of May 2013, Florida is one of the top eight states in the US with the highest BME employment, with an estimated 800 BME employees earning an average annual salary of \$77,000.

The proposed degree program addresses medical issues at the level of tissues, organs, and the body as a system applying engineering methodologies in surgical and cancer treatment planning and device development, along with the development of assistive and rehabilitative technology. This degree program will consist of 30 credit hours at the graduate level in one of three tracks: biofluids, biomechanics, and the biomedical engineering track for the M.D. program.

The motivation for high-patient safety, satisfaction, enhanced longevity, and quality of life has never been stronger; and the Affordable Care Act has provided financial incentives that reward the delivery of safe and efficient health care. Individuals who have a strong foundation in the biomedical sciences, mathematics, and engineering and who are trained to be creative problem solvers will be critical for the continued health and safety of the public. Graduates of the MSBME program will attain these skills through multi-disciplinary didactic, laboratory, and research experiences from the College of Engineering and Computer Science and the UCF College of Medicine. BME graduates will have a solid mathematics and engineering foundation enabling them to address the needs of the marketplace and enhance patient care and safety.

This proposal was evaluated and recommended by the department, college, and university Graduate Council Program Review Committee. The College of Graduate Studies recommends this proposal, and it has evaluated five of the eight program criteria as *met with strength* and three as *met*. The proposed implementation date is Fall 2016.

Supporting documentation: Attachment A: Analysis Summary for New Degree Authorization

Prepared by: Mubarak Shah, Interim Vice Provost and Dean of the College of Graduate Studies

Submitted by: Dale Whittaker, Provost and Executive Vice President

Attachment A

Analysis Summary for New Degree Authorization Program Name: Master of Science in Biomedical Engineering

	Criteria	Proposal Response to Criteria
1.	The goals of the program are aligned with the university's mission and relate to specific institutional strengths.	Met with Strength. The proposed master of science in biomedical engineering degree program clearly aligns with the mission, vision, and strategic goals of UCF by increasing the number of degree offerings in STEM disciplines. This degree program will train individuals for high-paying jobs that will have a significant impact on the local and national economies and ultimately enhance the health of our citizens.
2.	If there have been program reviews or accreditation activities in the discipline or related disciplines pertinent to the proposed program, the proposal provides evidence that progress has been made in implementing the recommendations from those reviews.	Met. Related to the proposed degree program, a 2011 program review recommended hiring more faculty to reduce the student-to-faculty ratio, exploring new avenues to foster research funding and student support, and developing and implementing a plan to recruit high-quality domestic students. In addition, biomedical engineering is identified as a high-priority in the college strategic plan. Since the 2011 program review, the Department of Mechanical and Aerospace Engineering has hired three additional faculty members with biomedical engineering experience and with research programs in biomedical engineering. The department is currently seeking to fill six faculty positions; several will support the master of science in biomedical engineering degree program.
3.	The proposal describes an appropriate and sequenced course of study. Admissions and graduation criteria are clearly specified and appropriate. The course of study and credit hours required may be satisfied within a reasonable time to degree. In cases in which accreditation is available for existing bachelor's or master's level programs, evidence is provided that the programs are accredited or a rationale is provided as to the lack of accreditation.	Met with Strength. The program requires completion of 30 credit hours and includes thesis and non-thesis options. The proposal provides a strong course of study and elective course offerings with other departments to provide flexibility for students. The degree program is structured to be completed in two years for students in the biofluids and biomechanics tracks. The track for the M.D. and the M.S. in biomedical engineering students can be completed in five years.
4.	Evidence is provided that a critical mass of faculty members is available to initiate the program based on estimated enrollments, and that, if appropriate, there is a commitment to hire additional faculty members in later years, based on estimated enrollments. For doctoral programs, evidence is provided that the faculty members in aggregate have the necessary experience and research activity to sustain a doctoral program.	Met with Strength. Participating faculty members have extensive teaching and research experience related to the focus area of the proposed degree. They have been successful in acquiring external funding and in publishing the results of their research in high-impact journals. Dr. Kassab, the director of the proposed program, will bring a long history of significant scholarship and student mentoring to the program. In addition, recent hires in mechanical and aerospace engineering and the connection to the prosthetic interface cluster hires demonstrate a commitment to biomedical engineering specializations within the college and department.

	Criteria	Proposal Response to Criteria
5.	Evidence is provided that the necessary library volumes and serials; classroom, teaching laboratory, research laboratory, office, and any other type of physical space; equipment; appropriate fellowships, scholarships, and graduate assistantships; and appropriate clinical and internship sites are sufficient to initiate the program.	Met. The resources of the Department of Mechanical and Aerospace Engineering are adequate to support this proposed new degree program. There will be no need for additional classroom resources and the laboratories of the participating faculty provide adequate facilities for research experiences. The library analysis shows that there are adequate resources, which will be complemented by additional journal subscriptions and book purchases of \$61,054 over the first five years, with the dean of the College of Engineering and Computer Science committing to the provision of these resources. There is also evidence of quality partnerships and commitment of health care organizations within the Central Florida community, which will be important for students as they engage in their research projects.
6.	Evidence is provided that there is a need for more people to be educated in this program at this level. For all degree programs, if the program duplicates other degree programs in Florida, a convincing rationale for doing so is provided. The proposal contains realistic estimates of headcount and FTE students who will major in the proposed program and indicates steps to be taken to achieve a diverse student body.	Met. Strong evidence is provided that the proposed degree program is a unique program that will not duplicate existing degree programs in Florida. Data from the Bureau of Labor Statistics demonstrates a strong demand for individuals with a biomedical degree and the state of Florida employs a significant number of biomedical engineers. Results from student surveys also indicate significant student interest in a biomedical engineering master's degree. There is little overlap with the existing biomedical engineering programs in Florida because the research and teaching focus of the proposed degree program is substantially different from the focus at the other institutions. Current collaborations and the potential for future partnerships also will provide research and teaching opportunities.
7.	The proposal provides a complete and realistic budget for the program, which reflects the text of the proposal, is comparable to the budgets of similar programs, and provides evidence that, in the event that resources within the institution are redirected to support the new program, such a redirection will not have a negative impact on undergraduate education. The proposal demonstrates a judicious use of resources and provides a convincing argument that the output of the program justifies the investment.	Met with Strength. The budget and cost of the program is appropriate. The cost of the program through the first five years of operation is relatively modest as many of the resources are already in place. There will be an internal reallocation of department funds to support the program. Hiring plans for the next few years will prevent any negative impact of attracting students from other programs.
8.	The proposal provides evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service.	Met with Strength. Participating faculty members, departments, and their parent colleges have been extremely productive in teaching, research, and service. Significant research in biomedical engineering has been achieved at UCF by faculty in several departments in the College of Engineering and Computer Science and research funding has also increased. Both undergraduate and graduate student head count has increased over the last five years with an increased number of graduate degrees. Expanded collaborations between the College of Medicine and the department of Mechanical and Aerospace Engineering are expected given the nature of the proposed program and existing productive collaborations.

ITEM: <u>EPC-3b</u>

EDUCATIONAL PROGRAMS COMMITTEE University of Central Florida

SUBJECT: Master of Science in Data Analytics

DATE: March 24, 2016

PROPOSED BOARD ACTION

Approval of a master of science degree in data analytics.

BACKGROUND INFORMATION

The Department of Computer Science in the College of Engineering and Computer Science and the Department of Statistics in the College of Sciences propose to establish a master of science degree in data analytics.

Data analytics is an emerging discipline that seeks to infer insights from large amounts of data (big data) by using various statistical techniques and algorithms. The discipline is concerned with both statistical techniques that measure the validity of such insights and with computational techniques for managing data and resources efficiently. There is a great need for people with technical skills in these areas, prompted by the large amounts of information that governments and businesses are collecting. By 2020, governments and businesses will collect zettabytes of data. Governments want to use these data to improve the life of their citizens, and businesses want to exploit these data to better serve their clients. Consequently, there is an increasing demand for data analysts who can create, adapt, and use state-of-the-art tools to obtain insight from large structured and unstructured data sets, converting them into knowledge. The proposed degree program aims to train people to develop algorithms and computerized systems to facilitate the discovery of information from big data.

The Bureau of Labor Statistics does not collect information about data scientists, but strong job growth is expected in the job categories under which such people fall (e.g., computer programmers). According to the November 2013 report of the Commission on Higher Education Access and Educational Attainment, Florida faces a "critical gap" in the areas of "computer and information technology." Graduates would contribute to filling this gap with their skills in data analytics and computer programming. This degree program will provide employable technical skills including the development of algorithms and computer systems to extract insight from big data.

The proposed program will require 30 credit hours beyond the bachelor's degree including one three-hour project course and will emphasize the technical aspects of big data analytics, including algorithm design, programming, acquisition, management, mining, analysis, and interpretation of data.

This proposal was evaluated and recommended by the department, college, and university Graduate Council Program Review Committee. The College of Graduate Studies recommends this proposal, and it has evaluated five of the eight program criteria as *met with strength* and three as *met*. The proposed implementation date is Fall 2016.

Supporting documentation: Attachment A: Analysis Summary for New Degree Authorization

Prepared by: Mubarak Shah, Interim Vice Provost and Dean of the College of Graduate Studies

Submitted by: Dale Whittaker, Provost and Executive Vice President

Attachment A

Analysis Summary for New Degree Authorization Program Name: Master of Science in Data Analytics

	Criteria	Proposal Response to Criteria
1.	The goals of the program are aligned with the university's mission and relate to specific institutional strengths.	Met with Strength. The proposed program is aligned with the goals and mission of the University of Central Florida and the State University System Strategic planning goals. The master of science degree in data analytics will offer prospective students advanced studies in the high-demand STEM discipline areas of data analytics. The curriculum is unique and interdisciplinary and focuses on the technical aspects of big data analytics with coursework from computer science and statistics. Graduates will be well-rounded, highly-skilled and prepared to either enter the workforce or pursue doctoral studies. Established partnerships with industry and the potential for more partnerships will be beneficial to faculty and students. Courses offered on nights or weekends allow working professionals to enroll and successfully complete the program part-time.
2.	If there have been program reviews or accreditation activities in the discipline or related disciplines pertinent to the proposed program, the proposal provides evidence that progress has been made in implementing the recommendations from those reviews.	Met with Strength . Recommendations from the most recent computer science program review included focusing on the area of data analytics, and to date the program has hired three faculty members who specialize in data analytics. In addition, adjustments to the faculty workload policy have resulted in a reduced teaching load for research active tenured and tenure track faculty.
3.	The proposal describes an appropriate and sequenced course of study. Admissions and graduation criteria are clearly specified and appropriate. The course of study and credit hours required may be satisfied within a reasonable time to degree. In cases in which accreditation is available for existing bachelor's or master's level programs, evidence is provided that the programs are accredited or a rationale is provided as to the lack of accreditation.	Met . The master of science in data analytics degree program is a 30-hour program with 24 hours of required courses and six hours of elective courses. The curriculum was developed with advice from the computer science advisory board and is designed to address specific key competencies identified by this board as well as educational requirements commonly listed for data scientist positions. Structured as a part-time cohort program, the M.S. degree in data analytics program allows students to graduate in five terms (two years) by completing six credit hours per term in courses offered at night or on the weekends. Students will complete six of the eight required courses in the first year of the program. In the second year, the remaining two required courses including a semester long project course and two elective courses are completed. Although undergraduate degrees in computer science, statistics, computer engineering, or information technology are preferred, they are not required. Prerequisites allow a broad base of students to enter the program.
4.	Evidence is provided that a critical mass of faculty members is available to initiate the program based on estimated enrollments, and that, if appropriate, there is a commitment to hire additional faculty members in later years, based on estimated enrollments. For doctoral programs, evidence is provided that the faculty members in aggregate have the necessary experience and research activity to sustain a doctoral program.	Met with Strength. Recent faculty hires in the area of data analytics have strengthened existing productive faculty in preparation for this program. Thirteen faculty currently at UCF (nine from computer science, three from statistics, and one from the Institute for Simulation and Training) will be involved in the proposed program. The size of the program (cohorts of 34 students each year) is well matched to the number of faculty to cover mentorship and support needs.

I		Criteria	Proposal Response to Criteria
	5.	Evidence is provided that the necessary library volumes and serials; classroom, teaching laboratory, research laboratory, office, and any other type of physical space; equipment; appropriate fellowships, scholarships, and graduate assistantships; and appropriate clinical and internship sites are sufficient to initiate the program.	Met with Strength. An analysis by the library indicates that UCF has the necessary and appropriate library collections to provide initial support for the program. The budget includes \$3,000 per year for the first three years of the program to strengthen resources in statistical methods and to purchase new books in the developing areas of big data and data mining.
			Classroom space will not be impacted as courses will be taught at nights and on the weekend. Both departments have existing industry partnerships to provide opportunities for students and faculty.
	6.	Evidence is provided that there is a need for more people to be educated in this program at this level. For all degree programs, if the program duplicates other degree programs in Florida, a convincing rationale for doing so is provided. The proposal contains realistic estimates of headcount and FTE students who will major in the proposed program and indicates steps to be taken to achieve a diverse student body.	Met. Data analytics is an emerging discipline, and there is a need for individuals with the expertise to be technical leaders in the area of big data analytics. The Bureau of Labor Statistics anticipates strong growth in data analytics with a need for individuals skilled in the technical aspects of data analytics. The proposed program is designed so that key skills as identified by industry are part of the curriculum. A recent survey of professionals in the Orlando area, UCF alumni, and students indicated sufficient demand for the proposed program. Although there are several master's degree programs that are tangentially related to the proposed program, there are no degree duplications.
	7.	The proposal provides a complete and realistic budget for the program, which reflects the text of the proposal, is comparable to the budgets of similar programs, and provides evidence that, in the event that resources within the institution are redirected to support the new program, such a redirection will not have a negative impact on undergraduate education. The proposal demonstrates a judicious use of resources and provides a convincing argument that the output of the program justifies the investment.	Met. The proposed program will be offered as a cost recovery program and it will be sustainable with the FTE projections. Departmental faculty will teach in this program as part of their in-load teaching assignment, and adjunct faculty will be hired to teach any courses that they would be released from. The courses for the proposed program have already been developed.

	Criteria	Proposal Response to Criteria
8.	The proposal provides evidence that the academic unit(s) associated with this	Met with Strength. The academic units collaborating for the proposed program
	new degree have been productive in teaching, research, and service.	have been productive in teaching, research, and service. Faculty in both
		departments are actively involved in research and have received significant
		research funding as contracts or grants including five NSF CAREER grants. The
		Department of Computer Science teaches more than 2,400 undergraduate majors
		and 300 graduate students. The Department of Statistics teaches 137
		undergraduate majors and thousands of non-majors in general education courses
		each year as well as 46 graduate students. The Statistics department has
		been teaching data mining classes for the past 16 years and has the distinction of
		being the first academic program in the US to offer a data mining MS degree.
		Across the two departments there are six fellows including two fellows of the
		American Association for the Advancement of Science. Both departments also
		have experience with administering successful graduate programs.

ITEM: EPC-3c

EDUCATIONAL PROGRAMS COMMITTEE University of Central Florida

SUBJECT: Bachelor of Science in Entertainment Management

DATE: March 24, 2016

PROPOSED BOARD ACTION

Approval of a bachelor of science degree in entertainment management.

BACKGROUND INFORMATION

The proposed bachelor of science in entertainment management directly addresses central aspects of the university's goals and matches these goals to a productive degree for students interested in managerial positions within the entertainment industry. The program establishes a competitive skillset, supported by an in-depth training that values the knowledge required to be successful leaders in the evolving business needs of the entertainment industry.

This degree program is housed in the Department of Tourism, Events, and Attractions in the Rosen College of Hospitality Management, and it is supported by the College of Arts and Humanities. The entertainment management degree provides an educational path for students leading to careers in the entertainment industry as business practitioners as opposed to that of performers. It emphasizes managerial competencies specifically pertaining to the entertainment industry, such as developing resources and attracting audiences, along with leadership values and communication skills. The degree program will also serve to complement the education of students pursuing performance-based degrees in music and theater.

Graduates from the entertainment management B.S. degree program will be able to pursue careers that include live performances and events, historical, cultural, and educational exhibits, digital media, film enterprises, tourism attractions, experiential hospitality related products, special events, sports events, and recreational or leisure time activities. Many companies including Red Lobster, Disney Theatrical Group, and MAGIC Magazine have expressed strong support for this degree program and have indicated they would welcome its graduates as interns or employees. UCF will be the first public institution to provide a comprehensive entertainment management B.S. degree program that addresses the needs of this prominent industry.

This degree program consists of 36 general education credit hours, 45 credit hours in entertainment management, 15 hospitality management credit hours, 12 credit hours in performing arts, nine credit hours in restricted electives, and three internship credit hours.

This proposal was evaluated and recommend by department, college, and university undergraduate curriculum committees. The College of Undergraduate Studies recommends this program, and it has evaluated seven of the nine program criteria as *met with strength* and two of the nine criteria as *met*. The proposed implementation date is Summer 2016.

Supporting documentation: Attachment A: Analysis Summary for New Degree Authorization

Prepared by: Elizabeth A. Dooley, Dean of the College Undergraduate Studies and Vice Provost for Teaching and Learning

Submitted by: A. Dale Whittaker, Provost and Executive Vice President

Attachment A

Analysis Summary for New Degree Authorization Program Name: Bachelor of Science in Entertainment Management

	Criteria	Proposal Response to Criteria
1.	The goals of the program are aligned with the university's mission and relate to specific institutional strengths.	Met with Strength. The goals of the program align well with the university's mission to offer quality undergraduate programs, expand international scope, increase diversity, and establish partnerships. The institution's strengths in hospitality management and related disciplines will be leveraged to a wider group of students who can apply their strategies to a strong and growing industry important to the region. An excellent reputation in the community has prepared UCF to build a unique and rigorous degree program. Met. In response to academic program reviews in 2010-11, which
2.	the discipline or related disciplines pertinent to the proposed program, the proposal provides evidence that progress has been made in implementing the recommendations from those reviews.	noted weaknesses in the Tourism, Events & Attractions Department, and concurrent internal reviews on the application of the Academic Learning Compacts, which identified issues in the event management program, the department addressed the rigor of its programs to enhance critical thinking activities and more closely articulate learning objectives and outcomes, which subsequently was reflected in revisions to the programs.
3.	The proposal describes an appropriate and sequenced course of study, including expected student learning outcomes, an assessment plan to verify student learning, and, in the case of advanced technology and related disciplines, industry-driven competences. Evidence is provided that, if appropriate, the university anticipates seeking accreditation for the proposed program.	Met with Strength. This major is planned well and includes five general core courses common to other related programs, 15 newly developed courses specific to basic and advanced topics in entertainment management, additional background courses from music and theatre, elective courses, and a sequence of internship courses, in common with other programs in the college. The courses are all in place for the degree program, including relevant criteria. Appropriate student learning outcomes have been identified and an assessment plan developed.

	Criteria	Proposal Response to Criteria
4.	Evidence is provided that a critical mass of faculty is available	Met with Strength. The college has a strong set of existing faculty
	to initiate the program based on estimated enrollments, and	members covering a wide range of disciplines related to hospitality
	that, if appropriate, there is a commitment to hire additional	management and with experience in the industry, including the
	faculty in later years, based on estimated enrollments.	entertainment management industry. There is also an articulated plan
		for new faculty hires to support the program. The university is
		positioned to deliver the new degree program using a combination of
		experienced UCF faculty members and those newly hired to facilitate
		the new offering.
5.	Evidence is provided that the necessary library volumes and	Met. The library's analysis is that there are adequate resources to
	serials; classroom, teaching laboratory, research laboratory,	support the proposed degree program. They have recommended an
	office, and any other type of physical space; equipment; and	additional \$5,000 per year for three years for adding to the current
	appropriate clinical and internship sites are sufficient to initiate	holdings. Existing classroom space is sufficient to meet the needs of
	the program.	the program. There is no specialized equipment or space necessary to
		implement the degree program.
6.	Evidence is provided that there is a need for more people to be	Met with Strength. National and local agency predictions of
	educated in this program at this level. The proposal contains	employment growth in the sector and closely related sectors indicate
	realistic estimates of headcount and FTE students who will	strong-levels of employment opportunities, and the presence of
	major in the proposed program and indicates steps to be taken	multiple large industries in the area is a major strength. The estimates
	to achieve a diverse student body.	of headcounts and FTE students are realistic given the size of current
		related degrees in the college and the large potential audience in the
		immediate region. The college has in place several programs
		targeting diverse student populations at all levels: h locally,
		nationally, and abroad. There is also a commitment to fund
		scholarships for students from developing countries.
7.	The proposal provides a complete and realistic budget for the	Met with Strength. The proposed program will be funded entirely
	program, which reflects the text of the proposal, which is	by a \$5 million donation, which covers recruitment and funding for
	comparable to the budgets of similar programs, and which	five faculty members, 20 scholarships for students from developing
	provides evidence that, in the event that resources within the	countries, and other associated expenses.
	institution are redirected to support the new program, such a	
	redirection will not have a negative impact on undergraduate	
	education. The proposal demonstrates a judicious use of	
	resources and provides a convincing argument that the output	
	of the program justifies the investment.	

	Criteria	Proposal Response to Criteria
8.	The proposal provides evidence that the academic unit(s)	Met with Strength. Faculty members in the Rosen College of
	associated with this new degree have been productive in	Hospitality Management have been very productive with excellent
	teaching, research, and service.	teaching, service, and research. The college has demonstrated strong
		student growth in recent years, and faculty members teach a large
		number of courses. Faculty members also serve on national
		committees and editorial boards, and as editors for national journals,
		and the college hosts a biannual international conference. A large
		number of faculty members are research active with an output
		significantly higher than comparable programs worldwide.
9.	Evidence is provided that community college articulation has	Met with Strength. The close association with DirectConnect
	been addressed and ensured. All prerequisites are listed with	partners and effective advising in the regional campuses ensure
	assurance that they are the same standardized prerequisites for	information flow about the program and sufficient preparation for the
	similar degree programs within the SUS.	degree program. One course is proposed for the common
	The total number of credit hours does not exceed 120.	prerequisites. Community college partners have expressed strong
		support for the program in that it provides a new pathway for
		students transitioning to the bachelor's degree.

ITEM: INFO-1

EDUCATIONAL PROGRAMS COMMITTEE

University of Central Florida

SUBJECT: Advancing Student Success Through the Use of Predictive Analytics

DATE: March 24, 2016

For information only.

Supporting documentation: Attachment A: Advancing Student Success Through the Use of Predictive Analytics presentation

Prepared by: Maribeth Ehasz, Vice President for Student Development and Enrollment Services and Elizabeth Dooley, Vice Provost for Teaching and Learning and Dean of the College of Undergraduate Studies

Submitted by: Dale Whittaker, Provost and Executive Vice President

Access, Quality and Success









INFO-1

Advancing Student Success Through the Use of Predictive Analytics

March 24, 2016

Maribeth Ehasz, Ph.D. Vice President for Student Development and Enrollment Services

Elizabeth A. Dooley, Ed.D. Vice Provost for Teaching and Learning and Dean of the College of Undergraduate Studies



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Stands For Opportunity

Overview

- Introduction
- Helping students succeed
 - Guiding questions
 - Goals
 - Performance indicators
 - Descriptive vs. predictive analytics
- Student success and predictive analytics
 - Making data matter
 - Student success collaborative campus
- Discussion



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INFO-1

Division of Student Development and Enrollment Services



Division of Teaching and Learning and College of Undergraduate Studies

Provides campus-wide leadership in instruction and student learning in order to create an integrated and synergetic approach to student and faculty centered engagement for the promotion of student learning and increased faculty and student engagement





UNIVERSITY INNOVATIONN ALLIANCE

When universities collaborate, students win.

UIA Goals:

- Improve outcomes for ALL students regardless of background
- Help students in highly innovative ways
- Change the way universities work together and help more students achieve a quality college degree



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Helping Students Succeed

Guiding Questions:

- What do you want to do when you graduate from UCF?
- What do you want to major in at UCF?
- What do you want to do while you're at UCF?
- When do you plan on graduating?



Student Success and Predictive Analytics – UCF Goals

- Increase the number of students attaining a degree or certificate
- Reduce the time to attain a degree
- Reduce excess hours
- Incorporate student success measures through program review
- Promote scholarly engagement with student success



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INFO-1

Performance Indicators Retention and Graduation Trends: First Time In College

Summer-Fall Full-Time





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Performance Indicators

Retention and Graduation Trends: Florida Community and State College Transfers





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Differences in Level of Insight

Descriptive Analytics

- 1. Which student groups have historically been more at-risk than others for student progression and graduation success?
- 2. What were the completion rates historically for key courses, programs of study, and groups of students over time?
- 3. Which groups of students are at-risk of not graduating and which groups of students are graduating?
- 4. How many students participate in highimpact practices and interventions?



- 1. Which students are exhibiting behaviors early in the semester which put them at risk for graduation completion?
- 2. What is the best course enrollment pattern for a particular program or student that increases graduation success?
- 3. Which students are currently at risk for graduating and why?
- 4. Which high-impact practices would increase a student's graduation success?





Student Success and Predictive Analytics



EAB Student Success Collaborative Campus

Delivering student success efforts at scale:

- UCF risk model
- Data driven systemic changes
- Target individual students for strategic intervention
- Empower advisors
- Campus-wide case management coordinated care network

Graduation **Student Predictive Pathways Analytics** • Major and career • Student success • Institution reports guidance • 360-degree • High impact practices student view • Mapping and tracking • Early alerts • Proactive outreach and interventions Stands For Opportunity

EAB Student Success Collaborative Campus – Future Roadmap

- Predictive analytics model expansion
- Course activity and behavior tracking
- Financial aid data points
- Track outreach and student interaction
- Set goals and monitor key outcome metrics



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EAB Student Success Collaborative Campus – UCF Timeline

4-4-16



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INFO-1

DISCUSSION



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INFO-1

ITEM: INFO-2

EDUCATIONAL PROGRAMS COMMITTEE

University of Central Florida

SUBJECT: College of Medicine Milestones

DATE: March 24, 2016

For information only.

Supporting documentation: Attachment A: UCF College of Medicine Update Summary Attachment B: Building the UCF Health Sciences Campus at Lake Nona presentation

Prepared by: Deborah German, Vice President for Medical Affairs and Dean of the College of Medicine

Submitted by: Dale Whittaker, Provost and Executive Vice President

INFO-2

UCF College of Medicine Update Summary Board of Trustees Meeting March 24, 2016

Dr. Deborah German, Vice President for Medical Affairs, Dean, College of Medicine



- A top-tier college of medicine that brings economic impact to a community must be strong in all three of its integral missions education, research, and patient care.
 - In almost ten years, the UCF College of Medicine has created an innovative medical education program that is gaining national and international recognition.
 - M.D. students are scoring in the top quartile nationally on board and licensing exams, research productivity, and service to patients.
 - The UCF College of Medicine is unique nationally in having a large undergraduate biomedical sciences program that is a pipeline for medical and other graduate schools and careers in healthcare professions.
 - College of Medicine faculty members are being recognized nationally for their efforts.
- In the next ten years, the UCF College of Medicine must develop its research and patient care missions if it is to achieve top-tier status.
 - UCF's medical school is one-tenth the size of the average U.S. public medical school in revenue. The College of Medicine must increase revenues from research and patient care if it is to achieve its goal.
 - The College of Medicine has created a small clinical practice with two sites in Orlando. It has also begun a young research program. These initiatives are still in their infancy. Research and clinical care must be developed to the level that the education mission has been developed. This will allow UCF to keep its promise of economic impact for the medical city.
 - A UCF teaching hospital is necessary for the College of Medicine to flourish in all three of its missions, particularly in patient care and research.
- In addition to the College of Medicine's education, research, and patient care programs, the UCF Health Sciences Campus at Lake Nona provides a prime location for future partnerships within the university and community.
 - Expansion of the campus could include UCF's existing College of Nursing, and the potential future colleges of dentistry and public or allied health, creating an integrated program for training the health providers of tomorrow.
 - Such an integrated campus would add to the College of Medicine's existing partnerships in the community, region, and state.

Building the UCF Health Sciences Campus at Lake Nona

UCF College of Medicine Update March 24, 2016

Deborah C. German, M.D. Vice President for Medical Affairs Dean, College of Medicine

INFO-2

UCF College of Medicine Missions



Partnerships

Our Growth in the Past Decade





COM Selected Achievements

	2007	2016
Space	120 Square Feet	527,954 square feet
Faculty/Staff	1	686 core faculty and staff 2,252 affiliated and volunteer faculty
Enrollment	0	2866 UG, 105 G, 458 MD, 34 GME
M.D. Graduates	0	169
M.D. Program	An Idea	LCME Full Accreditation
Research	0	\$88,627,376*
Patient Care	0	UCF Health Physician Practice (two locations)
Revenue	\$2 million	\$85 million

*cumulative



U.S. Medical Licensing Examination Step 1 and Step 2 Clinical Knowledge Scores



Step 1 Taken after pre-clerkship years (M2)



Step 2 Clinical Knowledge Taken after first clinical year (M3)

National Board of Medical Examiners Subject Exams



M.D. Education Update

 Data for all matched seniors from the National Resident Matching Program (2015)

	25th	50 th	75th	
STUDENT CHARACTERISTICS				
Mean number of work experiences	2.6	3.0	3.3	3.6
Mean number of volunteer experiences	6.0	6.8	8.0	
Mean number of research experiences	2.4	2.8	3.3	
Mean number of publications	3.0	4.2	5.3	<mark>6.1</mark>
USMLE STEP SCORES				
Mean Step 1 scores	227.9	231.3	235.9	236.6
Mean Step 2 scores	241.2	243.5	246.2	246.8



Virgin Islands Partnership

New Medical School Partnership

The UCF College of Medicine and The University of the Virgin Islands



COM Selected Achievements

	2007	2016	
Space	120 Square Feet	527,954 square feet	
Faculty/Staff	1	686 core faculty and staff 2,252 affiliated and volunteer faculty	
Enrollment	0	2866 UG, 105 G, 458 MD, 34 GME	
M.D. Graduates	0	169	
M.D. Program	An Idea	LCME Full Accreditation	
Research	0	\$88,627,376*	
Patient Care	0	UCF Health Physician Practice (two locations)	
<u>Revenues</u>	\$2 million	\$85 million	

*cumulative



College of Medicine Revenue Sources



College of Medicine Revenue Sources

UCF COM – 2014-15 Total Revenue: \$68 million 78 Public Medical Schools – 2014-15 Mean Total Revenue: \$639 million



AAMC Medical School Profile System

What We Need to Do



What We Need to Do



Areas of Research Focus

- Cancer
- Cardiovascular disease
- Neurodegenerative disease
- Infectious disease
- Medical simulation

Research funding total: \$88,627,376

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Patient Care – UCF Health

Multi-specialty faculty practice

- Internal and Family Medicine
- Cardiology
- Dermatology
- Geriatrics
- Sports Medicine
- Rheumatology
- Nephrology
- Endocrinology
- Gastroenterology
- Integrative Medicine
- Neurology
- Occupational Medicine







ITEM: INFO-3

EDUCATIONAL PROGRAMS COMMITTEE

University of Central Florida

SUBJECT: Programs for Students with Unique Abilities report

DATE: March 24, 2016

For information only.

Supporting documentation: Attachment A: Programs for Students with Unique Abilities report presentation

Prepared by: Adam Meyer, Executive Director for Student Accessibility Services and Inclusive Education Services and Pamela Carroll, Dean of the College of Education and Human Performance

Submitted by: Dale Whittaker, Provost and Executive Vice President

Access, Quality, and Success









Programs and Services for Students with Unique Abilities

March 24, 2016

Dr. Adam Meyer Executive Director, Student Accessibility Services & Inclusive Education Services Division of Student Development and Enrollment Services

> Dr. Pamela Carroll Dean, College of Education and Human Performance



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Stands For Opportunity

Overview

- Introduction
- Student accessibility services
- Inclusive education services
- Meet our students
- New opportunities
 - o Florida Center for Students with Unique Abilities
- Resources for students
- Discussion



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SDES: Helping Students Stay In School, Be Healthy, Live Ethically...Graduate



Student Accessibility Services – Mission

Work collaboratively with students, faculty, and staff members to create an inclusive educational environment for students

Awareness of human diversity and the impact of barriers Creating partnerships with students, faculty, and staff Constructing an inclusive college experience Equal opportunity through accessible environments Sharing resources that facilitate accessibility Seamless access as a long-term vision and destination



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Student Accessibility Services



Student Accessibility Services



Inclusive Education Services – Mission

To deliver an innovative and distinctively inclusive three-year postsecondary educational experience for individuals with intellectual disabilities by facilitating immersive academic, campus, and vocational opportunities



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Inclusive Education Services



Meet Our Students

INFO-3

	 <u>David</u> Works for UCF's Recreation and Wellness Center Enjoys running and lifting weights Lives on-campus A member of the Acapella Club Wants to work in fitness field 	 <u>Matt</u> Volunteers with the Creative School Paid position in UCF's Housing and Residence Life's mailroom Member of Campus Crusade for Christ Lives on-campus Interested in ministry, social work or leadership-related field 	
	 <u>Amanda</u> Volunteers at the Creative School Holds a Student Union Internship Works within College of Education and Human Performance Enjoys working out Member of Campus Crusade for Christ Lives on campus Still deciding on field 	 Patricia Enjoys learning about the police, practicing sign language, and doing arts and crafts. Lives on-campus Police or Speech and Language Pathology focus National Anthem singer 	
SDES UCF	College of Education and Human Performance	UCF	Stands For Opportunity

New Opportunities



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Florida Center for Students with Unique Abilities

- Statewide coordination of the dissemination of information regarding postsecondary programs and services for students with intellectual disabilities
- Partnership between College of Education and Human Performance and the Division of Student Development and Enrollment Service
 \$8 million funded by the Florida Legislature
 \$1.5 million funding for center operations
 \$3 million for institutional grants
 \$3.5 million for student scholarships



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Resources for Students



Student Accessibility Services Phone: 407-823-2371 Email: sas@ucf.edu Website: http://sas.sdes.ucf.edu/



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DISCUSSION



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