

FLORIDA'S **STEM** UNIVERSITY<sup>™</sup>

# US News: 2020 Ed. Review

**Office of Institutional Research and Effectiveness** Fall 2019

### **2019 Edition and 2020 Edition Metrics**

Main Percent	Main	Sub percent	Overall Rank Ranges (Average in Rank Range)	Florida Tech 2019 ED	Florida Tech 2020 ED	Change Indicator
			Overall Rank	177	202	25
5%	Alumni Giving	5%	Average alumni giving rate (2 Year)	6.1	6.5	0.4
		17.6%	6-year graduation rate (4 year average)	57.5	58.8	1.3
27%	Grad & Retention Rates	4.4%	Freshman retention rate (4 year average)	79.5	80.8	1.3
21%		2.5%	Pell Grant Comparative Grad Rate	-5.0	-11.0	-6.0
		2.5%	Pell Grant Grad Rate	56.0	51.0	-5.0
8%	Grad Rate Performance	8%	Graduation Rate Performance (Over/Under)	-1.0	-1.0	0.0
		2.25%	% of freshmen in top 10 percent of high school class	28.0	29.0	1.0
			SAT Math average score	625.0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	8.0
10%	Student Selectivity	7 750/	SAT Evidence-Based Reading & Writing average score	604.0	618.0	14.0
		7.75%	Internal Calculation SAT Combined	1229.0	1251.0	22.0
			ACT Composite average score	27.0	28.0	1.0
200/	Europat Opinion	15.0%	Peer assessment score	2.4	2.4	0.0
20%	Expert Opinion	5.0%	High school counselor score	3.4		
		1.0%	% of faculty who are full-time	80.7	82.0	1.3
		3.0%	% of full-time faculty with PhD or terminal degree	92.2	90.8	-1.4
20%	Faculty Resources	8.0%	Class Size Indicator Rank	113.0	161.0	48.0
		7.0%	Average Faculty Compensation (CY)	\$101,213	\$110,052	\$8,839
		1.0%	Student/faculty ratio	15.0	14.0	-1
10%	Financial Resources	10%	Educational expenditures per student	\$26,403	\$26,096	-\$307
			% of classes with fewer than 20 students	42.5	44.7	2.2
Aggre	egated into Class Size Ind	icator	% of classes with 20-49 students	50.4	50.9	0.5
			% of classes with 50 or more students	7.1	4.4	-2.7



### **The Notables**

- Remained constant or improved in 14 of 18 metrics areas
- Those areas make up 82% of the weighting
- Undergraduate Engineering improved to #153 from #167
- Ranked 2<sup>nd</sup> in international student percentage among National Universities
- Ranked 113 in Student Excellence (internal metric) aggregate of test scores and top 10% HS Rank



# We Improved...So Why Did We Decline?



### Impact of Carnegie Classification Change

- Institutions with professional doctorates were re-classified as National Universities
- Increased number of numerically ranked institutions from 226 to 281
- Increased number of institutions in National Universities category from 301 to 381
- 27 institutions were added that were ranked above Florida Tech including:
  - Gonzaga University (79)
  - Elon University (84)
  - Valparaiso University (153)
  - Missouri University of Science and Technology (179)
  - University of North Carolina Wilmington (185)
  - Loyola University New Orleans (197)



## **US News Methodology Changes**

- Eliminated the HS Counselor rating as part of the peer assessment score (was worth 5%)
- Increased weighting of peer assessment score to 20%
- Repackaged Pell graduation rate & gap into "social mobility indicator" with no weighting change
- Aligned student enrollment term and fiscal year in the educational expenditures per FTE student calculation
- Added percent first generation to the graduation rate predictive formula
- Adjusted faculty salary data to account for regional cost of living differences



Main Percent	Main	Sub percent	Overall Rank Ranges (Average in Rank Range)	91 to 100	101 to 110	111 to 120	121 to 130	131 to 140	) 141 to 150	151 to 160	161 to 170	171 to 180	181 to 190	191 to 200	Florida Tec	201 to 210	211 to 220		
5%	Alumni Giving	5%	Average alumni giving rate (2 Year)	10.5	9.8	10.5	10.9	9.1	7.2	10.3	7.3	8.4	7.1	8.1	6.5	5.4	8.1		
	Grad & Retention	17.6%	6-year graduation rate (4 year average)				73.4	69.0	68.5	67.7	64.7	58.3	64.7	66.2	58.8	62.6	58.5		
	Rates	4.4%	Freshman retention rate (4 year average)	88.9	87.8	87.1	85.6	85.5	84.7	84.7	83.8	81.2	83.0	81.6	80.8	79.9	79.6		
35%	Grad Rate Performance	8%	Graduation Rate Performance (Over/Under)	3.7	5.7	2.3	1.5	3.6	6.7	1.6	3.9	-0.5	2.9	2.5	-1.0	5.0	2.8		
		2.5%	Pell Grant Comparative Grad Rate	-4.9	-8.5	-7.5	-7.7	-9.5	-8.5	-11.8	-9.8	-9.3	-11.4	-11.2	-11.0	-7.6	-11.1		
	Social Mobility	2.5%	Pell Grant Grad Rate	73.1	65.8	65.5	68.4	62.9	64.3	60.3	59.5	53.5	59.0	58.7	51.0	58.6	52.6		
		2.25%	% of freshmen in top 10 percent of high school class	44.0	31.0	37.3	34.0	26.4	29.3	25.6	24.3	24.6	30.5	19.3	29.0	18.0	18.0 18.4		
	Student Selectivity	7.75%	SAT Math average score	629.2	615.2	616.3	617.3	601.5	604.5	603.3	589.6	590.8	600.6	586.3	618.0	568.0	569.2		
10%			SAT Evidence-Based Reading & Writing average score	639.8	614.6	633.5	615.3	602.6	604.2	598.1	584.3	599.8	591.0	566.7	633.0	558.4	560.7		
			7.73%	7.73%	Internal Calculation SAT Combined	1268.9	1229.8	1249.8	1232.6	1204.1	1208.7	1201.4	1173.8	1190.6	1191.6	1153.0	1251.0	1126.4	1129.9
					ACT Composite average score	27.4	26.6	26.3	26.6	25.5	25.5	26.2	24.8	24.3	24.7	24.5	28.0	23.5	23.5
2014	5 1011	20.0%	Peer assessment score	3.0	3.2	3.1	2.8	2.8	2.7	2.8	2.7	2.7	2.4	2.5	2.4 2.2		2.4		
20%	Expert Opinion		High school counselor score	-	-	Ř		/- )		$\langle \cdot \rangle$	-	X	_	1_	-	$\left\langle \cdot \right\rangle$	<u> </u>		
		1.0%	% of faculty who are full-time	81.6	87.8	88.5	81.1	83.6	81.5	76.2	79.2	81.7	82.7	81.0	82.0	67.6	79.0		
		3.0%	% of full-time faculty with PhD or terminal degree	90.3	86.4	89.7	86.7	88.1	89.2	83.7	87.0	87.9	82.6	83.4	90.8	80.7	82.0		
20%	Faculty Resources	8.0%	Class Size Indicator Rank	200.5	257.2	246.8	173.0	218.9	218.0	185.9	225.7	159.2	172.1	168.7	161.0	91.5	163.6		
		7.0%	Average Faculty Compensation (CY)	\$157,678	\$142,135	\$142,933	\$131,579	\$127,967	\$133,114	\$124,259	\$134,919	\$136,387	\$111,159	\$108,024	\$110,052	\$121,574	\$114,952		
		1.0%	Student/faculty ratio	13.2	15.8	15.1	14.5	14.7	17.0	15.3	16.3	14.1	14.3	14.1	14.0	13.4	15.6		
10%	Financial Resources	10%	Educational expenditures per student	\$36,543	\$36,390	\$32,543	\$36,178	\$34,951	\$25,323	\$34,693	\$30,556	\$41,121	\$23,955	\$25,224	\$26,096	\$23,919	\$25,004		



#### What does the US News ranking data suggest?

- There are opportunities
  - Benefits students
  - Opportunity for long term positive impact
  - Potential revenue generation
- There are challenges
  - Changes are unpredictable and out of our control
  - Few institutions have moved their rankings substantially
  - Metrics need longer intervals until impact is seen
  - Requires resources



## What May Impact in 2021? Unknown





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# Discussiona



#### **SOURCES AND DEFINITIONS**





Main Percent Main	Sub-percent	Sub-metrics (Average in Rank Range)	Definition & Source
5% Alumr Givinį	5%	Average alumni giving rate (2 Year)	Source – CAE VSE Undergraduate Alumni Giving: As noted, <i>exclude</i> former students who earned only graduate degrees and undergraduates who didn't graduate from your institution. Additionally, exclude all student giving (e.g., senior class gift) unless you count the entire senior student body in the alumni of record total. Please follow the standards set by the Council for Aid to Education (CAE) and the Council for Advancement and Support of Education (CASE), and used for reporting to CAE for the Voluntary Support of Education Survey when answering these questions. What was the number of undergraduate alumni of record at your institution? ( <i>Alumni of</i> <i>record are former full or part-time students with an undergraduate degree from your</i> <i>institution and for whom you believe you have a valid address or other way to make</i> <i>contact (telephone, email, etc.)</i> )





Main Percent	Main	Sub-percent	Sub-metrics (Average in Rank Range)	Definition & Source
27%	Grad & Retention Rates	17.6%	6-year graduation rate (4 year average)	The following questions ask for information needed to calculate the six-year graduation rate for the cohort of full-time, first-time, bachelor's (or equivalent) degree-seeking undergraduate students who entered your institution in the Fall of 2012. Include students who entered your institution during the Summer term preceding Fall of 2012. Based off of entering cohort of first time, full-time bachelors degree seeking undergrad students including those who began in the preceding summer. Allows cohort exclusions for death, permanent disability, armed forces, foreign aid service, or church mission.
		4.4%	Freshman retention rate (4 year average)	Same as above by first cohort one year later.
		2.5%	Pell Grant Comparative Grad Rate	Calculated metric – difference between grad rate and Pell grad rate
		2.5%	Pell Grant Grad Rate	Is same as grad rate, but for Pell students only. Pell status is based on their status at time of cohort entry.
8%	Grad Rate Performance	8%	Graduation Rate Performance (Over/Under)	US News algorithm 48.173+(.372*expenditures per student)+(.215*mean standardized test scores)+(3.375*10^-6)*(mean standardized test score^3)+(.308*top 10% class standing proportion)+(404*Pell proportion)+(044*STEM degree proportion)

In the 2019 edition (release in fall 2018), our predicted grad rate was impacted by a source change of the Pell data. Prior years, this was taken from the DOE counts which included annual Pell numbers including Florida Tech Online (n=2327). This was re-sourced to IPEDS which was an annual number based on fall headcount and excluded Florida Tech Online (n=741).





Main Percent	Main	Sub-percent	Sub-metrics (Average in Rank Range)	Definition & Source
10%	Student	2.25%	% of freshmen in top 10 percent of high school class	Common Data Set - High School Class Standing: Please enter the percent of all degree- seeking, first-time, first-year (freshman) students who had high school class rank within each of the following ranges. "Freshman" includes all full- and part-time, first-time, first- year students who enrolled in fall of 2018, including students who began studies during the summer, international students / nonresident aliens, and students admitted under special arrangements.
10%	Selectivity		SAT Math average score	
2		7.75%	SAT Evidence-Based Reading & Writing average	Average Test Scores: Please enter average test scores for all full- and part-time, first-time,
				first-year (freshman) students enrolling in the fall of 2018, including students who began
		7.7570		studies during the summer, international students / nonresident aliens, and students
			ACT Composite average score	admitted under special arrangements. Last year's data is provided for your reference.





27. V	Main Percent	Main	Sub-percent	Sub-metrics (Average in Rank Range)	Definition & Source
	20%	Expert	20%	Peer assessment score	Collected from assessment surveys administered by US News. Sum of 1-5 ratings divide by
	20%	Opinion		High school counselor score	number who rate the institution.





Main Percent	Main	Sub-percent	Sub-metrics (Average in Rank Range)	Definition & Source
<		1.0%	% of faculty who are full-time	Uses CDS data with AAUP definitions –
		3.0%	% of full-time faculty with PhD or terminal degree	
1		8.0%	Class Size Indicator Rank	See class size indicator below
	- h	7.0%	Average Faculty Compensation (CY)	Uses AAUP data - <u>https://research.aaup.org/instructions</u>
20%	20% Faculty Resources	1.0%	Student/faculty ratio	Uses CDS data – Report the Fall 2018 ratio of full-time equivalent students (full-time plus 1/3 part time) to full-time equivalent instructional faculty (full time plus 1/3 part time). In the ratio calculations, exclude both faculty and students in stand-alone graduate or professional programs such as medicine, law, veterinary, dentistry, social work, business, or public health in which faculty teach virtually only graduate-level students. Do not count undergraduate or graduate student teaching assistants as faculty.
			% of classes with fewer than 20 students	Uses CDS data –
			% of classes with 20-49 students	Class Sections: A class section is an organized course offered for credit, identified by
Aggreg	Aggregated into Class Size Indicator		% of classes with 50 or more students	discipline and number, meeting at a stated time or times in a classroom or similar setting, and not a subsection such as a laboratory or discussion session. Undergraduate class sections are defined as any sections in which at least one degree-seeking undergraduate student is enrolled for credit. Exclude distance learning classes and noncredit classes and individual instruction such as dissertation or thesis research, music instruction, or one-to- one readings. Exclude students in independent study, co-operative programs, internships, foreign language taped tutor sessions, practicums, and all students in one-on-one classes. Each class section should be counted only once and should not be duplicated because of course catalog cross-listings





Main Percent	Main	Sub-percent	Sub-metrics (Average in Rank Range)	Definition & Source
10%	Financial Resources	10%	Educational expenditures per student	<ul> <li>IPEDS Finance (audited financials) –</li> <li>U.S. News measures financial resources by using the average spending per student on instruction, research, student services and related educational expenditures in the 2017 and 2018 fiscal years. Spending on sports, dorms and hospitals does not count.</li> <li>Education expenses = ((research + public service) * percent full-time equivalent enrollment that is undergraduate) + instruction + academic support + student services + institutional support.</li> <li>Educational expenses per student = education expenses / total full-time equivalent enrollment</li> </ul>

