

America's Brightest ORANGE

# Oklahoma State University

## University Assessment and Testing

2021 OSU Alumni Survey

Survey Report – Computer Engineering

The OSU Alumni Survey is a survey designed to collect information about OSU graduated students. More specifically, it is designed to collect information on their career, educational achievements, and their experience with OSU. This information will be used to improve academic programs and student experiences at OSU for generations to come. This survey targeted alumni of undergraduate and graduate programs who received their degree in 2015 and/or 2019. The survey was administered online by OSU-University Assessment and Testing (UAT) in March 2021 through May 2021. Departments may request additional information by contacting UAT (assessment@okstate.edu).

### **Survey Questions**

Respondents were asked 35 items; 26 were institutional level items and 9 were program-specific questions developed by College of Engineering, Architecture and Technology. Institutional level items were given to all OSU alumni and the items were featured on categories; continuing education, well-being and community, demographic, satisfaction, career reflection, and current job or career.

### Target Population / Response Rate – Computer Engineering

	OSU Degree Received:					
	<u>2015</u>	<u>2019</u>	<u>Total</u>			
Number of graduates (n)	11	26	37			
Number of survey respondents ( <i>n</i> )	3	3	6			
Response rate	27.3	11.5	16.2			

	<u>2015</u>		<u>20</u>	<u>19</u>
<ol> <li>Since graduating from OSU, how would you describ apply")</li> </ol>				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Not engaged in paid employment, nor enrolled in graduate or professional school	0	0.0	1	33.3
Enrolled in graduate or professional school	0	0.0	0	0.0
Employed full-time or part-time	3	100.0	2	66.7
Both employed (other than graduate assistant) and continuing my education	0	0.0	0	0.0
Self-employed	0	0.0	0	0.0

	<u>2015</u>		<u>20</u>	<u>2019</u>	
2. Whether or not you are currently employed, in what	area is you	r principal occup	pation?		
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	
Engineering	1	33.3	1	33.3	
Computer Science, Programming or Technology	2	66.7	2	66.7	
Science, Social Science, or Mathematics	0	0.0	0	0.0	
Health or Mental Health	0	0.0	0	0.0	
Business or Management	0	0.0	0	0.0	
Finance or Accounting	0	0.0	0	0.0	
Education, Training, or Library	0	0.0	0	0.0	
Legal	0	0.0	0	0.0	
Writing, Journalism, or Design	0	0.0	0	0.0	
Public Service, Policy, or Politics	0	0.0	0	0.0	
Public Relations, Marketing, or Sales	0	0.0	0	0.0	
Architecture	0	0.0	0	0.0	
Art, Performing, or Athletics	0	0.0	0	0.0	
Participating in a volunteer or service program	0	0.0	0	0.0	
Serving in the U.S. military	0	0.0	0	0.0	
Other occupational area (INSERT FIELD)	0	0.0	0	0.0	



## **Continuing Education**

Participants who indicated they were continuing their education responded to the following items.

	<u>201</u>	15	<u>20</u>	<u>2019</u>		
<ol> <li>What graduate or professional degree are you purs you complete? (This item was "mark all that apply")*</li> </ol>	suing or, if	you completed	d a degree, wha	at degree did		
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>		
Graduate Certificate	0	0.0	0	0.0		
Master's	0	0.0	0	0.0		
Doctoral	0	0.0	0	0.0		
Medical (includes nursing, osteopathy, dental, vet, and more)	0	0.0	0	0.0		
Law	0	0.0	0	0.0		
Other (INSERT FIELD)	0	0.0	0	0.0		
Prefer not to answer	0	0.0	0	0.0		

4. What was the name of your graduate or professional sc	hool?	
	<u>2015</u>	<u>2019</u>

	<u>2015</u>		<u>20</u>	<u>19</u>
5. How well did your OSU program prepare you for gr	graduate or professional education program?			
	<u>n % n</u>			
Very well	0	0.0	0	0.0
Adequately	0	0.0	0	0.0
Not very well	0	0.0	0	0.0
Not at all	0	0.0	0	0.0
Prefer not to answer	0	0.0	0	0.0



## Well-being & Community

	<u>2015</u>		<u>2019</u>	
6. How connected do you feel to OSU?				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very connected	0	0.0	0	0.0
Moderately connected	0	0.0	0	0.0
Somewhat connected	2	66.7	2	66.7
Not very connected	1	33.3	1	33.3

	<u>2015</u>		<u>20</u>	<u>19</u>
7. Are you regularly in touch with people you met at OS	SU? (This item was "mark all that apply")			")
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Yes, with my advisor(s)	1	25.0	0	0.0
Yes, with professors or staff	0	0.0	0	0.0
Yes, with members of my team, club, or sorority/fraternity	0	0.0	0	0.0
Yes, with classmates/friends I met at OSU	3	75.0	2	66.7
No	0	0.0	1	33.3

	<u>2015</u>		<u>20</u>	<u>019</u>
8. How much has your overall quality of life been enhance experience?	ced by you	r Oklahoma S	tate Universi	ity
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very Much	2	66.7	2	66.7
Somewhat	1	33.3	0	0.0
Little	0	0.0	1	33.3
None	0	0.0	0	0.0

	<u>2015</u>		<u>20</u>	) <u>19</u>
9. In the past twelve months, how often have you partici	icipated in unpaid volunteer work?			
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
More than once a week	0	0.0	0	0.0
About once a week	0	0.0	0	0.0
About once a month	0	0.0	1	33.3
Every few months	0	0.0	0	0.0
Once or twice in the past year	1	33.3	1	33.3
Not at all	2	66.7	1	33.3



10. How would you change the emphasis OSU placed on these aspects of education and college life?

	<u>2015</u>		<u>2019</u>	
10a. Making ethical and thoughtful decisions				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Reduce a great deal	0	0.0	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	0	0.0	2	66.7
Increase somewhat	1	33.3	0	0.0
Increase a great deal	2	66.7	1	33.3
l don't know	0	0.0	0	0.0

	<u>2015</u>		<u>20</u>	<u>2019</u>	
10b. Exploring alternative values, perspectives, and beli	eliefs from around the world				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	
Reduce a great deal	0	0.0	0	0.0	
Reduce somewhat	0	0.0	0	0.0	
Keep about the same	0	0.0	2	66.7	
Increase somewhat	2	66.7	0	0.0	
Increase a great deal	1	33.3	1	33.3	
l don't know	0	0.0	0	0.0	

<u>2015</u>		<u>2019</u>	
<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
0	0.0	0	0.0
0	0.0	0	0.0
1	33.3	1	33.3
1	33.3	0	0.0
1	33.3	2	66.7
0	0.0	0	0.0
	<u>2(</u> <u>n</u> 0 1 1 1 1 0	1 33.3 1 33.3 0 0.0	1 33.3 0



	<u>2015</u>		<u>2019</u>					
10d. Improving ability to think critically (analytically and logically)								
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>				
Reduce a great deal	0	0.0	0	0.0				
Reduce somewhat	0	0.0	0	0.0				
Keep about the same	2	66.7	1	33.3				
Increase somewhat	0	0.0	0	0.0				
Increase a great deal	1	33.3	2	66.7				
l don't know	0	0.0	0	0.0				

	<u>2015</u>		<u>2019</u>					
10e. Ability to interact positively with people who are different from you								
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>				
Reduce a great deal	0	0.0	0	0.0				
Reduce somewhat	0	0.0	0	0.0				
Keep about the same	0	0.0	2	66.7				
Increase somewhat	2	66.7	0	0.0				
Increase a great deal	1	33.3	1	33.3				
l don't know	0	0.0	0	0.0				

	<u>2015</u>		<u>2019</u>	
0f. Developing good health habits and physical fitness				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Reduce a great deal	0	0.0	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	1	33.3	2	66.7
Increase somewhat	1	33.3	1	33.3
Increase a great deal	1	33.3	0	0.0
l don't know	0	0.0	0	0.0
-				



## **Academic Satisfaction**

11. Please rate your degree of satisfaction with each of the following items:	the following items:	each of the	with	satisfaction	<sup>·</sup> degree of	. Please rate your	11.
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	<u>20</u>	<u>15</u>	<u>2019</u>	
11a. The quality of teaching at OSU				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very Satisfied	0	0.0	0	0.0
Satisfied	2	66.7	1	33.3
Neutral	1	33.3	1	33.3
Dissatisfied	0	0.0	1	33.3
Very Dissatisfied	0	0.0	0	0.0
Very Dissatisfied Not applicable	0	0.0	0	0.0

<u>2015</u>		<u>2019</u>						
11b. Availability of courses needed for your degree program								
<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>					
2	66.7	1	33.3					
1	33.3	1	33.3					
0	0.0	0	0.0					
0	0.0	0	0.0					
0	0.0	1	33.3					
0	0.0	0	0.0					
	gram <u>n</u> 2 1 0 0 0 0 0	pram <u> n % 2 66.7 1 33.3 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 </u>	gram <u> n % n</u> 2 66.7 1 1 33.3 1					

	<u>2015</u>		<u>2019</u>					
11c. OSU academic facilities (e.g. classrooms, labs, buildings, etc.)								
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>				
Very Satisfied	1	33.3	0	0.0				
Satisfied	2	66.7	2	66.7				
Neutral	0	0.0	0	0.0				
Dissatisfied	0	0.0	0	0.0				
	0	0.0	1	33.3				
Not applicable	0	0.0	0	0.0				



			-	
	2	<u>2015</u>		<u>)19</u>
11d. OSU academic advising				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very Satisfied Satisfied	0	0.0	0	0.0
Satisfied	3	100.0	1	33.3
Neutral	0	0.0	0	0.0
Dissatisfied	0	0.0	2	66.7
Very Dissatisfied	0	0.0	0	0.0
Very Dissatisfied Not applicable	0	0.0	0	0.0

	<u>2015</u>		<u>20</u>	) <u>19</u>				
11e. Preparation to handle non-career related goals (e.g. family, finances, etc.)								
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>				
Very Satisfied	0	0.0	0	0.0				
Satisfied	1	33.3	0	0.0				
Neutral	2	67.3	1	33.3				
Dissatisfied	0	0.0	0	0.0				
Very Dissatisfied	0	0.0	1	33.3				
Not applicable	0	0.0	1	33.3				

	<u>2015</u>		<u>20</u>	<u>)19</u>
11f. Availability of internship/practicum experiences				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very Satisfied	0	0.0	0	0.0
Satisfied	2	66.7	1	33.3
Neutral	0	0.0	1	33.3
Dissatisfied	0	0.0	1	33.3
Very Dissatisfied	0	0.0	0	0.0
Very Dissatisfied Not applicable	1	33.3	0	0.0

	<u>2015</u>		<u>2019</u>	
11g. Overall education at OSU				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very Satisfied	0	0.0	1	33.3
Satisfied	2	66.7	0	0.0
Neutral	1	33.3	1	33.3
Dissatisfied	0	0.0	1	33.3
	0	0.0	0	0.0
Very Dissatisfied Not applicable	0	0.0	0	0.0



	<u>2015</u>		20	<u>)19</u>	
12. If you could start over, would you still choose to atte	tend Oklahoma State University?				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	
Definitely yes	1	33.3	1	33.3	
Probably yes	2	66.7	1	33.3	
Uncertain	0	0.0	0	0.0	
Probably no	0	0.0	1	33.3	
Definitely no	0	0.0	0	0.0	

## **Career Reflection**

Participants who indicated they were employed responded to the following items.

	<u>2015</u>		<u>20</u>	<u>19</u>
13. How closely is your job related to your field of study?	?			
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Not related	0	0.0	0	0.0
Somewhat related	2	66.7	1	50.0
Directly related	1	33.3	1	50.0

	<u>2015</u>		<u>2019</u>				
14. How well did OSU prepare you for meaningful employment?							
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>			
Very well	0	0.0	1	50.0			
Adequately	3	100.0	0	0.0			
Not very well	0	0.0	1	50.0			
Not at all	0	0.0	0	0.0			
Prefer not to answer	0	0.0	0	0.0			

	<u>2015</u>		<u>2019</u>	
15. Overall, how satisfied are you with your career?				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very Satisfied	2	66.7	1	50.0
Satisfied	1	33.3	1	50.0
Neutral	0	0.0	0	0.0
Dissatisfied	0	0.0	0	0.0
Very Dissatisfied	0	0.0	0	0.0



### **Current Job or Career**

	<u>201</u>	15	<u>2019</u>	
16. Are you employed full-time (on average 30 hours or than 30 hours per week)?	more pe	er week) or par	t-time (on ave	rage less
than so hours per week)?	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Full-time	3	100.0	2	100.0
Part-time	0	0.0	0	0.0

	<u>2015</u>		<u>20</u>	<u>2019</u>			
17. How long did it take to find your first employment after	w long did it take to find your first employment after graduating from OSU?						
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>			
Employed by graduation	2	66.7	2	100.0			
3 months after graduation	1	33.3	0	0.0			
6 months after graduation	0	0.0	0	0.0			
9 months after graduation	0	0.0	0	0.0			
1 year after graduation	0	0.0	0	0.0			
over 1 year after graduation	0	0.0	0	0.0			

18. What is your official job title?		
	<u>2015</u>	<u>2019</u>
Data Engineer	1	0
Software Engineer	1	2
Software Engineer Level II	1	0

### 19. What is the name of your current employer? Please include full name (no abbreviations).<sup>1</sup>

Enovation Controls
Life Church
The Boing Company
USAA

<sup>&</sup>lt;sup>1</sup>Current Employer is presented exactly as reported by survey respondents.



	<u>2015</u>		<u>2019</u>	
20. Which of the following best describes your employer?	?			
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
A corporation, partnership, or private business	2	66.7	2	100.0
Military	0	0.0	0	0.0
Other governmental entity	0	0.0	0	0.0
Charity or other nonprofit entity	1	33.3	0	0.0
Educational institution	0	0.0	0	0.0
Other	0	0.0	0	0.0
Prefer not to answer	0	0.0	0	0.0

	<u>2015</u>		<u>20</u>	<u>19</u>				
21. Does your job require: (This item was "mark all that apply")								
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>				
Technology skills	3	18.8	2	12.5				
Conducting research	2	12.5	1	6.3				
Extensive training	0	0.0	1	6.3				
Math skills	2	12.5	2	12.5				
Problem solving/analytic reasoning	3	18.8	2	12.5				
Speaking to a group	1	6.3	2	12.5				
Use of specialized machinery	0	0.0	1	6.3				
Use of specialized software	2	12.5	2	12.5				
Working with a diverse group of people	3	18.8	2	12.5				
Writing reports, memos, papers, publications, etc.	0	0.0	1	6.3				

<u>2015</u>		<u>20</u>	<u>2019</u>				
22. What is your approximate total annual salary (including bonuses), before taxes?							
<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>				
0	0.0	0	0.0				
0	0.0	0	0.0				
0	0.0	0	0.0				
0	0.0	0	0.0				
0	0.0	0	0.0				
0	0.0	0	0.0				
1	33.3	2	100.0				
2	66.7	0	0.0				
0	0.0	0	0.0				
0	0.0	0	0.0				
0	0.0	0	0.0				
0	0.0	0	0.0				
	ling bonuse <u>n</u> 0 0 0 0	Img bonuses), before taxe $n$ $\frac{N}{2}$ 0         0.0           0         0.0           0         0.0           0         0.0           0         0.0           0         0.0           0         0.0           0         0.0           0         0.0           1         33.3           2         66.7           0         0.0           0         0.0           0         0.0	$\underline{n}$ $\underline{N}$ $\underline{n}$ 0         0.0         0           0         0.0         0           0         0.0         0           0         0.0         0           0         0.0         0           0         0.0         0           0         0.0         0           0         0.0         0           0         0.0         0           0         0.0         0           1         33.3         2           2         66.7         0           0         0.0         0           0         0.0         0           0         0.0         0				



## Demographics

	<u>2015</u>		<u>2019</u>	
23. Which OSU campus do you most identify with?				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Stillwater	3	100.0	3	100.0
Tulsa	0	0.0	0	0.0
Equally Stillwater or Tulsa	0	0.0	0	0.0
Online	0	0.0	0	0.0

24. In which country do you currently reside?		
	<u>2015</u>	<u>2019</u>
United States of America	3	3

a. In which state do you currently reside?		
	<u>2015</u>	<u>2019</u>
ОК	1	2
OK-OKC	1	1
OK-STW	0	0
OK-TUL	1	0

## Overall

#### 25. What could OSU have done to better serve you?

Increase the screening evaluations for the professors they hire.

I was very happy with my time at OSU.

Professors that instruct out of passion for teaching rather than fulfilling a requirement to continue they research. EE/CE facilities were not up to par compared to other schools of similar size.

#### 26. What additional information would you like OSU to know?

Keep showing why OSU is America's Brightest Orange.

Nothing.



## Program-Specific Questions – ENG

	<u>20</u>	<u>015</u>	<u>20</u>	<u>019</u>
ENG1. How well did your OSU education prepare you engineering problems by applying principles of engine				ex
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very well	1	33.3	1	50.0
Well	2	66.7	0	0.0
Adequately	0	0.0	1	50.0
Poorly	0	0.0	0	0.0
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0

	<u>2</u> (	<u>015</u>	<u>20</u>	<u>)19</u>
ENG2. How well did your OSU education prepare yo that meet specified needs with consideration of publi cultural, social, environmental, and economic factors	c health, sa			
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very well	1	33.3	1	50.0
Well	2	66.7	0	0.0
Adequately	0	0.0	0	0.0
Poorly	0	0.0	1	50.0
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0

	<u>2015</u>		<u>2</u> (	01 <u>9</u>
ENG3. How well did your OSU education prepare you t audiences?	o commun	icate effectively	y with a rang	e of
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very well	1	33.3	0	0.0
Well	0	0.0	1	50.0
Adequately	1	33.3	0	0.0
Poorly	0	0.0	1	50.0
Not at all	0	0.0	0	0.0
Not applicable to my activities	1	33.3	0	0.0



<u>20</u>	<u>015</u>	<u>20</u>	<u>)19</u>
formed judg	gments conside	ring the impa	ct of
<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
0	0.0	1	50.0
2	66.7	0	0.0
1	33.3	0	0.0
0	0.0	1	50.0
0	0.0	0	0.0
0	0.0	0	0.0
	formed judg	formed judgments conside ental, and societal contexts <u>n</u> <u>%</u> 0 0.0 2 66.7 1 33.3 0 0.0	1 33.3 0 0 0.0 1

	<u>2015</u>		<u>20</u>	<u>)19</u>
ENG5. How well did your OSU education prepare you together provide leadership, create a collaborative an and meet objectives?				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very well	2	66.7	1	50.0
Well	0	0.0	0	0.0
Adequately	1	33.3	0	0.0
Poorly	0	0.0	1	50.0
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0

	<u>2015</u>		<u>20</u>	<u>2019</u>	
ENG6. How well did your OSU education prepare experimentation, analyze and interpret data, and u				ons?	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>	
Very well	0	0.0	1	50.0	
Well	3	100.0	0	0.0	
Adequately	0	0.0	1	50.0	
Poorly	0	0.0	0	0.0	
Not at all	0	0.0	0	0.0	
Not applicable to my activities	0	0.0	0	0.0	



	<u>2015</u>		<u>20</u>	<u>19</u>
ENG7. How well did your OSU education prepare y using appropriate learning strategies?	ou to acquir	e and apply new	/ knowledge as	needed,
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very well	2	66.7	1	50.0
Well	1	33.3	0	0.0
Adequately	0	0.0	1	50.0
Poorly	0	0.0	0	0.0
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0
Not applicable to my douvlide	·			

	<u>20</u>	015	<u>20</u>	<u>019</u>		
ENG8. Which OSU courses have been of greatest value	n of greatest value to you in your current position?					
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>		
Computer Science	1	50.0	1	50.0		
Data Structures	1	50.0	1	50.0		

#### ENG8. Which OSU courses have been of greatest value to you in your current position?

My first capstone project. Not so much the second.

Senior Design.

Mobile Application Development, Computer Architecture, Algorithms, Operating Systems.

ENG9. All CEAT Engineering programs are trying to continuously improve. Do you have any suggestions or comments that might contribute?

Do not only offer 1 class for either Spring or Summer, perhaps try to cover both semesters to minimize the extended duration of the students enrollment period.

My second capstone course felt poorly prepared and matched to me and my fellow classmates. Essentially, we were given an extremely complex machine learning problem despite none of us having any applicable experience. Data science and ML is \*not\* something you can just pick up on in one project. There should have been alternative options available to us for projects and the staff should have been more aware of our background and abilities in that area.

Move the computer science department to CEAT. It would benefit the CE and CS students with the funding.

