



America's Brightest **ORANGE**

## Oklahoma State University

### University Assessment and Testing

2021 OSU Alumni Survey

Survey Report – Civil 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](mailto: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 – Civil Engineering

	OSU Degree Received:		
	<u>2015</u>	<u>2019</u>	<u>Total</u>
Number of graduates ( <i>n</i> )	37	56	93
Number of survey respondents ( <i>n</i> )	10	13	23
Response rate	27.0	23.2	24.7

1. Since graduating from OSU, how would you describe your activity? (This item was "mark all that apply")	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Not engaged in paid employment, nor enrolled in graduate or professional school	0	0.0	1	7.7
Enrolled in graduate or professional school	0	0.0	4	30.8
Employed full-time or part-time	10	100.0	7	53.8
Both employed (other than graduate assistant) and continuing my education	0	0.0	1	7.7
Self-employed	0	0.0	0	0.0

2. Whether or not you are currently employed, in what area is your principal occupation?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Engineering	10	100.0	12	100.0
Computer Science, Programming or Technology	0	0.0	0	0.0
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.

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
3. What graduate or professional degree are you pursuing or, if you completed a degree, what degree did you complete? (This item was "mark all that apply")				
Graduate Certificate	0	0.0	0	0.0
Master's	0	0.0	5	100.0
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

	2015	2019
	4. What was the name of your graduate or professional school?	
Oklahoma State University	0	3
Purdue University	0	1

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
5. How well did your OSU program prepare you for graduate or professional education program?				
Very well	0	0.0	3	60.0
Adequately	0	0.0	2	40.0
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

6. How connected do you feel to OSU?	2015		2019	
	<i>N</i>	%	<i>n</i>	%
Very connected	1	11.1	1	9.1
Moderately connected	0	0.0	4	36.4
Somewhat connected	7	77.8	3	27.3
Not very connected	1	11.1	3	27.3

7. Are you regularly in touch with people you met at OSU? (This item was "mark all that apply")	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Yes, with my advisor(s)	1	10.0	1	6.7
Yes, with professors or staff	1	10.0	2	13.3
Yes, with members of my team, club, or sorority/fraternity	2	20.0	2	13.3
Yes, with classmates/friends I met at OSU	6	60.0	10	66.7
No	0	0.0	0	0.0

8. How much has your overall quality of life been enhanced by your Oklahoma State University experience?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Much	6	66.7	5	45.5
Somewhat	3	33.3	6	54.5
Little	0	0.0	0	0.0
None	0	0.0	0	0.0

9. In the past twelve months, how often have you participated in unpaid volunteer work?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
More than once a week	0	0.0	0	0.0
About once a week	1	11.1	1	8.3
About once a month	2	22.2	1	8.3
Every few months	0	0.0	2	16.7
Once or twice in the past year	1	11.1	3	25.0
Not at all	5	55.6	5	41.7



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

10a. Making ethical and thoughtful decisions	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	0	0.0	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	3	37.5	5	45.5
Increase somewhat	3	37.5	3	27.3
Increase a great deal	1	12.5	2	18.2
I don't know	1	12.5	1	9.1

10b. Exploring alternative values, perspectives, and beliefs from around the world	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	0	0.0	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	2	25.0	5	45.5
Increase somewhat	2	25.0	3	27.3
Increase a great deal	3	37.5	1	9.1
I don't know	1	12.5	2	18.2

10c. Improving written and oral communication skills	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	0	0.0	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	2	25.0	2	18.2
Increase somewhat	1	12.5	5	45.5
Increase a great deal	4	50.0	3	27.3
I don't know	1	12.5	1	9.1



10d. Improving ability to think critically (analytically and logically)	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	0	0.0	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	2	25.0	2	22.2
Increase somewhat	2	25.0	2	22.2
Increase a great deal	3	37.5	5	55.6
I don't know	1	12.5	0	0.0

10e. Ability to interact positively with people who are different from you	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	0	0.0	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	1	12.5	6	54.5
Increase somewhat	2	25.0	1	9.1
Increase a great deal	4	50.0	3	27.3
I don't know	1	12.5	1	9.1

10f. Developing good health habits and physical fitness	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	0	0.0	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	3	37.5	2	18.2
Increase somewhat	1	12.5	6	54.5
Increase a great deal	3	37.5	2	18.2
I don't know	1	12.5	1	9.1



## Academic Satisfaction

11. Please rate your degree of satisfaction with each of the following items:

11a. The quality of teaching at OSU	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	1	12.5	5	50.0
Satisfied	6	75.0	2	20.0
Neutral	0	0.0	3	30.0
Dissatisfied	1	12.5	0	0.0
Very Dissatisfied	0	0.0	0	0.0
Not applicable	0	0.0	0	0.0

11b. Availability of courses needed for your degree program	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	1	12.5	5	45.5
Satisfied	6	75.0	4	36.4
Neutral	1	12.5	1	9.1
Dissatisfied	0	0.0	1	9.1
Very Dissatisfied	0	0.0	0	0.0
Not applicable	0	0.0	0	0.0

11c. OSU academic facilities (e.g. classrooms, labs, buildings, etc.)	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	0	0.0	5	45.5
Satisfied	6	75.0	4	36.4
Neutral	1	12.5	1	9.1
Dissatisfied	1	12.5	1	9.1
Very Dissatisfied	0	0.0	0	0.0
Not applicable	0	0.0	0	0.0



11d. OSU academic advising	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	1	12.5	1	9.1
Satisfied	1	12.5	5	45.5
Neutral	4	50.0	2	18.2
Dissatisfied	2	25.0	1	9.1
Very Dissatisfied	0	0.0	2	18.2
Not applicable	0	0.0	0	0.0

11e. Preparation to handle non-career related goals (e.g. family, finances, etc.)	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	0	0.0	1	9.1
Satisfied	1	12.5	1	9.1
Neutral	3	37.5	2	18.2
Dissatisfied	2	25.0	4	36.4
Very Dissatisfied	2	25.0	3	27.3
Not applicable	0	0.0	0	0.0

11f. Availability of internship/practicum experiences	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	2	25.0	2	18.2
Satisfied	1	12.5	5	45.5
Neutral	2	25.0	2	18.2
Dissatisfied	3	37.5	2	18.2
Very Dissatisfied	0	0.0	0	0.0
Not applicable	0	0.0	0	0.0

11g. Overall education at OSU	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	2	25.0	5	45.5
Satisfied	5	62.5	4	36.4
Neutral	0	0.0	2	18.2
Dissatisfied	1	12.5	0	0.0
Very Dissatisfied	0	0.0	0	0.0
Not applicable	0	0.0	0	0.0





	2015		2019	
	<i>n</i>	%	<i>n</i>	%
<b>12. If you could start over, would you still choose to attend Oklahoma State University?</b>				
Definitely yes	5	55.6	6	54.5
Probably yes	2	22.2	2	18.2
Uncertain	1	11.1	2	18.2
Probably no	1	11.1	1	9.1
Definitely no	0	0.0	0	0.0

### Career Reflection

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

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
<b>13. How closely is your job related to your field of study?</b>				
Not related	8	88.9	6	85.7
Somewhat related	1	11.1	1	14.3
Directly related	0	0.0	0	0.0

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
<b>14. How well did OSU prepare you for meaningful employment?</b>				
Very well	1	11.1	2	28.6
Adequately	7	77.8	3	42.9
Not very well	1	11.1	1	14.3
Not at all	0	0.0	1	14.3
Prefer not to answer	0	0.0	0	0.0

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
<b>15. Overall, how satisfied are you with your career?</b>				
Very Satisfied	6	66.7	2	28.6
Satisfied	2	22.2	5	71.4
Neutral	0	0.0	0	0.0
Dissatisfied	1	11.1	0	0.0
Very Dissatisfied	0	0.0	0	0.0



### Current Job or Career

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
16. Are you employed full-time (on average 30 hours or more per week) or part-time (on average less than 30 hours per week)?				
Full-time	9	100.0	7	100.0
Part-time	0	0.0	0	0.0

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
17. How long did it take to find your first employment after graduating from OSU?				
Employed by graduation	6	66.7	7	100.0
3 months after graduation	2	22.2	0	0.0
76 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	1	11.1	0	0.0

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
18. What is your official job title?				
Civil Engineer	2		0	
Construction Inspector	0		1	
Cost Engineer	0		1	
EI	0		1	
Engineer Intern	0		1	
Engineering Intern	0		1	
Planning & Engineering Supervision	1		0	
Project Engineer	1		1	
Project Engineer / Hydrologist	1		0	
Project Manager and Professional Civil Engineer (P.E.)	1		0	
Resident Engineer	1		0	
Staff Engineer	1		0	



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

	2015	2019
American Electric Power	1	0
Crafton Tull.	0	1
Engineering Services, Inc.	1	0
ExxonMobil.	0	1
Kimley – Horn and Associates	2	0
Missouri Department of Transportation.	0	1
Oklahoma Department of Transportation	1	0
Peloton Land Solutions, Inc.	1	0
Stoney Miller Consultants.	1	0
Tanner Consulting.	0	1
Tulsa Engineering & Planning Assoc.	1	0
Weber L.L.C.	0	1

20. Which of the following best describes your employer?

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
A corporation, partnership, or private business	8	88.9	5	71.4
Military	0	0.0	0	0.0
Other governmental entity	1	11.1	2	28.6
Charity or other nonprofit entity	0	0.0	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

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



21. Does your job require: (This item was "mark all that apply")	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Technology skills	8	12.3	6	12.2
Conducting research	2	3.1	2	4.1
Extensive training	3	4.6	3	6.1
Math skills	9	13.8	6	12.2
Problem solving/analytic reasoning	9	13.8	7	14.3
Speaking to a group	6	9.2	4	8.2
Use of specialized machinery	2	3.1	3	6.1
Use of specialized software	9	13.8	5	10.2
Working with a diverse group of people	8	12.3	7	14.3
Writing reports, memos, papers, publications, etc.	9	13.8	6	12.2

22. What is your approximate total annual salary (including bonuses), before taxes?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Less than \$15,000	0	0.0	0	0.0
\$15,000 but less than \$25,000	0	0.0	0	0.0
\$25,000 but less than \$35,000	0	0.0	0	0.0
\$35,000 but less than \$45,000	0	0.0	0	0.0
\$45,000 but less than \$55,000	0	0.0	2	28.6
\$55,000 but less than \$65,000	1	11.1	2	28.6
\$65,000 but less than \$75,000	1	11.1	2	28.6
\$75,000 but less than \$100,000	3	33.3	0	0.0
\$100,000 but less than \$125,000	1	11.1	1	14.3
\$125,000 but less than \$150,000	2	22.2	0	0.0
Over \$150,000	0	0.0	0	0.0
Prefer not to answer	1	11.1	0	0.0



## Demographics

23. Which OSU campus do you most identify with?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Stillwater	8	88.9	11	100.0
Tulsa	0	0.0	0	0.0
Equally Stillwater or Tulsa	1	11.1	0	0.0
Online	0	0.0	0	0.0

24. In which country do you currently reside?	2015		2019	
	Kuwait	0		1
United States of America	7		7	

24a. In which state do you currently reside?	2015		2019	
	AR	1		0
IN	0		1	
OK*	4		4	
OK-OKC	0		0	
OK-STW	0		1	
OK-TUL	0		0	
TX	2		1	

\*2 respondents did not provide a valid Oklahoma zip code and were therefore added to the general Oklahoma count.



## Overall

25. What could OSU have done to better serve you?
Civil Engineers need AutoCAD Civil3D experience, because that is likely what they will be using day to day.
Everyone should be required to take a couple business courses. No matter what, certain aspects of business will be part of your career.
Gear classes toward industry
I loved my time at OSU! Since leaving, I wish I was more connected with other engineering Alumni (something as simple as a newsletter would be nice to receive).
I t could have offered better Professors and staff that were available and supportive . Professors that were encouraging and willing to put in the effort to see a student succeed instead of quickly writing them of to fail a class when the student was really wanting to learn the curriculum and pass a class .
Increase diversity awareness trainings and not just do computer based activities but actual classes. Likewise, a teaching on finances to all freshmen students would be beneficial for their life after college.
Providing more training and classes that were applicable to the real world, such as AutoCAD, Land Development, Construction Plans, etc. Place more emphasis on these skills and have some of them required instead of some of the theoretical classes.

26. What additional information would you like OSU to know?
Great school with great opportunities. I love it and would definitely choose it all over again if I had to. #GoPokes !
Have more professors who have had a career outside of academics.
I am very thankful for my time at OSU! I am setup well for my career and my family because married one of my classmates and am loving my career as an engineer!
Some student do want to learn and want to be successful adults with a career later in life . Some student are giving it their all and are willing to go the extra mile if it means they have a chance to pass a class and learn the content of the class.



### Program-Specific Questions – ENG

	<u>2015</u>		<u>2019</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
<b>ENG1. How well did your OSU education prepare you to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics?</b>				
Very well	1	11.1	4	44.4
Well	5	55.6	3	33.3
Adequately	3	33.3	1	11.1
Poorly	0	0.0	1	11.1
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0

	<u>2015</u>		<u>2019</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
<b>ENG2. How well did your OSU education prepare you to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors?</b>				
Very well	2	22.2	2	22.2
Well	3	33.3	3	33.3
Adequately	4	44.4	3	33.3
Poorly	0	0.0	1	11.1
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0

	<u>2015</u>		<u>2019</u>	
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
<b>ENG3. How well did your OSU education prepare you to communicate effectively with a range of audiences?</b>				
Very well	2	22.2	3	33.3
Well	2	22.2	2	22.2
Adequately	5	55.6	3	33.3
Poorly	0	0.0	1	11.1
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0



	<u>2015</u>		<u>2019</u>	
<b>ENG4. How well did your OSU education prepare you to recognize ethical and professional responsibilities in engineering situations and make informed judgments considering the impact of engineering solutions in global, economic, environmental, and societal contexts?</b>				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very well	2	22.2	3	33.3
Well	3	33.3	4	44.4
Adequately	4	44.4	1	11.1
Poorly	0	0.0	1	11.1
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0

	<u>2015</u>		<u>2019</u>	
<b>ENG5. How well did your OSU education prepare you to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives?</b>				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very well	4	44.4	3	33.3
Well	4	44.4	4	44.4
Adequately	1	11.1	2	22.2
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>2019</u>	
<b>ENG6. How well did your OSU education prepare you to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions?</b>				
	<u>n</u>	<u>%</u>	<u>n</u>	<u>%</u>
Very well	2	22.2	3	33.3
Well	2	22.2	1	11.1
Adequately	5	55.6	5	55.6
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





ENG7. How well did your OSU education prepare you to acquire and apply new knowledge as needed, using appropriate learning strategies?	2015		2019	
	n	%	n	%
Very well	1	11.1	2	22.2
Well	5	55.6	5	55.6
Adequately	3	33.3	1	11.1
Poorly	0	0.0	1	11.1
Not at all	0	0.0	0	0.0
Not applicable to my activities	0	0.0	0	0.0

ENG8. Which OSU courses have been of greatest value to you in your current position?	2015		2019	
	n	%	n	%
Environmental Sciences	2	15.4	0	0.0
Fluids	0	0.0	2	18.2
Hydraulics	5	38.5	4	36.4
Hydrology	4	30.8	3	27.3
Project Management	1	7.7	1	9.1
Steel Design	1	7.7	1	9.1

ENG8. Which OSU courses have been of greatest value to you in your current position?
Advanced soil mechanics.
Public Health Environment.
Geometric Design of Highways, Strengths of Material, Technical Writing.
Statics, Reinforced Concrete Design.
My study abroad course.
Engineering Economics.
Reinforced Concrete Design. Advanced Reinforced Concrete Design. Structural Analysis. Advances Structural Analysis.

ENG9. All CEAT Engineering programs are trying to continuously improve. Do you have any suggestions or comments that might contribute?
Always strive to have the best professors. If a professor is not working out, get rid of them.
I wish some of the senior CIVE classes were better taught. CIVE Transportation, CIVE Geotech, and CIVE Material Science are classes I use every day in my job, but wish I learned more about in school.
Involve more professor who've had nonacademic backgrounds.
Offer an AutoCad Civil3D specific course.
Talk about diversity in normal classes, not just the one in the Diversity category.



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

Yes, the hydrology classes should incorporate learning HEC-HMS and HEC-RAS or have a computer class that goes over these softwares. Everyone in the industry uses these FREE programs from the Army Corps of Engineers and I had to teach myself. It would have been great to get familiar with that program before starting my career.

Teachers that create problems that cannot be found on the internet were the best ones. Their classes required us to truly think and problem solve. I think that is what most prepared me for my career as an engineer.

The content of the curriculum was good however; there are some professors that want to fail 80% of a class instead of teaching better and explaining the content. Having a hard class is not determined by how many students fail its determined by the material taught. Failing a large portion of a class just shows you are a poor instructor. Definitely not saying pass everyone but teach the material and test on what is taught not what you think you have taught. Failing one class can set a student back a whole year and professors need to understand they work for the students paying tuition.

