



America's Brightest **ORANGE**

## Oklahoma State University

### University Assessment and Testing

2021 OSU Alumni Survey

Survey Report – Computer Science

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 up to 26 institutional level items. Institutional level items were given to all OSU alumni and the items consisted of six topics: continuing education, well-being and community, demographic information, academic satisfaction, career reflection, and current job or career information.

#### Target Population / Response Rate – Computer Science

	OSU Degree Received:		
	<u>2015</u>	<u>2019</u>	<u>Total</u>
Number of graduates ( <i>n</i> )	34	44	78
Number of survey respondents ( <i>n</i> )	11	15	26
Response rate	32.4	34.1	33.3

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	6.3
Enrolled in graduate or professional school	0	0.0	2	12.5
Employed full-time or part-time	11	100.0	12	75.0
Both employed (other than graduate assistant) and continuing my education	0	0.0	0	0.0
Self-employed	0	0.0	1	6.3

2. Whether or not you are currently employed, in what area is your principal occupation?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Engineering	0	0.0	1	6.7
Computer Science, Programming or Technology	10	90.9	13	86.7
Science, Social Science, or Mathematics	0	0.0	0	0.0
Health or Mental Health	1	9.1	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	1	6.7
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	2	66.7
Doctoral	0	0.0	1	33.3
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?			
Penn Engineering	0		1	
University of Oklahoma	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	0	0.0
Adequately	0	0.0	2	100.0
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	9.1	3	21.4
Moderately connected	1	9.1	1	7.1
Somewhat connected	3	27.3	4	28.6
Not very connected	6	54.5	6	42.9

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)	0	0.0	0	0.0
Yes, with professors or staff	0	0.0	1	5.6
Yes, with members of my team, club, or sorority/fraternity	0	0.0	3	16.7
Yes, with classmates/friends I met at OSU	6	54.5	10	55.6
No	5	45.5	4	22.2

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	3	27.3	2	14.3
Somewhat	5	45.5	5	35.7
Little	3	27.3	5	35.7
None	0	0.0	2	14.3

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	0	0.0	0	0.0
About once a month	0	0.0	1	7.1
Every few months	0	0.0	3	21.4
Once or twice in the past year	4	36.4	2	14.3
Not at all	7	63.6	8	57.1



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	1	9.1	1	7.7
Reduce somewhat	0	0.0	0	0.0
Keep about the same	3	27.3	5	38.5
Increase somewhat	3	27.3	2	15.4
Increase a great deal	2	18.2	4	30.8
I don't know	2	18.2	1	7.7

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	1	7.1
Reduce somewhat	1	9.1	1	7.1
Keep about the same	3	27.3	4	28.6
Increase somewhat	3	27.3	4	28.6
Increase a great deal	1	9.1	3	21.4
I don't know	3	27.3	1	7.1

10c. Improving written and oral communication skills	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	1	9.1	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	6	54.5	7	50.0
Increase somewhat	2	18.2	3	21.4
Increase a great deal	2	18.2	3	21.4
I don't know	0	0.0	1	7.1



10d. Improving ability to think critically (analytically and logically)	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	1	8.3	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	6	50.0	2	14.3
Increase somewhat	1	8.3	3	21.4
Increase a great deal	3	25.0	9	64.3
I don't know	1	8.3	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	1	7.1
Reduce somewhat	0	0.0	0	0.0
Keep about the same	6	54.5	5	35.7
Increase somewhat	3	27.3	2	14.3
Increase a great deal	2	18.2	4	28.6
I don't know	0	0.0	2	14.3

10f. Developing good health habits and physical fitness	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Reduce a great deal	1	9.1	0	0.0
Reduce somewhat	0	0.0	0	0.0
Keep about the same	4	36.4	2	14.3
Increase somewhat	2	18.2	4	28.6
Increase a great deal	3	27.3	6	42.9
I don't know	1	9.1	2	14.3



## 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	0	0.0	0	0.0
Satisfied	2	20.0	4	28.6
Neutral	3	30.0	4	28.6
Dissatisfied	2	20.0	3	21.4
Very Dissatisfied	3	30.0	3	21.4
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	10.0	0	0.0
Satisfied	3	30.0	9	64.3
Neutral	5	50.0	1	7.1
Dissatisfied	1	10.0	1	7.1
Very Dissatisfied	0	0.0	3	21.4
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	1	7.1
Satisfied	9	90.0	5	35.7
Neutral	0	0.0	3	21.4
Dissatisfied	1	10.0	3	21.4
Very Dissatisfied	0	0.0	2	14.3
Not applicable	0	0.0	0	0.0



11d. OSU academic advising	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	1	10.0	4	28.6
Satisfied	2	20.0	6	42.9
Neutral	5	50.0	2	14.3
Dissatisfied	0	0.0	1	7.1
Very Dissatisfied	2	20.0	1	7.1
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	0	0.0
Satisfied	0	0.0	2	15.4
Neutral	4	40.0	5	38.5
Dissatisfied	3	30.0	4	30.8
Very Dissatisfied	1	10.0	0	0.0
Not applicable	2	20.0	2	15.4

11f. Availability of internship/practicum experiences	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	1	10.0	0	0.0
Satisfied	2	20.0	5	35.7
Neutral	3	30.0	4	28.6
Dissatisfied	0	0.0	2	14.3
Very Dissatisfied	3	30.0	2	14.3
Not applicable	1	10.0	1	7.1

11g. Overall education at OSU	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	1	10.0	0	0.0
Satisfied	2	20.0	7	50.0
Neutral	4	40.0	2	14.3
Dissatisfied	2	20.0	3	21.4
Very Dissatisfied	1	10.0	2	14.3
Not applicable	0	0.0	0	0.0





12. If you could start over, would you still choose to attend Oklahoma State University?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Definitely yes	3	30.0	2	14.3
Probably yes	2	20.0	4	28.6
Uncertain	2	20.0	0	0.0
Probably no	1	10.0	6	42.9
Definitely no	2	20.0	2	14.3

### Career Reflection

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

13. How closely is your job related to your field of study?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Not related	1	10.0	0	0.0
Somewhat related	1	10.0	3	30.0
Directly related	8	80.0	7	70.0

14. How well did OSU prepare you for meaningful employment?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very well	2	20.0	0	0.0
Adequately	1	10.0	4	40.0
Not very well	4	40.0	5	50.0
Not at all	2	20.0	1	10.0
Prefer not to answer	1	10.0	0	0.0

15. Overall, how satisfied are you with your career?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Very Satisfied	5	50.0	5	50.0
Satisfied	4	40.0	5	50.0
Neutral	1	10.0	0	0.0
Dissatisfied	0	0.0	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	10	100.0	10	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	5	50.0	7	70.0
3 months after graduation	1	10.0	1	10.0
6 months after graduation	2	20.0	1	10.0
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	2	20.0	1	10.0

	2015		2019	
	<i>n</i>	%	<i>n</i>	%
18. What is your official job title?				
Database Administrator	0		1	
Deployment Engineer	0		1	
E-3, Airman First Class	0		1	
Full Stack Developer	1		0	
IT Analyst II	0		1	
IT Manager	1		0	
Senior Software Engineer	1		0	
Software Developer	5		1	
Software Engineer	1		3	
Systems Integrator	0		1	
Web and Mobile Developer	0		1	



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

	2015	2019
Casino Cash Trac	0	1
Enovation Controls	0	1
Kintetsu Global IT	1	0
Midwest Precision, Inc	1	0
Oklahoma State Alumni Association	0	1
ONE Gas	0	1
Paycom	1	1
Pioneer Telephone	0	1
Power Costs, Inc.	1	0
Spherexx.com	1	0
Tibco	1	0
Trevipay	1	0
Trimble Incorporated	1	0
United States Air Force	0	1
USAA	1	0
Walmart Global Tech	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	9	90.0	6	60.0
Military	0	0.0	1	10.0
Other governmental entity	0	0.0	0	0.0
Charity or other nonprofit entity	0	0.0	1	10.0
Educational institution	0	0.0	0	0.0
Other	1	10.0	1	10.0
Prefer not to answer	0	0.0	1	10.0

<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	9	17.0	10	15.4
Conducting research	3	5.7	5	7.7
Extensive training	1	1.9	6	9.2
Math skills	4	7.5	5	7.7
Problem solving/analytic reasoning	9	17.0	10	15.4
Speaking to a group	6	11.3	7	10.8
Use of specialized machinery	0	0.0	1	1.5
Use of specialized software	9	17.0	9	13.8
Working with a diverse group of people	7	13.2	7	10.8
Writing reports, memos, papers, publications, etc.	5	9.4	5	7.7

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	1	10.0	1	10.0
\$45,000 but less than \$55,000	0	0.0	2	20.0
\$55,000 but less than \$65,000	0	0.0	3	30.0
\$65,000 but less than \$75,000	1	10.0	3	30.0
\$75,000 but less than \$100,000	3	30.0	0	0.0
\$100,000 but less than \$125,000	2	20.0	1	10.0
\$125,000 but less than \$150,000	0	0.0	0	0.0
Over \$150,000	0	0.0	0	0.0
Prefer not to answer	3	30.0	0	0.0



## Demographics

23. Which OSU campus do you most identify with?	2015		2019	
	<i>n</i>	%	<i>n</i>	%
Stillwater	6	60.0	11	84.6
Tulsa	4	40.0	2	15.4
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?	2015	2019
	United States of America	9

24a. In which state do you currently reside?	2015	2019
	DC	1
MO	1	0
OK*	3	5
OK-OKC	0	2
OK-STW	0	2
OK-TUL	1	1
PA	0	1
TX	2	0
UT	1	0

\*4 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?
1) Get ABET 2) not lose the CS advisor my second year to replace her with a math advisor(The new advisor is great but she was unprepared at the time) 3) build a new CS building. The current one is abysmal 4) Make XXXXX department head 5)Replace the CS professors with no CS knowledge. Why on earth do you let someone with a Degree in industrial engineering and no CS experience 6) side note, fire racist people working at the university. Ie XXXXX wearing an OAN shirt, or XXXXX saying that All Lives matter and that its immigrants fault they don't socialize with other groups, or literally anything XXXXX says sexist every lecture
An accredited degree program for Computer Science. I feel the program did not properly prepare me for any sort of professional career in IT, and caused me to feel disappointed overall in my experience.
Ensure that the various departments maintain their accreditation status. Provide more "hands-on" and "applied" electives in the Computer Science department.
Have higher standards for computer science professors and students.
Hired competent computer science teachers Had a software development focus Had an ABET accreditation
I came in with developer experience. I had previously created services and made up to 50-60k in a 1 year period. I may have been someone dense to the goals of college, but if I had understood early on that Computer Science is progressing to the point to where researchers are claiming that AGI will be a reality in 10-20 years, I probably would have been more interested in that dream. (see: URL, or URL) And, it's not just that (if you're not a part of the researchers who think this will happen in you're lifetime), I just wish I had known early on how important some classes are to Computer Science and the possibility of research later. I was one of those students who assumed I knew more than I did, and questioned the expertise of the different professors I had at the beginning of my degree. Though, last year, I remember seeing a video from Bjarne Stroustrup (creator of C++) who said students often "are absolutely convinced they are smarter than I am." (URL) So, maybe, I'm not the only one who felt this way. I don't know how to fix that. Though, I do recommend watching that video. On classes: I often was unable to choose classes. In elective classes, I often had to take what was available. (even if I was uninterested in the class)
I was a transfer student from NOC so I didn't get those first 2 years at OSU, but overall I felt I was given plenty of opportunities to engage in classes, clubs, and activities.
Let XXXXX go. URL URL
Listened to years of feedback on the program and professors. Treat Computer Science as more of an engineering degree than an art and science degree, as it should be. I would HEAVILY suggest moving it away from Arts and Sciences and into Engineering college. Focus a little less on the theory, or offer more classes with practical knowledge in them. Verify professors are covering their course contents, not just skipping when behind. Also verify students are leaving with the knowledge they are supposed to, not just learning how to pass the homework/exams. The exams for the most part were usually extremely challenging, just not relevant to the main points of the classes or with practical knowledge. Be more agile on class electives. For example: Discrete Mathematics, Engineering Statistics, and Numerical Methods all required Calculus as a prerequisite, but would not be counted towards a math minor. Asking students from other schools, they were all able to count it towards a math minor.
More funding to computer science department.
Most of the CS department cared more about their research than teaching. Hardly any of the courses actually covered material that I use on a day to day basis. I also encountered a lot of sexism in the Computer Science department and even had professors assume I was in the wrong class.
OSU needs a better reputation. IE improved certifications in Mathematic and CS education. This would provide clout to my degrees.
OSU's Computer programming courses were ok but everything is so theory based. We need more hands on courses like CS2. We need more applied programing and/or projects that help us utilize what we are learning about. Proofs and Theory didn't help me get my job. The practical applications of how I used programming to solve daily problems and quicken tasks I was assigned is what got me my job.
Paid for proper CS professors that help the students learn and excel as opposed to the jerks that only would graduate 1/4 of the class to "prove a point"



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

The teachers were horrible. Only interested in being published. Subject material was dated and useless in any real modern job. Typical curves in most classes were 40 points. Very dissatisfied with the whole experience.

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

Alumni events

Get updated materials and teachers that are actually interested in more than furthering their own publishing.

I enjoyed the friendships I made. I liked my advisor. But overall, I did not learn anything relevant toward my degree. Luckily for me, I had internship experience that allowed me to find a job more easily. But I keep up with 5 or so members of my classes, and we all have similar experiences.

I love OSU but I left the Computer Science program feeling like I had a lot of knowledge and no understanding of how to truly apply it to help me and others.

It would have been more beneficial to my career (and others) had Software Engineering been under the engineering department rather than siloed under computer science.

My choice to attend a different University has some components: -Finding out information about ABET accreditation of the program in one of my classes (URL) -Changing life goals that would have contributed me to attending a University that offered more courses and opportunities related to research. My not fully positive remarks on advisor has comments: -I had like at least 3 or 4 different advisors. The last one I had was extremely good, but I was tossed between advisors and didn't really understand why I had one. Also: -I had an extremely good math professor in one of my classes that really changed my outlook on math near the end up degree. -I had extremely bad issues with mental health. The Universities resources with this were very good. My situation is just bizarre and has made it extremely complicated to determine a good path towards anything. (extreme isolation in relationships, parents dead or prison, dependency on bad relationships, weird complicated past work experience, unbelievable changes in personality, roommate dying, mental health bad enough to be hospitalized) I'm doing better now. I've made some new services online. Though, I am very confused about how to work towards the goals I want beyond self study. I'm glad I did attend OSU.

OSU did not teach me how to be a great software engineer/computer scientist. A lot of the classes just pushed people forward and others just failed a lot of people. Higher emphasis on coding proficiency and the need for a MUCH better data structures class.

Some professors were not clearly understandable due to a heavy accent. This combined with a difficult subject is extremely stressful

Specifically at the Tulsa location, CS professors were very overworked and taught way too many classes each semester, causing the quality of education in these classes to suffer.

the computer science program is very disappointing. I went to OSU because of financial reasons if not for that reason I would never have picked OSU knowing what I know about the computer science dept.

The individuals in the math department were absolutely amazing. I met some of the nicest people at OSU as well. I chose the university because it lived up to the values it advertised.

