

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates

Results for Computer Science CoE (CS-CoE)

Produced by
The Office of Student Affairs
University of Michigan, College of Engineering
Tuesday, July 14, 2020

Purpose and Approach

Each year, the College of Engineering (CoE) conducts a Senior Survey of degree applicants in our undergraduate programs. The Office of Student Affairs distributes, collects, and processes the surveys on behalf of the undergraduate programs. The survey's purpose is to provide departments with assessment data from recent graduates. When combined with other types of assessment data, results from the annual senior survey can help departments identify strengths in their undergraduate programs and opportunities for improvement.

Methods

Identifying Recipients

Queries into U-M's online system for submission of degree applications identified CoE and Computer Science in Literature, Sciences, and Arts degree applications. Each semester, a query identified the degree applicants for the current term, which became the list of survey recipients for the semester. Each degree applicant's official U-M email address was compiled into the address list.

Distribution and Collection

The Office of Student Affairs sent email invitations to every CoE degree applicant about four to six weeks before the end of the semester. An email reminder was sent once, a week before closing the survey. As an incentive to complete the survey, respondents who completed the survey were entered in a drawing to win several \$500 gift cards to U-M Computer Showcase. Response rates by survey year are in the graph on the next page.

Analysis

Analysis has been completed only for fixed-response items. Fixed-response items are questions on which respondents were forced to choose from fixed, existing alternatives similar to a multiple-choice test.

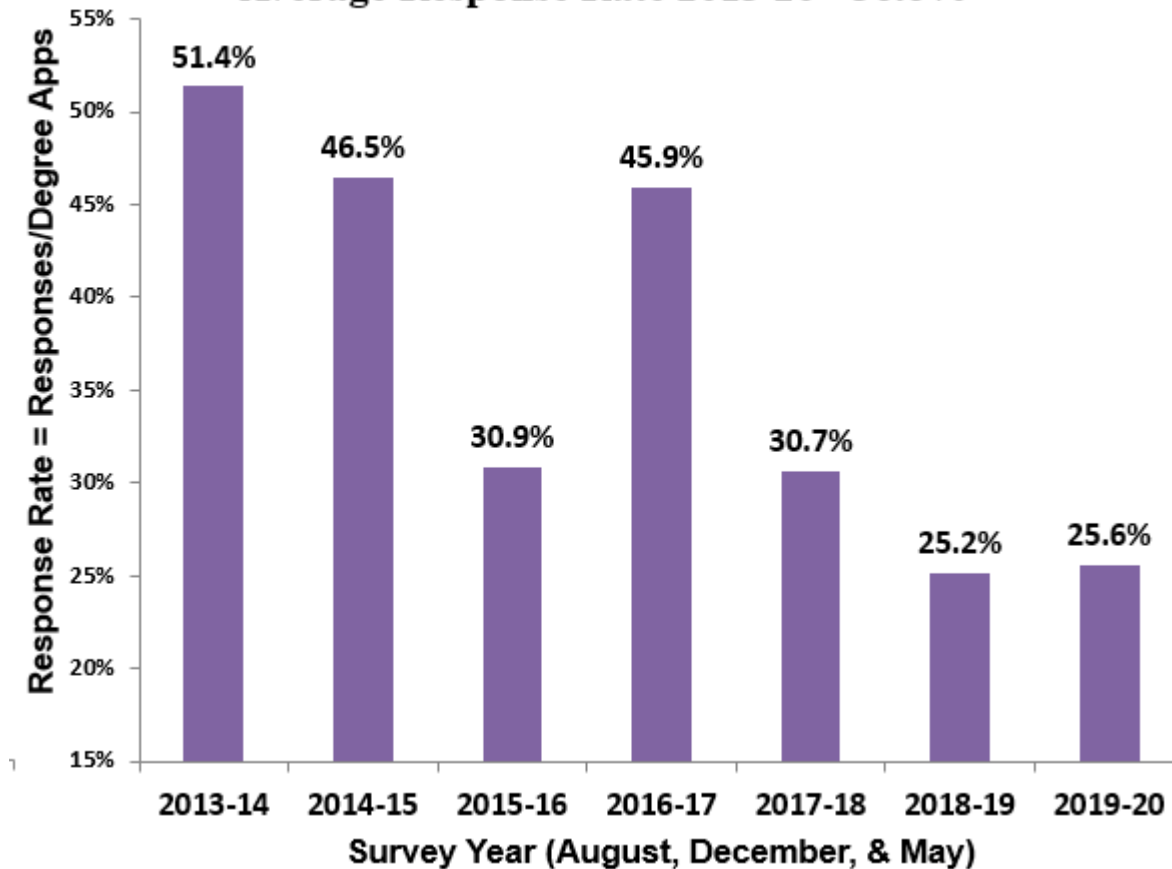
Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

Analysis (continued)

Free-response items are questions that allow the recipient to compose their own response, similar to a short-answer test. To allow each reader of this report to interpret degree applicants' comments for themselves, comments are listed in the reports in alphabetical order by question. The comments are verbatim, with the exception of replacing the names of individuals with dashes (e.g., "Dr. John Smith" is listed as "Dr. ---- ----"). Comments are listed in the reports for specific programs, but not in the report for the College of Engineering Overall.

**Senior Survey Response Rates
by Survey Year (CoE Overall)**
Average Response Rate 2013-20= 36.6%



Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

Results

Responses from degree applications in the semester(s) and program(s) listed above 134

Degree applications from students in the semester(s) and program(s) listed above: 513

Response Rate (responses/ degree applications): 26.1%

Degrees granted to undergraduates in the semester(s) and program(s) listed above: 516

Note: Response Ratios (below) are calculated for respondents to that particular question.

PART I. EDUCATIONAL BACKGROUND

1. How did you enter the U-M College of Engineering or CSLSA? As a:		
	Number of Responses	Response Ratio
First year student (freshman), first time in college	106	79%
Transfer student from a two-year college	6	4%
Transfer student from a four-year college	15	11%
Transfer student from another U-M school or college	7	5%
Totals	134	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

2. What is your undergraduate major? (Check all that apply)		
	Number of Responses	Response Ratio
Aerospace Engineering	0	0%
Biomedical Engineering	0	0%
Chemical Engineering	0	0%
Civil Engineering	0	0%
Climate and Space Sciences and Engin	0	0%
Computer Engineering	0	0%
Computer Science Engineering	134	100%
Computer Science LSA	0	0%
Data Science	0	0%
Electrical Engineering	0	0%
Engineering Physics	0	0%
Environmental Engineering	0	0%
Industrial and Operations Engineering	0	0%
Materials Science and Engineering	0	0%
Mechanical Engineering	0	0%
Naval Architecture and Marine Engineering	0	0%
Nuclear Engineering and Radiological Sciences	0	0%
Other (please specify):	2	1%
Totals	134	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

3. When did you decide on your engineering major?

	Number of Responses	Response Ratio
Prior to first year (=0)	48	36%
First year (=1)	44	33%
Second year (=2)	38	29%
Third year (=3)	3	2%
Mean = 1	Totals	133
		100%

4. Will you complete a minor from the College of Engineering or from the College of Literature, Science, and the Arts?

	Number of Responses	Response Ratio
No	90	67%
Yes (please specify):	44	33%
	Totals	134
		100%

5. How many credits did you take in an average semester?

	Number of Responses	Response Ratio
Less than 12 credits/semester	0	0%
12-14 credits/semester	57	43%
15-17 credits/semester	76	57%
18+ credits/semester	1	1%
	Totals	134
		100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

PART II. CURRICULUM

6. How well did your high school science and math courses prepare you for your studies at U-M?

	Number of Responses	Response Ratio
Excellent Preparation (=5)	45	36%
Good Preparation (=4)	48	38%
Adequate Preparation (=3)	26	21%
Unsatisfactory Preparation (=2)	6	5%
No Preparation (=1)	1	1%
Mean = 4	Totals 126	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

7. How well did the following courses at U-M prepare you for your courses in engineering? (Select "N/A" (Not Applicable) for any categories in which you did not take classes at U-M.)

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Excellent Preparation	4 = Good Preparation	3 = Adequate Preparation	2 = Unsatisfactory Preparation	1 = No Preparation	N/A = Not Applicable	Response Ratio
							Total Responses
							Mean
First Year Math (e.g., 105, 115/116)	9% 11	13% 16	12% 15	3% 4	2% 3	60% 75	100% 124 3.6
Sophomore Math (e.g., 214/215/216)	10% 13	27% 34	31% 39	7% 9	2% 3	21% 26	100% 124 3.5
Chemistry (e.g., 125/126/130 or 210/211)	0% 0	0% 0	0% 0	0% 0	0% 0	100% 57	100% 57
Physics (e.g., 140/240)	0% 0	0% 0	0% 0	0% 0	0% 0	0% 0	100% 0
Intro to Computers and Programming (ENG 101)	23% 28	28% 35	12% 15	6% 7	5% 6	27% 33	100% 124 3.8
Intro to Engineering (ENG 100)	11% 14	25% 31	23% 28	9% 11	10% 12	23% 28	100% 124 3.2
College Writing (English 125)	3% 4	3% 4	8% 10	3% 4	2% 3	80% 99	100% 124 3.1

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

8. Please rate how important you predict the following competencies and attitudes will be to you in your PROFESSIONAL CAREER.

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Extremely Important	4 = Quite Important	3 = Somewhat Important	2 = Slightly Important	1 = Not at all Important	Response Ratio Total Responses Mean
Math, science and engineering skills	50% 63	37% 47	10% 13	2% 2	1% 1	100% 126 4.3
Ability to design and conduct experiments	15% 19	28% 35	30% 38	12% 15	15% 19	100% 126 3.2
Ability to analyze and interpret data	58% 73	28% 35	9% 11	5% 6	1% 1	100% 126 4.4
Ability to design a system, component or process	63% 79	28% 35	9% 11	1% 1	0% 0	100% 126 4.5
Ability to function on a team	86% 108	13% 16	2% 2	0% 0	0% 0	100% 126 4.8
Engineering problem solving skills	81% 102	17% 21	2% 3	0% 0	0% 0	100% 126 4.8
Understanding of professional and ethical responsibility	62% 78	29% 37	8% 10	1% 1	0% 0	100% 126 4.5
Written communication skills	45% 57	38% 48	16% 20	1% 1	0% 0	100% 126 4.3
Oral communication skills	57% 72	37% 47	6% 7	0% 0	0% 0	100% 126 4.5

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

8. Please rate how important you predict the following competencies and attitudes will be to you in your PROFESSIONAL CAREER. (continued)						
The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Extremely Important	4 = Quite Important	3 = Somewhat Important	2 = Slightly Important	1 = Not at all Important	Response Ratio Total Responses Mean
Understanding of the social, economic and environmental impact of my work	32% 40	31% 39	26% 32	9% 11	2% 3	100% 125 3.8
Ability to continue formal or informal learning	56% 71	33% 42	8% 10	2% 3	0% 0	100% 126 4.4
Knowledge of contemporary issues that affect my work	35% 44	43% 54	16% 20	5% 6	2% 2	100% 126 4
Ability to use modern engineering techniques, skills & tools	67% 85	26% 33	5% 6	2% 2	0% 0	100% 126 4.6

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

9. Please rate how well you feel your UNDERGRADUATE PROGRAM at the University of Michigan prepared you in the following competencies and attitudes.

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Excellent Preparation	4 = Good Preparation	3 = Adequate Preparation	2 = Unsatisfactory Preparation	1 = Poor Preparation	Response Ratio Total Responses Mean
An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics	51% 62	42% 51	5% 6	2% 2	1% 1	100% 122 4.4
An ability 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	27% 33	37% 45	26% 32	7% 9	2% 3	100% 122 3.8
An ability to communicate effectively with a range of audiences	32% 39	39% 47	22% 27	7% 8	1% 1	100% 122 3.9
An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental and societal contexts	28% 34	41% 50	23% 28	5% 6	3% 4	100% 122 3.9

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

9. Please rate how well you feel your UNDERGRADUATE PROGRAM at the University of Michigan prepared you in the following competencies and attitudes.

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Excellent Preparation	4 = Good Preparation	3 = Adequate Preparation	2 = Unsatisfactory Preparation	1 = Poor Preparation	Response Ratio Total Responses Mean
Ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives	47% 57	36% 44	11% 14	6% 7	0% 0	100% 122 4.2
An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions	34% 41	39% 48	17% 21	8% 10	2% 2	100% 122 4
An ability to acquire and apply new knowledge as needed, using appropriate learning strategies	46% 56	43% 52	10% 12	1% 1	1% 1	100% 122 4.3

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

10. How well were the courses in your curriculum integrated with each other (e.g., how well did prerequisites prepare you for subsequent courses)?

	Number of Responses	Response Ratio
Excellent Integration (=5)	23	18%
Good Integration (=4)	77	61%
Adequate Integration (=3)	20	16%
Unsatisfactory Integration (=2)	6	5%
No Integration (=1)	0	0%
Mean = 3.9	Totals 126	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

11. How important do you feel the following elements are for your learning in an engineering course?

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 =	4 =	3 =	2 =	1 =	Response Ratio
	Extremely Important	Quite Important	Somewhat Important	Slightly Important	Not at all Important	Total Responses
						Mean
Small class size	15% 19	29% 36	21% 27	21% 26	14% 18	100% 126 3.1
Taught by a professor	32% 40	34% 43	17% 21	8% 10	10% 12	100% 126 3.7
Quality of the lecture	71% 90	21% 27	5% 6	1% 1	2% 2	100% 126 4.6
Quality of the discussions	26% 32	33% 41	26% 32	11% 14	5% 6	100% 125 3.6
Quality of the homework and exams	46% 57	38% 47	14% 18	2% 3	0% 0	100% 125 4.3
Accessibility of the professor	31% 39	34% 43	24% 30	10% 13	1% 1	100% 126 3.8
Accessibility of the GSI	37% 46	35% 44	17% 22	10% 12	2% 2	100% 126 4

Report on Senior Surveys for Academic Year 2019-2020
Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

Number of Responses:	96
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Responses listed on subsequent pages.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

PART III. CO-CURRICULAR ACTIVITIES

13. Which of the following activities/programs did you participate in during your time at U-M? (Check all that apply.)

	Number of Responses	Response Ratio
No participation in programs/activities outside of the requirements for my academic degree(s)	15	4%
Professional Societies (e.g., ASME, AIAA)	17	4%
Honor Societies (e.g., Eta Kappa Nu, Tau Beta Pi)	18	5%
Project Teams (e.g., Solar Car, Steel Bridge)	30	8%
Community Service	18	5%
Student Government (e.g., UMEC, MSA)	1	0%
Sports (Intercollegiate or Club)	25	7%
Music Performance (e.g., Marching Band, Glee Club)	13	3%
Religious Organizations	11	3%
Undergraduate Research Project	25	7%
Study Abroad	22	6%
Co-Op	5	1%
Internship	100	26%
Months or years experience in Co-op/Internship:	67	17%
Other	16	4%
Totals	383	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

14. Indicate below how many hours, on average, you worked (including work study) during the terms in which you were taking classes.

	Number of Responses	Response Ratio
No job	51	41%
0-10 hours/week	42	34%
10-20 hours/week	26	21%
20+ hours/week	5	4%
Totals	124	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

PART IV. SUPPORT SERVICES AND ENVIRONMENT

15. How satisfied were you with the following aspects of the DEPARTMENT in which you did your primary major?

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Extremely Satisfied	4 = Satisfied	3 = Neutral	2 = Dissatisfied	1 = Extremely Dissatisfied	Response Ratio Total Responses Mean
Academic advising	12% 15	41% 50	22% 27	17% 21	7% 8	100% 121 3.4
Career guidance from faculty	11% 13	35% 42	37% 44	13% 15	5% 6	100% 120 3.3
Instruction by faculty	20% 24	60% 72	12% 15	8% 10	0% 0	100% 121 3.9
Accessibility of faculty	17% 20	56% 67	18% 22	9% 11	0% 0	100% 120 3.8
Contact with faculty	20% 24	45% 54	26% 31	8% 9	1% 1	100% 119 3.8
Instruction by graduate students (GSI's)	30% 36	52% 63	12% 14	5% 6	2% 2	100% 121 4
Accessibility of GSI's	33% 40	43% 52	17% 21	5% 6	2% 2	100% 121 4
Percentage of teaching by faculty	23% 28	57% 69	14% 17	5% 6	1% 1	100% 121 4
Contact with staff	23% 28	46% 55	24% 29	7% 8	0% 0	100% 120 3.9
Sense of community among students	18% 22	36% 44	23% 28	17% 21	5% 6	100% 121 3.5

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

PART IV. SUPPORT SERVICES AND ENVIRONMENT

15. How satisfied were you with the following aspects of the DEPARTMENT in which you did your primary major? (continued)

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Extremely Satisfied	4 = Satisfied	3 = Neutral	2 = Dissatisfied	1 = Extremely Dissatisfied	Response Ratio Total Responses Mean
Research opportunities	15% 18	27% 32	44% 52	12% 14	3% 3	100% 119 3.4
Classroom facilities	31% 37	48% 58	17% 20	5% 6	0% 0	100% 121 4
Lab facilities	27% 32	41% 49	23% 28	7% 8	3% 3	100% 120 3.8
Computing facilities	32% 38	47% 56	16% 19	4% 5	2% 2	100% 120 4
Overall experience with your department	26% 31	51% 62	14% 17	7% 8	2% 3	100% 121 3.9

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

16. How satisfied were you with the CENTRAL student services in the College of Engineering? (Select "N/A" (Not Applicable) for any categories with which you had no experience while at U-M.)

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Extremely Satisfied	4 = Satisfied	3 = Neutral	2 = Dissatisfied	1 = Extremely Dissatisfied	N/A = Not Applicable	Response Ratio
							Total Responses Mean
Academic advising in the Engineering Advising Center (EAC)	9% 11	28% 33	24% 28	6% 7	3% 3	31% 37	100% 119 3.5
Tutoring or academic assistance	6% 7	15% 18	25% 29	4% 5	2% 2	48% 56	100% 117 3.4
Information provided to support you in choosing an engineering major	10% 12	28% 33	23% 27	9% 11	0% 0	29% 34	100% 117 3.6
Engineering Scholarship Office services	8% 9	14% 16	16% 19	3% 4	3% 3	56% 65	100% 116 3.5
Career services (e.g. co-op, internship, permanent job)	20% 24	36% 42	16% 19	4% 5	3% 3	21% 25	100% 118 3.8
Personal counseling services	9% 11	12% 14	16% 19	4% 5	7% 8	51% 59	100% 116 3.3
Contact with student services staff	10% 11	13% 15	20% 23	3% 4	1% 1	53% 61	100% 115 3.6
Sense of community in the College	14% 16	31% 36	27% 31	10% 12	5% 6	13% 15	100% 116 3.4
Computing facilities	23% 27	46% 53	11% 13	4% 5	2% 2	14% 16	100% 116 4

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

17. Did you have a mentor (official or unofficial) who took a personal interest in your educational development? (Check all that apply.)

	Number of Responses	Response Ratio
Professor	27	19%
Graduate Student Instructor (GSI)	4	3%
Staff member	3	2%
Peer	22	15%
Alumna or alumnus	9	6%
No mentor	76	53%
Other (please specify):	3	2%
Totals	144	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

18. To what extent do you think the College is a supportive climate for:					
The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	3 = Very Supportive	2 = Supportive	1 = Not Supportive	Not Applicable	Response Ratio Total Responses Mean
Women	33% 39	43% 51	14% 17	9% 11	100% 118 2.2
Students of color	31% 37	40% 47	18% 21	11% 13	100% 118 2.2
Diverse religious views	26% 30	51% 59	8% 9	16% 18	100% 116 2.2
Students from lower income families	18% 21	36% 42	25% 30	21% 25	100% 118 1.9
Gay, lesbian, bisexual students	32% 38	38% 44	11% 13	19% 22	100% 117 2.3
International students	0% 0	0% 0	0% 0	0% 0	100% 0
Students with disabilities	0% 0	0% 0	0% 0	0% 0	100% 0

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

PART V. FUTURE PLANS AND INTERESTS

19. What are your EDUCATIONAL plans after graduation?		
	Number of Responses	Response Ratio
No plans for further formal education	68	56%
Military	0	0%
Graduate School (select the educational plan below)	37	30%
Professional School (select the educational plan below)	1	1%
Master's outside of engineering (and not an MBA)	2	2%
J.D.(Law)	1	1%
M.D.(Medicine)	2	2%
Doctorate in an engineering field	3	2%
Doctorate outside of engineering	0	0%
School attending &/or other formal degree pursuing	8	7%
Totals	122	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

20. What are your **EMPLOYMENT** plans after graduation? (Check all that apply.)

	Number of Responses	Response Ratio
No plans for employment after graduation	20	17%
Entrepreneurial ventures/self employed business owner	2	2%
Military	0	0%
Volunteer Experience	0	0%
Accepted full-time employment (select the employment plan below)	75	63%
Accepted part-time employment (select the employment plan below)	2	2%
Still seeking employment	14	12%
Other (please specify):	7	6%
Totals	120	100%

Report on Senior Surveys for Academic Year 2019-2020
Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

21. What is the name of the employer you accepted a position with after graduation? Please also list additional offers you received.

Number of Responses: 74

For additional employer information, such as location, starting salary, and other salary offers, contact UM CoE's Engineering Career Resource Center (ECRC).

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

22. How did you learn about the employment position you accepted?		
	Number of Responses	Response Ratio
Career fair	21	22%
Classified ad	0	0%
Company Day	2	2%
Departmental career fair	0	0%
Direct inquiry	8	8%
Faculty	1	1%
Family/friends	6	6%
ENGenius.Jobs	1	1%
ENGenius.Jobs on-campus recruiting	0	0%
Internship Fair	0	0%
Job posting	11	12%
Networking	4	4%
Online	18	19%
Organization/club	1	1%
Previous internship/co-op	17	18%
Other, please specify	5	5%
Totals	95	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

23. If you plan to be employed in ENGINEERING OR ENGINEERING-RELATED WORK after graduation, which phrase(s) BEST describe the work you plan to do? (Check all that apply.)

	Number of Responses	Response Ratio
Consulting engineer	4	4%
Design engineer	2	2%
Faculty member	0	0%
Manager of engineers	2	2%
Process or industrial engineer	0	0%
Product engineer	2	2%
Project manager/project leader	3	3%
Quality engineer	0	0%
Researcher	3	3%
Sales engineer/technical sales	0	0%
Software developer/programmer	92	81%
Systems analyst/systems engineer	2	2%
Test engineer/field engineer	0	0%
If not listed above, provide the title of position	4	4%
Totals	114	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

PART VI. PERSONAL BACKGROUND

24. What is your approximate Grade Point Average (GPA)?		
	Number of Responses	Response Ratio
3.51-4.0	67	55%
3.01-3.5	39	32%
2.51-3.0	15	12%
2.01-2.5	1	1%
2.0 or below	0	0%
Totals	122	100%

25. Did you receive financial aid and/or scholarships while a student in the College of Engineering? (Check all that apply.)		
	Number of Responses	Response Ratio
Financial aid	41	42%
Scholarships	57	58%
Totals	98	100%

26. What is your Gender?		
	Number of Responses	Response Ratio
Female	30	26%
Male	85	73%
Other	1	1%
Totals	116	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
 Aug 2019, Dec 2019 & May 2020 Graduation Dates
 Results for Computer Science CoE (CS-CoE)

27. Race/Ethnicity: Choose which best describes you (optional)		
	Number of Responses	Response Ratio
2 or more	8	7%
Hispanic or Latino (including Spain)	6	5%
American Indian or Alaska Native (including all Original Peoples of the Americas)	0	0%
Asian (including Indian subcontinent and Philippines)	62	51%
Black or African American (including Africa and Caribbean)	0	0%
Native Hawaiian or Other Pacific Islander (Original Peoples)	0	0%
White (including Middle Eastern)	45	37%
Totals	121	100%

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for

Aug 2019, Dec 2019 & May 2020 Graduation Dates

Results for Computer Science CoE (CS-CoE)

PART VII. EVALUATION OF YOUR ENTIRE UNDERGRADUATE PROGRAM

28. Overall, how satisfied are you with:

The percentage is the fraction of respondents giving the specific response to the given question. In bold is number of respondents.	5 = Very Satisfied	4 = Satisfied	3 = Neutral	2 = Dissatisfied	1 = Very dissatisfied	N/A = Not Applicable	Response Ratio Total Responses Mean
Your undergraduate educational experience at the University of Michigan	49% 59	35% 42	11% 13	3% 4	2% 2	0% 0	100% 120 4.3
The career services offered to you by the College of Engineering	28% 33	45% 54	18% 21	3% 3	3% 4	4% 5	100% 120 3.9

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

29. Overall, what aspects of your experience in the College of Engineering have you found to be MOST VALUABLE and LEAST VALUABLE? Please be specific. Share any other comments you would like to make, such as recommendations for specific changes, comments about quality of life as a CoE student, or descriptions of significant challenges you faced.

Number of Responses:	63
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Responses listed on subsequent pages.

Report on Senior Surveys for Academic Year 2019-2020
Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

2. What is your undergraduate major? (Check all that apply)

Number of Responses: 2

Business Administration

Spanish in LSA

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

4. Will you complete a minor from the College of Engineering or from the College of Literature, Science, and the Arts?

Number of Responses:	43
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Anthropology (socio-cultural)

Applied Statistics

Biochemistry

Creative Writing

Entrepreneurship

Entrepreneurship

Entrepreneurship

Entrepreneurship

History of Law and Policy (LSA)

International Minor for Engineers, Multidisciplinary Design Minor

International minor for engineers

Linguistics

Math

Math

Math

Math

Math

Math

Mathematics

Mathematics

Mathematics

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

4. Will you complete a minor from the College of Engineering or from the College of Literature, Science, and the Arts?

Mathematics

Mathematics

Mathematics

Mathematics

Mathematics

Mathematics

Mathematics

Mathematics

Mathematics

Mathematics and STS

Minor in Business

Music

Music

Music

Music

Music Minor from LSA

Philosophy

Physics

Statistics

Statistics

Statistics

Stats

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

Number of Responses: 96

494 game dev or 484 OS was the best courses. They were planned out well, lectures complemented projects, and lecturers were amazing.

Academically speaking, my best course in engineering was EECS 494 (Game Design). Although this class was rigorous, it was something I was interested in and wanted to excel in. I also worked with teammates who learned at the same pace that I did and who also wanted to succeed. We also designed something that was entirely our own, and I think I am at my best when I get to tap into my creativity. There aren't too many EECS courses where you get to make something without someone telling you what you have to do.

Best course was EECS 482: OS. The class was well put together, the staff and professors were extremely knowledgeable, the projects were well thought out and perfectly complemented lecture and the exams, and the course was implemented in such a way that the workload didn't become isolating or boring.

EECS 183 because they genuinely care about their students.

EECS 203 - I performed the best in that class and I enjoyed the material

EECS 281

EECS 281 - I recognize how crucial this class was for building my fundamental coding skills.

EECS 281 because it was most relevant to my major and profession and was taught very well.

EECS 281 because I learned so much and was able to get all the help I needed to succeed by taking it in the spring semester. I definitely think being able to focus solely on that course by taking it in the spring led to a better experience, especially because there was so much accessibility to the course staff which typically isn't the case during the regular academic year.

EECS 281, EECS 203, EECS 376, EECS 482, and EECS 490 (Taught by ----). Very intellectually challenging courses :)

EECS 281, Great class enjoyed each project and learned many computer science fundamentals

EECS 281. No course elevated my skill as a software developer and helped me become employable as much as 281. I found it challenging yet engaging and came out of it a much better coder.

EECS 281. Prof ---- was an incredible lecturer and the projects and exams were very well structured for the class.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

EECS 281. Ran incredibly well. The projects were difficult enough to be rewarding but at the same time had excellent documentation and resources to help complete them in a reasonable amount of time. The exams were extremely well written.

EECS 370 because I wasn't overwhelmed by the work and I found the lectures to be interesting.

EECS 376. In two aspects: 1. The material covered is useful in the way such that we will be able to analyze a problem beforehand after taking the course. For example, we will be able to recognize the optimal time or space complexity that can be achieved for a certain problem. We will be able to introduce randomness to an algorithm to boost the performance if we don't care about false positives or true negatives. 2. The professors did a great job at explaining and teaching all the concepts and methods.

EECS 381. Although it was by far the most difficult course I took Professor ---- was one of the if not the most knowledgeable and experience filled professor I have had and I felt that due to his expertise and the subject matter of this class I learned more in this class than any other class.

EECS 441: I got a lot of hands-on experience working on a project that didn't exactly have a right or wrong answer. I felt this was the best simulation of real world work because once I start programming for a full time job, there are no professors telling you to use a certain data structure or algorithm in an app. It's just you consulting with clients and making sure their needs are met.

EECS 445 Machine Learning.

EECS 445, EECS 281 I'm interested in the course material and course structure is good. Professors are easy to access.

EECS 445, well-run office hours, interesting content and applications, good professor

EECS 445. I loved Prof. ---- and the lectures were interesting and engaging. The homework and projects were directly related to lectures and applied learned concepts.

EECS 445. It was taught with a focus on discussions with the professor and staff and I found all the teaching staff to be interested in helping us learn genuinely. Also assignments and exams fit the course material well

EECS 467 because it had a tiny class size, was challenging, and had a tremendous workload thus leaving me with a sense of accomplishment. The best non-mde course was EECS 482 for similar reasons but also that it taught essential ways of thinking in computer science that I feel many people who get a degree from this school lack. EECS 482 should be a required class in computer science in my view, but that may be a bit extra.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

EECS 475 w/ Prof. ----. The class covered concepts with concrete examples and problems during the lectures. The problems covered in class were at a university level (unlike many classes where only very simple examples are covered). ---- had a note taking/example focused lecture where the material was explored at university depth. This was a common feature of all courses that I thought did a great job of teaching the material (EECS 445 w/ Prof. ---- is another great example). Please refer to these professors as golden examples of what education should be.

Eecs 481 because it taught me real skills

EECS 481 taught by Prof. ----. Everything we discussed is something that I could use in any other CSE class I have taken. Having had a few internships, everything in class was directly applicable to all of my internships. It was also fairly easy to digest. Prof ---- did an excellent job listening to student questions and feedback, was patient and sympathetic to our needs and questions. Excellent job all around.

eecs 481, most applicable to real world work

EECS 481. Easily. It's not even close. ---- made software engineers think holistically about their actions in an engineering org and understand "how" AND "why" an engineer is being asked to perform a task

EECS 481. Incredible communication abilities of the staff, the content was engaging, and it felt like the professor really cared.

EECS 482 - High quality professor (----) and lectures. Learned more than any other class and projects were also high quality

EECS 482 - I think the most important skills that the Engineering department was trying to teach us was problem solving and teamwork. EECS 482 threw us into the deep end in terms of applying/learning those skills. The only way to properly succeed in the course was the have developed those skills to an extreme level. It was a great test of what the Engineering department was preparing us for.

EECS 482 - Operating Systems. It had good lectures and discussions where I learned a lot, and the projects forced me to stretch my problem solving and critical thinking skills

EECS 482 - very well taught and managed

EECS 482 (operating systems) this class just broadened my knowledge so much and gave me experience working in a group under lots of pressure. Should be 8 credits!

EECS 482 and EECS 485 taught me a tone and the professors were amazing (---- and ----).

EECS 482 due to the complexity of the material and the quality in which is was taught.

EECS 482 had incredible teaching staff. Always available and willing to help.

EECS 482 Operating Systems. The professor (----) was great and the projects were very interesting and educational.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

EECS 482 or 485. 482 was the hardest class I've ever taken. But it was cool. It was challenging and I felt like I learned more than any other course. 485 was also a fantastic course because I loved Prof. ----, and the content was extremely interesting and relevant to how people experience software in the real world.

EECS 482 was a rigorous course that taught me a lot and provided many learning opportunities.

EECS 482 was the only class I took where the professor wasn't upset to be teaching undergrads.

EECS 482 was the most rewarding class I took during my time at the University of Michigan. Even though it was quite challenging, it definitely tested my learning capabilities and I am a much more critical thinker because of that class.

Eecs 482 with ----. It was the most conceptually difficult programming class I took and ---- was an extraordinary teacher

Eecs 482, I learned more there than in any other course

EECS 482, since it was the most challenging and interesting course I've taken. I wish there were more challenging systems courses offered at UofM similar to the ones available at other top computer science schools like CMU and Stanford.

EECS 482, the prerequisite of EECS 370 was very helpful. The professor ---- was amazing and cared about students, learning everyone's names. The projects, although challenging, were so informative and fun. The discussions were well run and the GSI who taught it cared and was so smart.

EECS 482. ---- was an excellent instructor, the GSI's/IA's were amazing, and the material was very interesting.

Eecs 482. Best projects and exams

EECS 482. Great professor and interesting content

EECS 482. It tested my limits be it my sleep limits and my intellectual limits. It is an interesting and challenging course that gave me such a strong work ethic that I wish I had taken it sooner in my college career. Other EECS classes I have taken seem like a cakewalk compared to this class.

EECS 482. This course really challenged me and taught me many things that applies to my internships over the summer. Regardless of how well you do in the class, if you pass this class, your knowledge of operating systems should be pretty strong. I believe that a course should be made so that any passing grade would still give a strong background of the subject.

EECS 482: extreme preparedness from professors and other course staff, highest quality of instruction.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

EECS 485 - I have used the knowledge and projects I learned and created in the class numerous times already to aid me in my internship as well as other classes. Its the class that did its best in connecting classroom learning to real life development

EECS 485 - The class was taught well and had interesting material, specifically projects 4 and 5 on MapReduce and PageRank were somewhat challenging and fun.

EECS 485 because the professor (----) was amazing. Lectures were always very relevant and interesting. He answered questions in a clear and professional manner. The projects were reasonable in scope and provided for great learning opportunities. The incredible breadth and depth of content related to web systems we covered in this course was great to learn.

EECS 485 because professor ---- is amazing

EECS 485 was the best run course I had in engineering. The course work was relevant to both industry and applying in research, it was extremely well taught by ----, I had a good expedience with delegating work among group members, and it taught me extremely relevant skills for later industry internships.

EECS 485, I really enjoyed how hands-on it was and how relevant it is to real-life work in the industry.

EECS 485, it was very well taught and I enjoyed the projects. The knowledge has also been directly applicable in internships

EECS 485. ---- puts a lot of effort into his classes, which you can see it both EECS 280 and EECS 485. It did a good job of cover the topics necessary for web development while also being fun and adequately challenging.

EECS 485. I learned very practical skills that I will use for the industry and gave me the tools to become a professional.

EECS 485. It was highly practical, provided real-world exposure, and displayed a broad array of topics within the concept. It also taught students to teach themselves. I actually think there should be a class that follows this that deals with the backend architecture of a web system (how to set up different resources to work with each other in a cloud environment such as AWS)

EECS 485. Not only was it the most applicable class I've taken. The professor was a terrific teacher.

EECS 485. This course forced me to work on a larger team, read documentation online, and learn very useful information. The lectures were also taught very well.

EECS 485. This class taught us a lot about modern software and how to use them together and fostered a community of learners filled with passionate computer science students.

EECS 491 - Distributed Systems. Very well thought course, and extremely well managed. Brings very interesting concepts in CS together, and covers some real large scale systems and companies like Google and Facebook which manage billions of users daily.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

Eecs 492, professor ---- prepared the lecture really well, and you can understand it during her lecture. Assignments are eligible to work.

EECS 494 provided me with the most experience when it came to real-world applications of what I was working on. I constantly had to make time to meet with team members to work on our project and having real clients that we had to present to at the end of the semester gave us more to think about than just trying to reach a simple end goal.

EECS 494 was my best course in engineering. It was my major design project in designing and developing my own video game. I felt like the class was as close to solving real world problems as any EECS class I had ever taken. We went through the entire engineering process of producing a finished product and every single element was thought up by the team, no specs, no starter code. It was also the most accurate team environment for computer science I had experienced. We were in charge of our own work and coming up with our own tasks and items to be complete before the deadline. We used industry standard time management principles and software to keep track of our work and fell into a regular work and peer review scheduled meetings each week. It was simultaneously the most difficult and the most rewarding class I ever took here.

EECS 494. It gave me a fantastic, team and project-based experience that was very close to working in industry. It also allowed me to be creative and analytical simultaneously.

EECS 498 - Cybersecurity for Future Leaders - it was the first and really only course that tied technology to the real world and brought technology into a new light.

EECS442 - I found what I want to do after graduation

EECS445, EECS492, and EECS476 because I am interested in the material and the course staffs were great

EECS482 was a well structured course. It had professors who were fantastic lecturers and were readily accessible outside of class. The class has been around for so long that the project specs were solid. It was also a challenging course and made me have a greater appreciation for the subject.

Either 491 or 482. Both of those professors have been by far the best I've had. They actually get to know each student in their lecture, try to engage students in lecture, take and use feedback about the course, and are just amazing lecturers

Either EECS 442 (Computer Vision) or CEE 265 (Sustainability Engineering Principles). Both classes had excellent professors, interesting subject material, and a reasonable workload. The GSIs/IAs were also available and very willing to help with questions related to assignments.

Engineering 100: Gaming for the Greater Good because it introduced me to my passion for accessibility. Dr. ---- has been an invaluable resource to me as I have grown academically and professionally. EECS 485: Web Systems was also a very good class for me because we got to learn about a broad range of topics. ---- is a fantastic lecturer and explains concepts clearly in multiple ways.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

I really enjoyed EECS 482. It was very clear lectures and an organized curriculum. The projects were difficult, but greatly improved my learning. ---- was a great lecturer.

I really enjoyed EECS 482 because of the high level of challenge and complexity offered by the projects. This course felt like a chance to use all of the skills taught in the CS curriculum just as a professional software engineer does.

I think my favorite course was EECS 281, I really enjoyed the projects and material covered in the class.

I would say EECS 445 because of the combination of linear algebra, a math course I liked, and machine learning techniques, which is something I am interested in and relevant to me since the job I start in August is based around data analysis and machine learning.

In my experience, the courses were not nearly as important as the instructors teaching them. The following instructors had a significant positive impact on my experience in engineering. ---- (EECS 482), ---- (EECS 485), ---- (EECS 201), ---- (EECS 376)

Machine Learning, because I invested time and effort into it.

My best course in engineering was EECS 281 because I felt it prepared me well for following courses as well as working in industry.

My best course was EECS482 because of how well it was taught, and how it challenged me.

My best course in engineering was EECS 493 User Interface Development. The projects were fun to build, lectures were interesting, and I felt like I learned a lot in a subject area that I hadn't had experience to before.

My best courses in engineering were those where the professors took the time to actually formulate a course plan and effectively teach the students. Professors like ----, ----, ----, ----, & ---- have been the most effective and therefore made the courses the best ones I've taken at CoE.

My favorite course in engineering was EECS 482. A large part of what made it my favorite was the deep care that Prof. ---- put into making sure it was a good experience for his students. His lectures were meticulously prepared, he was always open to questions and discussion, and was always accessible if extra help was needed. He recognized that teaching a class is more than just standing in front of students for 80 minutes twice a week, reading off poorly-prepared slides, and disappearing as soon as class is over like many of my other professors here at U of M. Additionally, I felt that the projects were designed to truly encourage deep thought and understanding of the material, and I felt that I walked away from the projects with a solid understanding of the fundamentals the project was meant to teach.

My favorite course was EECS 482

My MDE course EECS 497 was the best. It was great to be given the freedom to pursue a project of my choosing and work as a team making our own decisions

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

12. What was your best course in engineering? Why?

Physics 140, because Prof. ---- taught it extremely well and it was one of the courses I've taken in college that I had the most solid grasp of.

Probably enjoyed EECS 311 the most because of Professor ---- and the content was fun to learn

Really liked EECS 486 - ---- was engaging and informative and I was able to take it just because I was interested. Also EECS 281 - professors were engaged and passionate and the course well extremely well coordinated and informative.

So far, EECS388 has been my best engineering course, because of how hands-on and practical the skills I learned there are.

The best engineering course I have taken was EECS 281. The amount of information you learn is incredible. From the beginning of the term to the end of the term, you can see the improvement you have made as a coder. Additionally, the GSIs were incredibly competent and were available and ready to help at all times. The professors provided as much help as they could and the lectures were informative and the class overall was very well organized and transparent in its requirements.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

13. Which of the following activities/programs did you participate in during your time at U-M? (Check all that apply.)

Number of Responses: 16

Club (MHacks & Shift)

Cultural Clubs - Indian American Student Association

DEI committees

Girls in Electrical Engineering & Computer Science (GEECS)

IA

Instructional Aide

Instructional Aide (IA)

Instructional Aide

Kappa Theta Pi

Michigan Hackers and MHacks

Michigan Learning Community (Living Arts), Interfaith program by Trotter Multicultural Center

Model UN at UofM

Residential Adviser

Varsity Athletics

Visual Arts Performance Group

WCBN Student Radio

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

17. Did you have a mentor (official or unofficial) who took a personal interest in your educational development? (Check all that apply.)

Number of Responses: 3

Grad student mentor through SHPE

Internship and student group (non build team)

Research Boss

Report on Senior Surveys for Academic Year 2019-2020
Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

19. What are your EDUCATIONAL plans after graduation?

Number of Responses: 7

Masters degree in Computer Science Engineering from U of M

Masters in CSE at Michigan

MBA

MBA

Michigan, Master's Degree

MIT

Possibly a masters at somepoint

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

20. What are your **EMPLOYMENT** plans after graduation? (Check all that apply.)

Number of Responses:	7
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Considering offers but have not yet accepted.

Doing industry internship before starting masters degree

Graduate School

Internship

Planning on full-time employment after masters program

Received multiple offers still deciding on company.

Summer internship before grad school

Report on Senior Surveys for Academic Year 2019-2020
Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

22. How did you learn about the employment position you accepted?

Number of Responses: 4

N/A

N/A

Reached out to by recruiter on LinkedIn

They were in the Duderstadt connector

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

23. If you plan to be employed in ENGINEERING OR ENGINEERING-RELATED WORK after graduation, which phrase(s) BEST describe the work you plan to do? (Check all that apply.)

Number of Responses:	4
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Associate Offering Manager

Quantitative Developer

Quantitative Finance/ Strategist

Security Engineer

Report on Senior Surveys for Academic Year 2019-2020
Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

26. What is your Gender?

Number of Responses: 1

Non-binary

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

29. Overall, what aspects of your experience in the College of Engineering have you found to be MOST VALUABLE and LEAST VALUABLE? Please be specific. Share any other comments you would like to make, such as recommendations for specific changes, comments about quality of life as a CoE student, or descriptions of significant challenges you faced.

Number of Responses:

63

Allowing me to explore EE and CS was very valuable to me and I was able to find something I can get a high paying job in with a low GPA. Least valuable was humanities requirement. I learned nothing from greek mythology.

As a student that spent most years commuting, I think getting more resources and guidance on how to feel apart of the community while not living on campus.

Courses and leadership in a student project team.

Ethics should be concentrated into a single required course (maybe two since ethics can be very broad). Taking a week or two of valuable course time to focus on ethics is a shame for people who want more focus in a class (e.g. machine learning could have covered reinforcement learning in-depth but instead covered ethics). Ethics is valuable, I'm not saying remove it, what I am saying is don't sprinkle it across every course. Tech-comm should have one section focused on technical writing and one focused on professional presentation. There's way too much repetition between the two (I've written technical memos in all of my writing classes). Academic advising was worthless for me. I got 5 minutes during orientation and didn't learn anything about which classes transferred or not (thank god wolverine access has what-if degree scenarios and unofficial transcript audits). Not that I personally used CAPS but apparently they're pretty ready to brush people off (four different people I know have had negative experiences with CAPS, maybe because of understaffing?). I feel like the most valuable aspects of my undergrad have been the ECRC and the Career fairs. I learned a lot about the professional side of life solely from these. There were also a handful of professors who positively influenced my opinion of the school (as well as a handful who negatively influenced it).

Everything was valuable. Even the classes I didn't like. All part of the experience of learning what works and what doesn't for you. I think the most valuable thing to me was probably all the grueling hours working on projects with my teammates. Least valuable for me was probably a lot of the pre-req classes required for computer science. If I was in LSA, I could've found another degree or minor I liked earlier on.

I found the advisors within the CSE department not valuable at all. They insulted my intellectual ability and tried to dissuade me from majoring in CS because I was having trouble adjusting to college my freshman year and was clinically depressed and I lost trust in them.

I found the classes, specifically project oriented classes, to be the most valuable part of my experience. These kinds of classes taught me how to work both individually and in a team to create a solution to a complex problem. I found the overall structure of exams in the CS-Eng program to be the least valuable. The typical CS exam results in an average score in the 60s-70s and relies on a curve to distribute grades. I think the nature of the computer science field is not well suited for paper exams, especially in code-heavy classes and some sort of alternative format that better mimics actual software development and tests the skills taught in class would be more valuable to students.

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

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I found the most valuable part to be very flexible in specializations of your major when deciding classes.

I found the professor office hours to be the most valuable use of my time at the university. I learned a lot by listening to how they approached problem-solving. I found that career fairs were not as helpful as I thought they would be. I didn't find many opportunities in those events.

I found the upper level course the most valuable. What I think is lacking is the career preparation for things such as coding interviews. Also courses like EECS 496 are just absolutely useless. This along with courses like CHEM 130 had no relevance to my career and were simply a waste of time or money

I have found my involvement in student organizations and the use of career resources to be most valuable.

I have found the resources available to be most valuable and the educational structure to be least valuable. The CS department and its attitude toward students actively traumatized me during my time in the College of Engineering. The inflexibility of staff with grading and the college-wide policy of curving grades only at the end of the semester along with the hyper competitive nature of the student body forced me to attend therapy and caused significant stress throughout college. I ultimately regret choosing engineering and choosing computer science as a major because I had such a terrible experience.

I learned a lot in my college career and U of M did a great job of helping me in terms of finding internships/full time job and preparing me for it. Unfortunately, I think the level of challenge the university provided surpassed a healthy level and has had long last negative effects on my health - emotional, mental, and physical

I liked being an IA - I met excellent people who helped me grow. You guys need to do a better job having staff in all engineering classes be as diverse as possible. Having a diverse staff helps students in a variety of ways including staff being more sensitive to student needs as well as making students more confident in their place in CoE if they see staff who look like them (personal/anecdotal evidence).

I think the community and the courses have been amazing. I have been able to take classes that I am interested in and find like minded people to spend my time with. I think issues would be actually getting into the courses that you want to take as well as large class sizes. But I'm in the EECS department so that isn't really surprising

Report on Senior Surveys for Academic Year 2019-2020

Survey of Undergraduate Degree Applications for
Aug 2019, Dec 2019 & May 2020 Graduation Dates
Results for Computer Science CoE (CS-CoE)

29. Overall, what aspects of your experience in the College of Engineering have you found to be MOST VALUABLE and LEAST VALUABLE? Please be specific. Share any other comments you would like to make, such as recommendations for specific changes, comments about quality of life as a CoE student, or descriptions of significant challenges you faced.

I think the most valuable thing that helped me succeed was office hours and the ability to have one on one conversations with professors and GSIs. During lecture, the content may seem easy and understandable, but when you actually do the projects that's when all the difficulties arise, and it was really great to have these intelligent resources there to help us understand the material. There wasn't really anything not valuable at the college of engineering. I would say the only thing would be the career fair. I didn't really get anything positive from the career fair. Most semesters I had class during the times of the career fair and didn't want to skip them. And even when I did to go to the fair I would end up going late and standing in lines the whole time. I think a better system, like an online queue so people can see where they are in line would be beneficial, can be put in place to help out the thousands of students that show up.

I think weeder classes are not valuable. Why do I as an engineer need to be taught calculus and linear algebra at a theoretical level when I am going to be using it at a practical level? Why do I need to take two semesters of Physics when I am going to be a computer scientist? I wish I could have taken that time to get deeper into the CS curriculum or take other STEM classes I was actually interested in instead of tanking my GPA on a class that does not matter to me or my profession.

I wish there were more attempts to make the computer science students closer together. I never really found a community in my classes that I saw my friends did in their departments.

I would like there to have been more support for mental health, diversity, and an actual consideration for women (sexual assault issues).

I would say that I found the course projects to be most valuable, as that was the best way that I learned the course material. The least valuable would be the exams as I often found myself just shoving as much information as I could into a cheat sheet and then hoping it was enough rather than actually learning to apply the material like the projects forced me to do.

I'd like more staff/student interaction and smaller class sizes (I know this is hard to accomplish), but this will improve overall enjoyment of the class. It was hard to connect with professors and build a community of engineering students without smaller class sizes.

Least valuable: having to take physics courses Most valuable: being a EECS 281 IA

Mental health resources were abysmal, and some of the blatant disrespect the professors had for their students' well-being was heartbreaking. One professor singled out a student who was too sick to take their exam, making comments like "you were able to do an interview, why couldn't you take my exam?" (when the sickness wasn't quite at its peak during the interview, but was during the exam) or when the student tried to speak in lecture class but couldn't, due to a terribly sore throat, the professor made a similar comment like "You don't need to be able to speak in order to take a test". Really now...

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Most valuable- many of my CS classes had very interesting projects; I enjoyed doing them and learned a lot. Least valuable- Only the "elite" high schools offered AP Physics C in high school so only the students who were already destined to be ahead did not have to take physics 140/141 and 240/241. These classes tend to bring down everyone's GPAs and take up a lot of time so students who were already struggling struggled much harder having to take these classes. Plus these together are 10 credits so a student could nearly graduate a semester early just from not taking these classes alone, but again this just applies to students who went to better high schools and probably are already wealthier. Overall, students who were already behind fell much more behind because of the AP credit situation on physics.

Most valuable - course content Least valuable - lack of community between students and between students/professors

MOST VALUABLE - Career support for the computer science students. I think that the university does a really good job with the number of companies it brings in for recruiting. I think the accessibility to them could be improved (i.e. the career fair seems a bit unmanageable, and students are not well informed about upcoming career days). That said, I recognize that compared to other universities whose computer science programs are of a similar size, this university does a far better job at managing these recruiting events at this scale.

Most valuable - facilities, opportunities for research and further applications of material covered in class, intelligence of professors, GSIs. Least valuable - inclusiveness of organizations on campus

Most Valuable - Research projects and office hours that are well staffed. Least - Huge course sizes where it is not realistic to be able to form a relationship with the instructor. Also no dedicated advisor that can follow you through your college journey.

Most valuable is definitely the people I've been able to meet (thus connections I've been able to make), the communities I've been able to be part of, and hopefully life-long friends I've been able to find and form.

Most valuable would be working in teams and working with other students in clubs around campus. Least valuable would be how hard it was to register for EECS classes because of the amount of people in the major. Lots of CS students who didn't take it seriously and ruined class culture because they wasted lecture time with bad questions.

Most valuable was the my peers, least valuable was pretty much everything else, especially professor and GSI office hours/availability and cs advising.

Most valuable was the high quality and challenging courses in the EECS department (Specifically 280, 281, 485, 482, 481) Least valuable was the underwhelming advising from the EECS department - older students are way better advisors than the actual advisors in my experience.

Most valuable were Wilson center design teams. Least valuable were any of the IB courses or the required workshops.

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Most valuable were the technical skills that many of the core classes in the CS degree taught me. I think it would be helpful for students if the university somehow provided more options for career or networking opportunities either for internships or full-time jobs. Career fairs and company days were useful for me to gain exposure to companies that I didn't know of before, but were not very helpful in finding a job and getting started in the interview process. Having more mock interviews available to students would be helpful.

Most valuable: having excellent instructors leading undergraduate lectures/classes, regardless of their title (lecturer, professor, assistant professor, GSI). Good professors have made the greatest positive impact on my undergraduate education while bad professors (those that didn't care about students, or were too stuck in their own cloud of knowledge) made classes way too confusing or un-relatable.

Most valuable: breadth of classes and career opportunitiesLeast valuable: overflowing classes and long waitlists

Most Valuable: The rigor of the classes definitely provided a good challenge. The professors for the most part understood the struggle of the students and constantly sought compromise. Very intelligent professors passionate about their work. Least Valuable: How collaboration between students was dissuaded be it with most classes being curved, natural competition of students trying to get better grades/jobs than each other, or with the Honor Code causing students to be wary of sharing knowledge with each other and instead head to office hours when they were confused. That being said, Office hours for most eecs classes were quite bad. Lots of people in not big enough rooms. This caused GSI's to just suggest the solutions since they didn't have enough time to go to each student and have them reach the correct solution naturally.

Most valuable: flexible satisfaction of degree requirements in computer science.

MOST VALUABLE: Student OrgsLEAST VALUABLE: Senior Design

Most valuable: fall career fairLeast valuable: not quite enough research opportunities unless you know a professor

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Most valuable: Prof ----, Prof ---- - very sympathetic professors who went above and beyond to ensure students were learning and doing well in class. The countless opportunities for career preparation - interview and resume workshops, career fairs, corporate outreach seminars, ECRC one-on-one reviews for elevator pitch / resume. Least valuable: There were a few classes I wish I could have opted out of. In CS, I didn't need to use physics or chemistry and would have preferred not to take those once I had declared. I came in with extensive preparations in English and wish I could have tested out of the technical communication requirements. Quality of life: A few years ago, there was a panel of CSE department leaders, hosted by Pro----. The panel was meant to address questions and concerns women in computer science might have. The ---- of the department at the time would not answer our questions. One of his colleagues on the panel invited him to answer some questions, but he laughed it off and said everyone else on the panel was doing good and that he wanted to enjoy his lunch. We asked him about what was being done to support women in CS - he replied that there were clubs, but struggled to name even the club that was hosting the panel. At the end of it all, he said we should do this again next year so he can enjoy another free lunch. It was very disheartening to see how little the ----CS department cared to support women in CS. It did not help that there was at most one woman on that panel of higher-ups in the CS department.

Most Valuable: Exceptional professors Least Valuable: Career services (They do a decent job handling interview prep but were abysmal placing students, which is where students are hurting unfortunately)

Most valuable: the career resource center. Least valuable: can't think of anything. The main thing that keeps me from being completely satisfied with my undergraduate experience was a lack of ability to get face to face help in my CS classes. Office hours are too often packed because there are so many students in the class struggling and so few faculty around when needed. Additionally, going to office hours and not getting help discourages you from trying to use it again in the future since it was a waste of time, so you just end up trying to make everything happen on your own and if you fail at doing so you just have to move on. Lastly, sometimes I feel as though course staff are purposely responding in such a way as to discourage students from utilizing office hours.

Most valuable: faculty and their investment in the students. I constantly felt inspired by the work I saw around me and the passion that the lecturers and professors have about these topics. I think there should be more transparency about what is happening in the department, and better facilities for office hours, discussions, etc.

Most valuable: The rigor of my upper level major classes, and the experience of being challenged intellectually. Participating in an honor society and getting to meet and network with exceptional peers. Least valuable: Difficulty registering for CS classes due to lack of seats and overabundance of students. Lack of support from university for acquiring housing as an upperclassman. The university is ruining the housing market by over admitting students that the city doesn't have room for. If you're not going to provide students with on campus housing, then at least support a student tenant union or something so we don't all get screwed on off campus housing.

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Most: classLeast: tech comm is a joke

My experience was incredibly positive in the college of engineering. The technical courses are, for the most part, excellent. The professors were almost all excellent as well. That being said, I did find little to no value in the technical communications courses. I understand the need for technical communications, but the way it is taught does not seem to have any benefit. This is quite frustrating as an out of state student paying full price. I'd much rather have taken more technical courses than shell out \$10k to learn how to write a memo. Also, the cost of tuition is absolutely ridiculous for an out of state student (in state as well). I loved my experience at Michigan, and I learned an incredible amount. In my honest opinion, however, it is not worth ~\$60k+ per year. Again, the courses are excellent, but much of my learning came from FREE supplements. If you go on YouTube, for example, you can get world class lectures (UM does have great lectures don't get me wrong) for free that cover basically the same material as UM EECS classes (---- machine learning course for instance). Of course, this is an elite institution, and I certainly had great career opportunities that I took advantage of. I am quite thankful to have UM on my resume any time I apply anywhere. But this perk is not worth the absurd cost. There are schools that are a fraction of the cost of UM (University of Waterloo in Canada is a notable one) that place at least as many students at top companies for software (Google, Facebook, etc) as UM. The career fairs, while helpful and worthwhile, are very overhyped as well if you are trying to get a job at a very competitive company. A vast majority of my interviews/offers for Summer 2019 internships came from cold applying online. It's great that Facebook/Google etc come to career fair, but why would I wait in line for 90 min only to be told to apply online? I don't want to gripe too much, as my experience was amazing and the career opportunities I was able to take advantage of were outstanding. But the tuition is seriously getting out of control.

My most valuable experience with the CoE was taking EECS 482. It's the only class that truly teaches you multithreading which is a super important skill for industry. I wish that another required class like 281 went over multithreading, even if only at a high level. My least valuable experience was taking TECHCOM 300. The class is usually taken by juniors and teaches them how to make resumes. While that is useful knowledge, by that point in time, most juniors will have a resume. The class should be pushed to be taken first semester sophomore year so that students can take advantage of how to make a resume and use that resume at career fairs.

N/A

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One change the college should strongly consider is making the option to skip intro programming classes much more visible for incoming students. This can save first semester students a lot of wasted time, and would allow them more room to grow intellectually. Additionally, the registration issue within the CSE department needs to seriously be resolved. I don't see how that can happen unless the college limits the number of students who can declare a CS major, since hiring additional staff will take an immense amount of time during which many students will be unable to get into classes that they want. Many other top CS schools have adopted similar policies, so it might be worth consulting with other schools to determine the best solution.

One significant challenge I faced was not having the time to go to office hours, even when I really needed help. I work two jobs on campus and I usually have shifts in the gaps between classes. On any given day, I could be busy from 9am-5pm, or even later if I have student organization activities going on in the evenings. I usually had to rely on friends to help me, which made me feel guilty, or turn in subpar work. I was an IA this semester, and I offered office hours from 4-6pm, which I think was popular for students who had other commitments during the day. I wouldn't expect everyone to offer later hours though.

The amount of people I have met through class has been what I've come to appreciate most. I know people who are working at loads of different companies and in just about all the major CS cities in the US.

The availability of research opportunities. Before I was qualified enough to get internships, there were a lot of opportunities on campus for me to further my programming experience and create a solid resume.

The College of Engineering really helped prepare me for working in a professional environment and being a part of a larger team working on a large project. Having various courses available to take that cover different subjects while still fulfilling the same requirement gave me a lot of opportunities to explore my field and my interests.

The community and network of friends that I've made in the College of Engineering is what I found most valuable. The least valuable aspects are overfilled CS classes with hundreds of people on the waitlists and office hour queues that either take hours to get help or that never end up getting to you.

The courses and resources were very valuable. I learned a lot from my courses about both my discipline and how to think. Least valuable: There are a lot of things that seem to be done because they seem like good ideas but don't seem to be measured. Resources need to be better allocated to supporting students. It is unacceptable that office hours queues can be 3 or more hours

The most valuable is having GSI and TI in classes. Just graduated in U of M is valuable.

The most valuable aspect of my experience was the career services offered by the CoE. Specifically, I think they do a really good job with the career fairs. The least valuable aspect of my experience was dealing with long waitlists on high demand classes.

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The most valuable experience I have had was learning from other peers. I have made so many connections peers in the same classes as me, and some of them have grown to become my closest friends. The least valuable experience I have found was the lack of ELC sessions after Engineering 101. I think when I first started taking classes such as EECS 203, 280 I would have liked a study group such as the SLC ones for the science classes.

The most valuable experiences I have had in the CoE have been the engineering career fairs. Through the winter career fair during my freshman year, I was able to get an internship position, which kickstarted my career. The career fairs have been very valuable experiences, both in assisting with my job search, and teaching me valuable skills such as how to sell myself to employers, interviewing skills, and understanding of the job market. For me, the main value of getting an undergrad engineering degree is to land a good job after graduation, and I feel that I have achieved this goal in large part due to the engineering career fairs. The least valuable experiences have been the many classes I have taken in the CoE that were taught by professors who very clearly did not care about teaching, and were just teaching a class because they were contractually obligated to. The university system of forcing professors to teach in hopes that they will share their knowledge is archaic and out of place in today's society. This is a system meant for medieval guilds and apprenticeships. Today, people who are skilled in their field should not be assumed to be good teachers, and the university has the resources to hire good teachers alongside the professors. Lecturers should teach all classes, and professors should perform research and only teach if they want to. Most of the best teachers I have had in the CoE have been lecturers, not professors, because they were hired with their sole purpose being to teach, and so naturally they enjoy their job, and it reflects in the quality of the class. Some examples of classes I have taken that were taught well by lecturers are EECS 281 (with Dr. ----) and EECS 473 (with Dr. ----). Some examples of classes I have taken that could have been a good experience but were brought down by the professor are EECS 370 (with Prof. ----) and EECS 270 (with Prof. ----). Another set of experiences I thought were least valuable were all of the non-CS courses I was required to take for "breadth". These courses are very clearly just required because the CAC accreditation requires some breadth courses, and because the university wants to keep the students here as long as possible to extract more money from us. For example, being required to take general chemistry as a CS major is completely useless, to say the least. Additionally, EECS 496 (Professionalism) has been a complete waste of time, where I have learned absolutely nothing, all of the material is at least 10 years outdated, and the professor puts in minimal effort. Because breadth is required for accreditation, I would recommend making changes to the required breadth courses so that they actually provide value to the students, instead of merely serving as checkboxes to mark on an accreditation audit.

The opportunities outside of classes have by far been the most valuable.

The team project experience through my classes is invaluable. There's something to be said for working through struggles but this degree program was not great for my mental health. I've had to go to CAPS in my time here because of the stress it hss put me through and that's when it has gone too far.