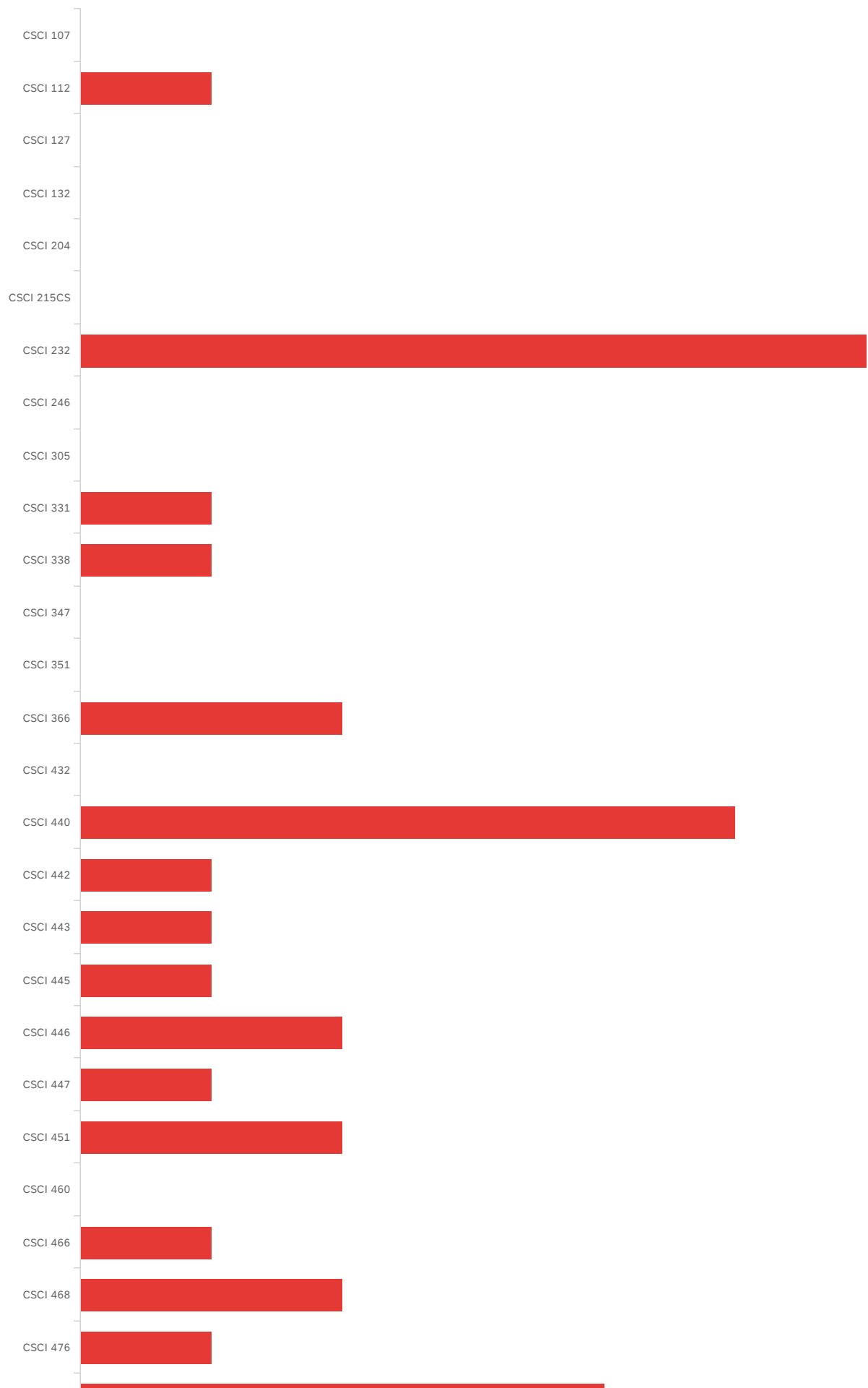


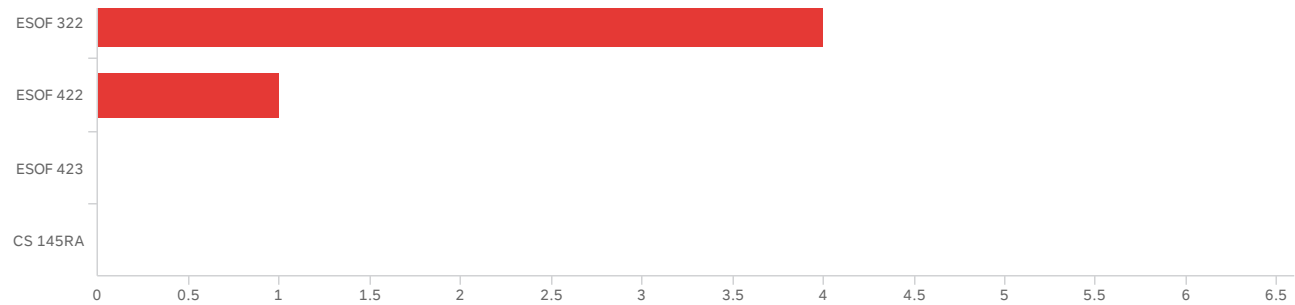
Default Report

AY24 CS-INT Senior Survey

April 15, 2024 11:21 AM MDT

Question 1 - Q1) Choose up to 3 courses in the curriculum that you found most valuable





#	Field	Choice Count
1	CSCI 107	0.00% 0
2	CSCI 112	3.03% 1
3	CSCI 127	0.00% 0
4	CSCI 132	0.00% 0
5	CSCI 204	0.00% 0
6	CSCI 215CS	0.00% 0
7	CSCI 232	18.18% 6
8	CSCI 246	0.00% 0
9	CSCI 305	0.00% 0
10	CSCI 331	3.03% 1
11	CSCI 338	3.03% 1
12	CSCI 347	0.00% 0
13	CSCI 351	0.00% 0
14	CSCI 366	6.06% 2
15	CSCI 432	0.00% 0
16	CSCI 440	15.15% 5
17	CSCI 442	3.03% 1
18	CSCI 443	3.03% 1
19	CSCI 445	3.03% 1
20	CSCI 446	6.06% 2
21	CSCI 447	3.03% 1
22	CSCI 451	6.06% 2
23	CSCI 460	0.00% 0

#	Field	Choice Count
24	CSCI 466	3.03% 1
25	CSCI 468	6.06% 2
26	CSCI 476	3.03% 1
27	ESOF 322	12.12% 4
28	ESOF 422	3.03% 1
29	ESOF 423	0.00% 0
30	CS 145RA	0.00% 0

Question 1-explain - Q1-EX) Please explain your answer to the valuable courses question

Q1-EX) Please explain your answer to the valuable courses question

CS451 was by far my favorite class. Incredibly valuable for learning how to build efficient algorithms, let alone learning about the applications specific to bio. I didn't really enjoy ESOF322 but it was quite valuable. Not my favorite subject but likely one I will use professionally the most.

I think 232 gives a very important foundation for data structures and programming fundamentals that is vital to progression as a programmer. 112 is the only C course offered at the school and it helps us understand programming more fundamentally as well as its evolution. On top of this it is still widely used in embedded programming so it is an incredibly useful class. 442 introduced me to image processing and I think this area of programming is incredibly interesting and incredibly useful in terms of the working world.

I really liked the teachers that taught these courses! i think that when the teacher is more enjoyable, its easier to digest the material and such

I think these two courses provide the foundation for all others. Even though I didn't entirely enjoy ESOF 322, what I learned in it helped me in how I think about software. 338 melted my brain for a while, but it was important to learn limitations to what we do.

232 taught the most important fundamentals, 366 taught how computers actually work, and 440 taught how to work with databases which is important for a job, but not taught in other classes much.

These were the most valuable because 1) CSCI 232 forms the foundation in teaching data structures and algorithms; all other courses build off of it, 2) ESOF 322 teaches software management and modeling along with proper project management strategies that are useful in a professional setting.

Databases was very useful because every system on the planet uses some form of database so that is useful for our careers. AI was useful because it introduced me to the core mechanics of AI and showed me avenues to learn more about it on my own. Finally Computer Systems was useful because it introduced us to the core components of how you go from hardware to cloud computing.

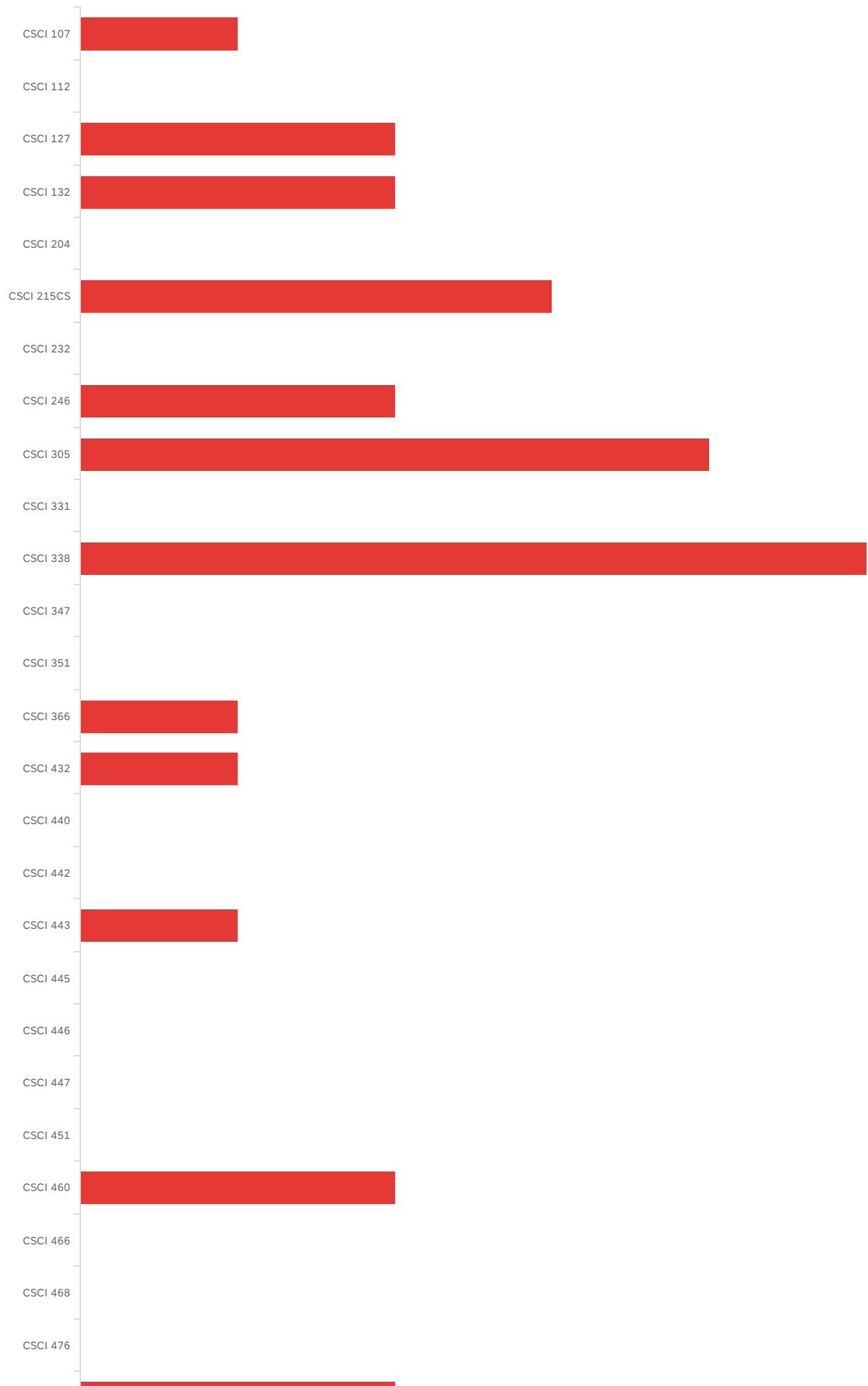
CSCI 232: DS and Algorithms is the basis of coding in general. This course teaches prepares students for upper division courses by introducing essential coding data structures and different algorithms for things they might need to do. CSCI 440: Databases was an essential class for me, and I'm grumpy with myself that I waited to take it until my senior year. Databases are essential for most computer programs and I would love to see databases be introduced to students in introductory level classes. ESOF 322: Software Engineering Principles was a great course! I enjoyed the UML diagrams and learning the general software process. Definitely a useful course for students to take in the second or third year.

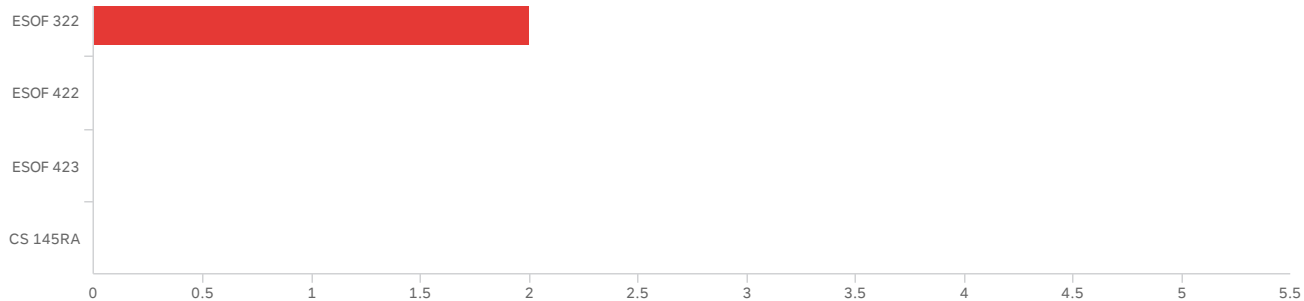
Databases is one of the only courses I learned real industry-used knowledge in. Everything I've learned in that class helped me understand how to architect and build my own full stack app for the capstone project. I also use that knowledge in my current job. He goes over many different types of databases and everything clicks when you start working on any type of web project. advanced software engineering was awesome because it was so vastly different from the rest of the classes. It really opened my eyes to what a job or career in computer security might look like. He has you using specific industry tools and has someone with real experience come in and teach the class. 468, compilers was great it was a well structured class that just makes you a better programmer. I wasn't particularly interested in how programming languages were built, but the way that the project was developed step by step with test driven development helped me understand how to build a good foundation for a project that could be built upon for further growth in the future. I don't know why 483R isn't listed. This is by far the best class I've taken. If you are excited about the essence of computer science, building a project with code. This class is a must. I've also learned more and done more in this class than any other class. It really is a culmination of a lot of skills learned in my previous years and the development of new skills that are commonplace in industry. Such as github, pull requests, tests driven development, researching tech, building architectural diagrams, and using cloud services. while some of these things are covered, a lot of them are forced on you with mundane boring examples that don't require you to think. When you decisions and choices affect the project's future you will care a lot more and get a far better understanding. That doesn't even take into account what you will learn about tech that isn't covered at the school for some reason like cloud computing.

The most valuable course is those that were taught by excellent professors and could lead me to a unique job.

I thing 232 was an amazing basis for all things coding and algorithms and I learned a ton from this course. Then both 446 and 447 (AI and ML) are closely related and while I died while taking them they taught me more about coding, writing, and teamwork than any other class

Question 2 - Q2) Choose up to 3 courses in the curriculum that you found least valuable





#	Field	Choice Count
1	CSCI 107	3.85% 1
2	CSCI 112	0.00% 0
3	CSCI 127	7.69% 2
4	CSCI 132	7.69% 2
5	CSCI 204	0.00% 0
6	CSCI 215CS	11.54% 3
7	CSCI 232	0.00% 0
8	CSCI 246	7.69% 2
9	CSCI 305	15.38% 4
10	CSCI 331	0.00% 0
11	CSCI 338	19.23% 5
12	CSCI 347	0.00% 0
13	CSCI 351	0.00% 0
14	CSCI 366	3.85% 1
15	CSCI 432	3.85% 1
16	CSCI 440	0.00% 0
17	CSCI 442	0.00% 0
18	CSCI 443	3.85% 1
19	CSCI 445	0.00% 0
20	CSCI 446	0.00% 0
21	CSCI 447	0.00% 0
22	CSCI 451	0.00% 0
23	CSCI 460	7.69% 2

#	Field	Choice Count
24	CSCI 466	0.00% 0
25	CSCI 468	0.00% 0
26	CSCI 476	0.00% 0
27	ESOF 322	7.69% 2
28	ESOF 422	0.00% 0
29	ESOF 423	0.00% 0
30	CS 145RA	0.00% 0

Question 2-explain - Q2-EX) Please explain your answer to least valuable courses

question

Q2-EX) Please explain your answer to least valuable courses question

CSCI338 was incredibly abstract, so much that I didn't get anything valuable from it. The important subjects covered that I believe a graduate will need to know was better covered in many other classes.

For 215, I feel like the information is important to know and keep in mind, but the class beats the horse to death and then drops a nuclear bomb on the dead horse. Its so overkill and I felt incredibly bored by the structure of the class. 322 was incredibly confusing and I dont feel like I got a very good understanding out of it. While I understand why the course material is important, it generally felt like it would only be useful if I went into a certain job and was interested in doing that kind of work. 443 Is similar to 215, I'm not super interested in the course material and I have a hard time seeing past the "common sense" information.

i would say that overall i find these classes to be the hardest in the degree and there is not much support around them. also, we dont use a lot of what we learned here out in the real world, according to professionals.

I feel like this class was almost too basic. There was a bit of overlap with 232 and 232 could just absorb all of 132.

I didn't actually learn anything applicable in 215CS and I struggled to learn in 246 because I had 6 different professors in the semester I took it and the class was very unorganized.

I already knew all of the material for this course, but I understand its value for most programming novices.

These classes were the least useful because the professor who taught these course to me did not care about the courses, and did not but any extra effort into teaching them, and I felt like they were classes that I just showed up to get a credit to graduate. If they had been taught by a professor who had cared I would have felt differently about the class.

CSCI 305: Programming Languages just didn't excite me. Every two ish weeks, we'd begin covering a new programming language to the point where we could make an introductory program, and then would abandon it for another language. All of those languages that we used are probably good to know, but I haven't touched any of them since this course. CSCI 338: CS Theory is definitely important and good for students to know, but similar to what I mentioned above, I haven't thought about anything from this course since I took it. Although I could immediately after I took the course, I couldn't tell you what a Turing Machine or automata is currently, simply because I haven't given this course a single thought since I took it.

215 was not helpful at all. I never understood the point of taking an ethics class. Why isn't that just covered in other classes as a side note? Having a class specifically for this is overkill and frankly probably not very effective. I think ethics root from morals. CSCI 305 is unfortunately the most useless class I've taken in the cs curriculum. Forcing students to take this class is arbitrary and disrespectful in my opinion. The class doesn't actually cover very relevant languages and the assignments are so trivial you don't even learn anything about the language. If the university really wanted people to learn more languages they would strategically pick languages and assign them to different classes so that a student could become proficient rather than just waste their time writing one-off scripts that won't teach them anything. The teacher for this class also does not take anything seriously. There is a serious lack of care and to allow him to teach so many classes feels like a lazy excuse when there are certainly better and more motivated professors out there. CSCI 366 could be a good class, but the issue mainly roots from the professor. This is the same professor that is mentioned above,. I think the department needs to seriously reconsider their options. OS would have been an awesome class, but the lack of effort and actually knowledge in the subject made me feel like I was being cheated out of my education. The teacher couldn't even answer the questions on the exam, the answers were pulled from online sources, like chegg, with incomplete answers. I think the department needs to evaluate the professors more rigorously. There are awesome teachers, but the bad ones really bring down the overall fulfillment with the program. I don't know why other classes required in the curriculum are not mentioned here. It is extremely frustrating that CS students are forced to take random science courses. This feels like a complete waste of time. Having to devote attention to topics like plant science and earth science feels like a direct measure to keep students at the university longer and capture more tuition. Additionally, not taking AP credits in non-calculus-based physics feels completely unfair. The material covered in that class is far more extensive and the course load is more substantial than most if not all of the available science courses for cs majors

These courses are the least valuable because the professors that taught them created more confusion than knowledge.

Q2-EX) Please explain your answer to least valuable courses question

One reason I say 107 is because I believe it is the first coding course and you teach it in python. I think that python should not be the first coding language that a person should learn as it confuses the rest of the languages later on; however, if you learn java or c first while there are harder coding languages in general make more sense and it is easy to go back to python later.

Question 3 - Q3) Are there any important topics missing from the curriculum?

Q3) Are there any important topics missing from the curriculum?

Entry level AI/ML course.

I feel like embedded programming is incredibly lacking. I am currently in embedded systems and while I feel like I am learning a lot, it is almost entirely self taught. I would like a stronger foundation in C that leads naturally into embedded and computer vision. These were classes I was incredibly interested to take but have struggled to feel like I understand them or would feel confident working in that area.

high performance computing, machine learning, AI, etc

I think having more ethics courses around CS would be beneficial

More emphasis on file structures and creating projects that incorporate multiple languages and how they integrate.

Not that I can think of.

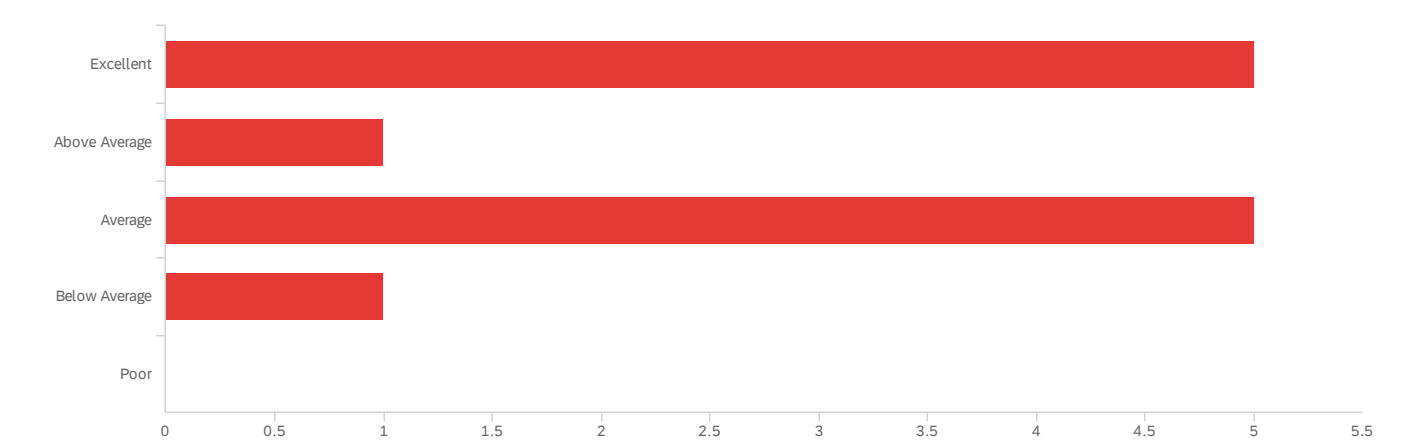
I think working with cloud computing software such as AWS and Azure is critical for students futures, and the fact that our program does not work with these at all is a disservice to every graduate of this program.

Databases! It's not missing from the curriculum as it's included with CSCI 440. However, when I interned in Wisconsin over the summer, many of my peers (who graduated from Wisconsin universities) looked at me like I was crazy when I told them that I had went through three years of a bachelor's degree in computer science without being introduced to databases. Many of them were introduced in their freshman or sophomore years, and it would have been very valuable to begin looking into databases earlier (and would definitely help with the interdisciplinary capstone as well).

Cloud computing. a class that offers help on solving leet-code problems to help people get jobs. a class and tests and test driven development

I wish there was a dedicated github team coding project. If we could have been taught how to pull and push with a team I think this is an invaluable skill to learn. I know there are team projects, but you just learn this through trial and error and a lot of merge conflicts. I wish I could have been taught a bit more about github and tools similar to it for teamwork.

Question 4 - Q4) How do you rate your advising experience?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q4) How do you rate your advising experience?	1.00	4.00	2.17	1.07	1.14	12

#	Field	Choice Count
1	Excellent	41.67% 5
2	Above Average	8.33% 1
3	Average	41.67% 5
4	Below Average	8.33% 1
5	Poor	0.00% 0
		12

Showing rows 1 - 6 of 6

Question 4-explain - Q4) Please explain your answer to the advising question

Q4) Please explain your answer to the advising question

Didn't get much valuable advice from anyone except from Dr. Kaiser.

I had a mix up where I hadn't picked a minor resulting in me running into a number of course selection and graduation date mix ups. This on top of my minor advising was incredibly poor and I had to weasel my way into a class I hadn't completed the prereqs for to graduate when I intended to.

I was having an amazing advising experience when Shartyn was still employed but now my advising experience is much different since the professor I chose is busy with their own things.

Wasn't great, wasn't bad. Sometimes I felt lost when forming schedules.

My first year was great and when I changed advisors there was very little suggestions. I was basically my own advisor and just used my advisor to get the registration pin.

My advising experience was excellent, my advisors helped me navigate an unusual path through this degree given my mechanical engineering degree credits. I was helped in navigating the quickest way to achieve this degree while taking interesting and personally relevant course work.

I worked with Dr. Cummings and she put in effort to ensure that I had a good experience with my course selection.

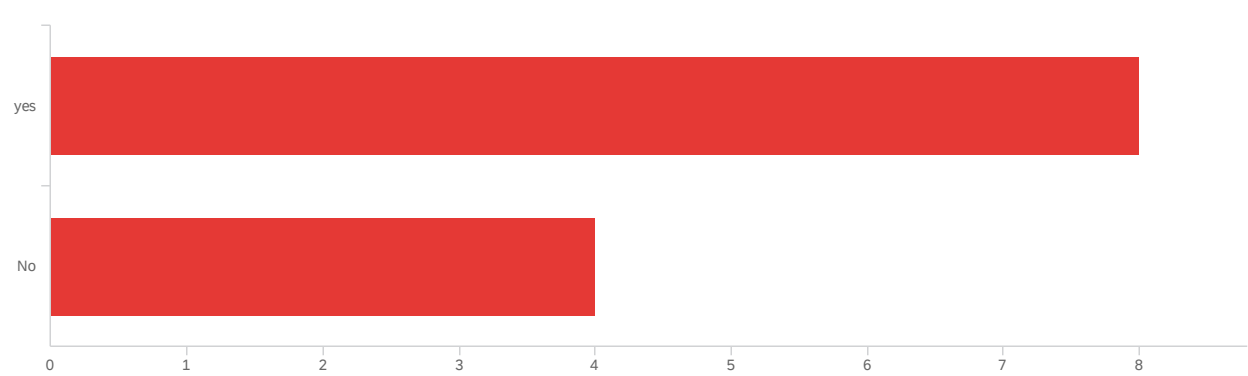
I hadn't written a single line of code before I came to MSU, and began by taking The Joy and Beauty of Computing (CSCI 107) with Dr. Paxton. I had asked him a couple of questions about courses going into my second semester and he offered to be my advisor. I've greatly enjoyed having Dr. Paxton as an advisor over the last four years. He's a welcoming and friendly face who will answer my questions honestly while encouraging me to do what's best for myself. He's been an incredibly valuable part of my college career and I'm very grateful for his guidance and support.

Cheralyn was absolutely amazing. But she wasn't my advisor. My advisor was too busy teaching classes to offer me any help. I have no issue with that. However, the school certainly has the budget to hire someone specifically for advising. Not doing that is rude to the teachers who have to fill this role. If this problem was fixed I think students would have a far better time. Also it is frustrating when you come to office hours and there is a whole slew of people there specifically for advising. I don't think the teachers appreciate this either. I don't think this cost-saving measure is doing anyone justice and should strongly be reconsidered.

My advisor, Professor Brendan Mumey has been the best professor and advisor I have had in all my years of college.

John Paxton was an amazing advisor and helped me with everything that I needed

Question 5 - Q5) Did you participate in an internship?



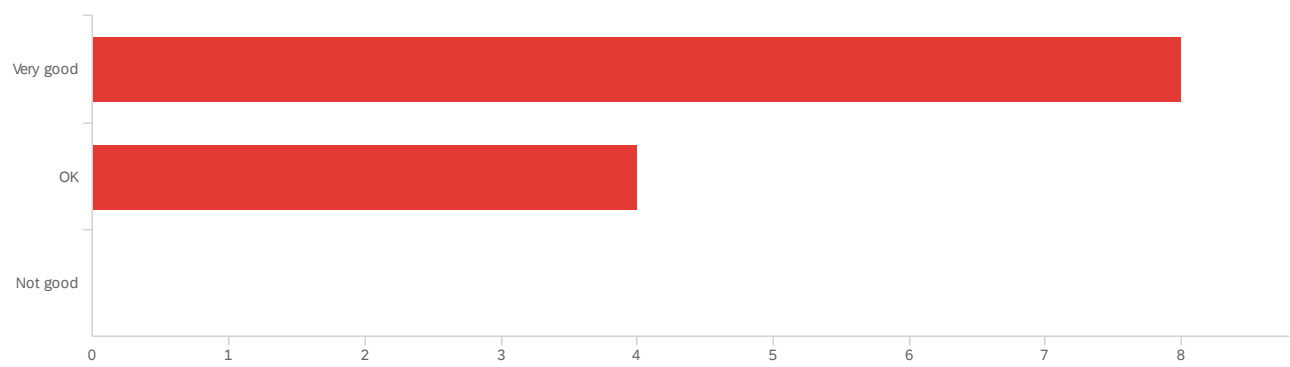
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q5) Did you participate in an internship?	1.00	2.00	1.33	0.47	0.22	12

#	Field	Choice Count
1	yes	66.67% 8
2	No	33.33% 4

12

Showing rows 1 - 3 of 3

Question 6 - Q6) How would you rate the quality of the communications (emails, CS website, discord, etc) you received from GSOC?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q6) How would you rate the quality of the communications (emails, CS website, discord, etc) you received from GSOC?	1.00	2.00	1.33	0.47	0.22	12

#	Field	Choice Count
1	Very good	66.67% 8
2	OK	33.33% 4
3	Not good	0.00% 0
		12

Showing rows 1 - 4 of 4

Question 6-explain - Q6-EX) Please explain your answer to the communications question.

Q6-EX) Please explain your answer to the communications question.

Emails seemed consistent and informative.

Lots of emails with relevant information, sometimes they dont pertain to me or im not interested but its important information nonetheless.

There are many emails that inform us of the different things going on around campus as well as things we may need for graduation, etc.

I like all the updates provided. I also like the use of Discord in some classes. Wish more classes would use it.

I never had any problems getting in touch with professors.

I received emails for all relevant and important information.

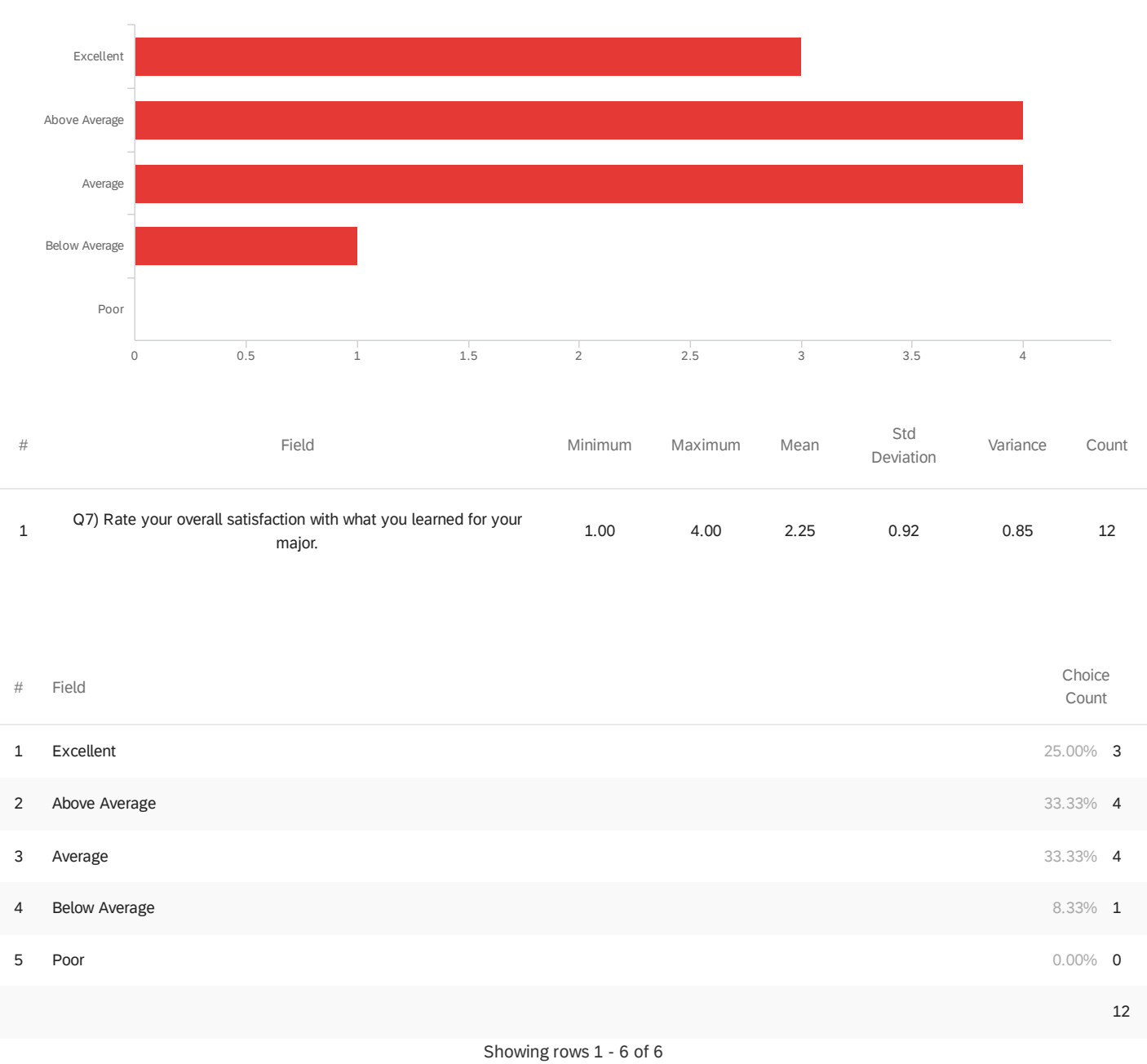
The communication was okay, but I was only introduced to it at junior level standing.

I got communications from the GSOC every once in a while and found them useful. I can't say I noticed anything "very good" or "very bad", but felt that the things that were necessary to know was communicated.

discord was very helpful when teachers participated and there were other helpful students.

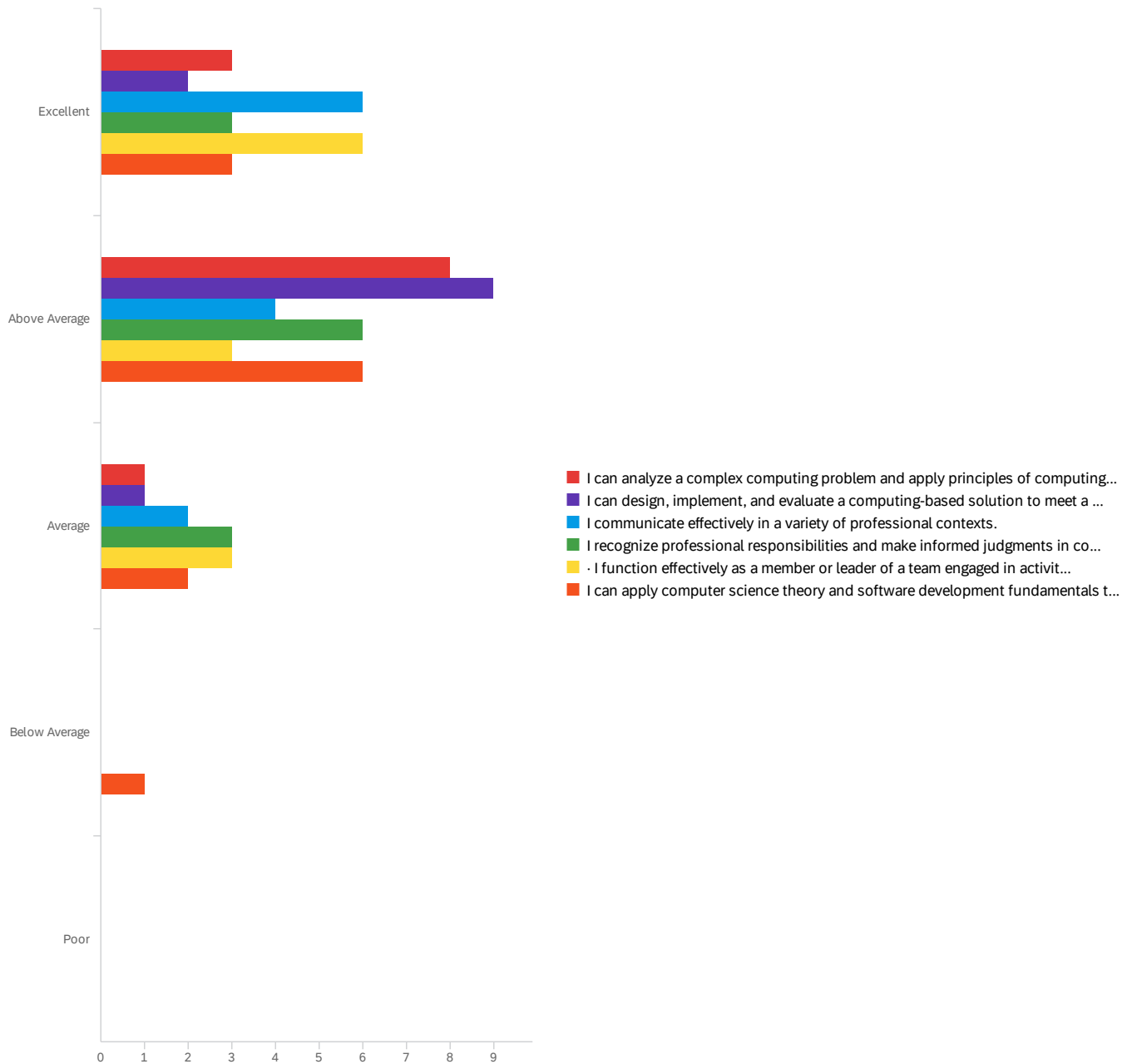
Some teachers are amazing at communication and others arent as good

Question 7 - Q7) Rate your overall satisfaction with what you learned for your major.



Question 8 - Q8) Indicate your level of preparedness in regard to the following CS

program. outcomes



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I can analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.	1.00	3.00	1.83	0.55	0.31	12
2	I can design, implement, and evaluate a computing-based solution to meet a given set of computing requirements.	1.00	3.00	1.92	0.49	0.24	12

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
3	I communicate effectively in a variety of professional contexts.	1.00	3.00	1.67	0.75	0.56	12
4	I recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	1.00	3.00	2.00	0.71	0.50	12
5	I function effectively as a member or leader of a team engaged in activities appropriate to my major.	1.00	3.00	1.75	0.83	0.69	12
6	I can apply computer science theory and software development fundamentals to produce computing-based solutions.	1.00	4.00	2.08	0.86	0.74	12

#	Field	Excellent		Above Average		Average		Below Average		Poor		Total
1	I can analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.	25.00%	3	66.67%	8	8.33%	1	0.00%	0	0.00%	0	12
2	I can design, implement, and evaluate a computing-based solution to meet a given set of computing requirements.	16.67%	2	75.00%	9	8.33%	1	0.00%	0	0.00%	0	12
3	I communicate effectively in a variety of professional contexts.	50.00%	6	33.33%	4	16.67%	2	0.00%	0	0.00%	0	12
4	I recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	25.00%	3	50.00%	6	25.00%	3	0.00%	0	0.00%	0	12
5	I function effectively as a member or leader of a team engaged in activities appropriate to my major.	50.00%	6	25.00%	3	25.00%	3	0.00%	0	0.00%	0	12
6	I can apply computer science theory and software development fundamentals to produce computing-based solutions.	25.00%	3	50.00%	6	16.67%	2	8.33%	1	0.00%	0	12

Showing rows 1 - 6 of 6

Question 9 - Q9) What was your favorite School of Computing experience?

Q9) What was your favorite School of Computing experience?

CS451

I really enjoy the camaraderie among class mates and the collaboration that exists in the CS program. While its not a close knit group I feel like we worked well together and were helpful to one another when it came to understanding and learning.

my favorite school of computing experience is always the women in engineering dinner!

The capstone project is a good experience.

All of my classes with Sean Yaw and Carson Gross. Sean is able to make every class exciting and Carson is very good at giving real world examples and explaining things at an easy to understand level.

I don't have a specific favorite experience. I had a good experience overall and I think that the department is being well-run.

The AI course was the first time I was given some issue to solve and not given source code to complete the problem, so it was enjoyable to solve a non trivial problem from scratch with a team.

The people! I've met great people in this department in my classes and will carry many of those relationships forward throughout my career. Bozeman is a dream of a place to have lived for the past four years and to be able to get a good education at the same time has been wonderful. There are definitely some things that I enjoyed greatly and things that I didn't enjoy as much, but I feel prepared going forward as I leave MSU.

the interdisciplinary capstone. This is hands-on learning. A lot of the rest is forced learning.

I dont have any in particular. I just remember late nights working through code

Question 10 - Q10) Is there anything else we should know?

Q10) Is there anything else we should know?

Nada

NA

nope!

I think there's too large of a difference between the Professional capstone (compilers) and the interdisciplinary project. I've heard this from other students as well. Interdisciplinary is significantly harder and more work

No

No

I feel as if the capstone for the interdisciplinary course is far more difficult than what I have heard about the Professional option, and is far more open ended than the capstones from other schools in the College of engineering, and I feel like it would be useful to have more sponsors for the class so we can build something for a client instead of building something random from scratch.

N/A

i think the department has some great teachers, yaw, gross, reese, clem. Some other grad students who taught courses. But I think if you value the students you need more stellar teachers like this to teach other classes. granted i haven't had every professor, but certain ones have made my experience subpar. The goal of this i hope was to get truthful responses from students. I only meant to be candid in my answers. I hope they are taken seriously so the program can be better for future students.

End of Report