

# Computer Science Program Senior Survey

(On the Undergraduate Experience in Computer Science at Carroll College)

The objectives of this survey are to:

- a) Determine if the computer Science program is achieving the goals/learning outcomes stated in the catalog.
- b) Determine what, if any, changes are needed to improve our abilities to meet those goals/learning outcomes.

## (I). General Information

1. First enrolled at Carroll as (circle one): Freshman \_\_\_\_ Transfer \_\_\_\_
2. Select one:
  - Computer Science was my first major \_\_\_\_\_
  - I switched major to Computer Science \_\_\_\_\_
3. The number of semesters it took me to finish the degree: \_\_\_\_\_
4. Do you have a disability that affects your ability to perform as a student?  
Yes \_\_\_\_ No \_\_\_\_
5. Your approximate GPA: \_\_\_\_\_  
Do you think that your GPA reflects your level of preparedness? \_\_\_\_\_
6. Employment while in school:  
Full time \_\_\_\_\_  
Part time each semester \_\_\_\_\_  
Occasionally part time \_\_\_\_\_  
Work during summer \_\_\_\_\_  
Do not work \_\_\_\_\_
7. What are your immediate post-graduation goals? (Circle one)
  - a) Obtain a position in the IT industry  
If you already had an offer, what's the name of the firm? \_\_\_\_\_  
What technical position will you be in? \_\_\_\_\_
  - b) Obtain a position in another technical or science-related industry \_\_\_\_\_
  - c) Attend graduate school \_\_\_\_\_  
What would be the area of study? \_\_\_\_\_
  - d) Don't know or have not finalized my plans yet \_\_\_\_\_

## (II). Teaching and Educational Environment

Please rate the following items using the numerical key as:

1 – poor, 2 – fair, 3 – good, 4 – very good, 5 – excellent

1. Quality of teaching by Computer Science faculty \_\_\_\_
2. Quality of laboratories and classrooms \_\_\_\_
3. Quality of academic advising and information \_\_\_\_
4. Access to Computer Science courses and course sections \_\_\_\_
5. Fairness of student performance evaluation procedures \_\_\_\_
6. Accessibility of faculty in general \_\_\_\_

7. Communication between faculty and students regarding student needs and concerns \_\_\_\_
8. Library system (online or its book collection) regarding your Computer Science study needs \_\_\_\_
9. How satisfied were you with your major in Computer Science? \_\_\_\_

### (III). Particular Areas of Concerns

#### *Communication skills and Ethics*

1. To what extent did computer science courses involve you in *significant* experiences with *written communication* (e.g., papers, group projects, feedbacks, etc.)?  
None \_\_\_\_ A little \_\_\_\_ Somewhat \_\_\_\_ A fair amount \_\_\_\_ A great deal \_\_\_\_ Don't know \_\_\_\_
2. To what extent did computer science courses involve you in *significant* experiences with *spoken communication* (e.g., presentation, group projects, tutoring, etc.)?  
None \_\_\_\_ A little \_\_\_\_ Somewhat \_\_\_\_ A fair amount \_\_\_\_ A great deal \_\_\_\_ Don't know \_\_\_\_
3. How much do you think your experiences as a computer science major have contributed to the improvement (if any) of your overall communication skills?  
None \_\_\_\_ A little \_\_\_\_ Somewhat \_\_\_\_ A fair amount \_\_\_\_ A great deal \_\_\_\_ Don't know \_\_\_\_
4. Please check any of the following that you found particularly useful in improving your communication skills.  
Paper \_\_\_\_ Presentation \_\_\_\_ Group Projects \_\_\_\_ Tutoring \_\_\_\_ Giving feedbacks \_\_\_\_
5. To what extent did computer science courses expose you the issues of the *ethics of computing and information processing*?  
None \_\_\_\_ A little \_\_\_\_ Somewhat \_\_\_\_ A fair amount \_\_\_\_ A great deal \_\_\_\_ Don't know \_\_\_\_

#### *Teamwork experience*

1. To what extent did computer science courses involve you in *significant* experiences working in teams?  
None \_\_\_\_ A little \_\_\_\_ Somewhat \_\_\_\_ A fair amount \_\_\_\_ A great deal \_\_\_\_ Don't know \_\_\_\_
2. To what extent are you satisfied with your teamwork experiences at Carroll?  
Satisfied \_\_\_\_ Somewhat satisfied \_\_\_\_ Not satisfied but I like teamwork idea \_\_\_\_  
Not satisfied but I don't like teamwork idea anyway \_\_\_\_
3. If you are not satisfied with your teamwork experiences, what were the problems you have observed (please be specific)?

4. Are there any suggestions you want to give to improve the quality of teamwork in computer science courses?

### *Problem solving*

1. To what extent did computer science courses involve you in *significant* problem-solving experiences?

None \_\_\_ A little \_\_\_ Somewhat \_\_\_ A fair amount \_\_\_ A great deal \_\_\_ Don't know \_\_\_

2. Please check any of the following that you found particularly useful in improving your problem-solving skills.

Homework \_\_\_ Exams \_\_\_ Projects \_\_\_ Group work \_\_\_ Extra credit questions \_\_\_

3. To what extent do you think your problem-solving experiences as a computer science major have contributed to the improvement of your overall problem-solving skills?

None \_\_\_ A little \_\_\_ Somewhat \_\_\_ A fair amount \_\_\_ A great deal \_\_\_ Don't know \_\_\_

4. How much do you feel that your problem-solving ability improved at Carroll?

None \_\_\_ A little \_\_\_ Somewhat \_\_\_ A fair amount \_\_\_ A great deal \_\_\_ Don't know \_\_\_

5. To what extent has your study of computer science influenced your thinking outside of computer science?

None \_\_\_ A little \_\_\_ Somewhat \_\_\_ A fair amount \_\_\_ A great deal \_\_\_ Don't know \_\_\_

6. Are there any particular courses that might have attributed more significantly than others to the improvement of your problem-solving skills?

### **(VI). Open-Ended Questions**

1. One of our goals is to prepare students to be effective IT professionals in the IT Industry. Regardless of your future plans do you feel prepared to work as an entry level IT professional? Why or why not?

2. The primary way we try to meet our objectives is through the design of our curriculum.

- a) What areas of the curriculum do you feel were strong and where do you feel that improvements may be needed?
  - b) What course or courses have had the greatest impact on you as a computer science major? Why?
  - c) Is the number of credits for each course consistent with the amount of work?
  - d) Are the prerequisites for the courses too strict, just right, not enough?
  - e) Are there topics which you would like to see included in the curriculum?
  - f) Is there a balance between theory, practice, and teamwork in the courses you took?
3. You took classes from different faculty members. What are the attributes of faculty that helped you to have learned the most in any Computer Science course?
4. The aspects of the Computer Science program that were most helpful to your pursuit of an education at Carroll
5. Please comment on advising you received as a computer science major about course selection, resolving issues, and career plans.

6. Did you seek computer science tutoring at some point during your years at Carroll? If you did, did the tutoring meet your needs?

7. What do you see as strengths of the Carroll computer science program?

8. What do you see as weaknesses of the Carroll computer science program?

#### (V). Program "Learning Outcomes" Survey

Listed below left are the "learning outcomes" of the Computer Science program. These are what we expect our graduates to be able to do. Please read them through carefully and assign a numeric score to each one. Indicate where you think we can make improvements in the right hand column. The numeric keys are: 1 – poor, 2 – fair, 3 – good, 4 – very good, 5 – excellent

Learning Outcome	Score	Suggestions for Improvements
1. Problem-solve (for business, scientific, Web, and recreational problems) through programming, using multiple programming paradigms, enterprise resources, different software development frameworks, sound software design techniques and software engineering practices.		
2. Be competitive in the net-centric world of computing in terms of being knowledgeable about architecture of the Internet and capable of developing		

and maintaining web software.		
3. Successfully work in or be adapted to an organization in any business setting to meet technology challenges.		
4. Further their academic pursuits and meet challenges in graduate schools by having the necessary body of theory that underpins the discipline of computer science.		
5. Demonstrate an understanding of ethics as it applies to the discipline of computer science.		
6. Demonstrate the ability to work effectively as part of a team.		

*Thank you so much for your feedback!*