Instructions: Fill in your name, student ID number, and index number (for course) on the Opscan form. For “Group”, fill in:

<table>
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<th></th>
<th>CS Major: 1</th>
<th>CpE Major: 2</th>
<th>Other: 3</th>
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<td>Group</td>
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</table>

For questions 1 through 20:

1. more than 5 programs
2. 2 to 5 programs
3. only one program
4. Not at all
5. Not sure

Prior to taking CS 2704, to what extent have you done the following as part of a course at Virginia Tech?

1. programmed using standard stream I/O (cin and cout)?
2. programmed using file stream I/O?
3. programmed using pointers?
4. programmed using structs (not classes)?
5. programmed using an array of structs?
6. programmed using string objects to hold character data?
7. programmed using char arrays to hold character data?
8. programmed using dynamic memory management (new and delete)?
9. programmed a linked list implementation yourself?
10. programmed using a supplied linked list implementation?
11. programmed a queue or stack implementation yourself?
12. programmed using a supplied queue or stack implementation?
13. programmed using standard library classes?
14. programmed using classes you wrote yourself?
15. programmed overloaded function definitions?
16. programmed overloaded operators?
17. programmed using inheritance?
18. programmed using standard template library classes?
19. programmed using templated classes you wrote yourself?
20. programmed using exceptions (throw and catch)?
21. Prior to taking CS 2704, the largest program you have written for a class at Virginia Tech contained:

1) less than 500 statements
2) 500 to 1000 statements
3) 1001 to 3000 statements
4) more than 3000 statements

22. Prior to taking CS 2704, the largest program you have written for a class at Virginia Tech contained:

1) less than 10 functions
2) 11 to 50 functions
3) more than 50 functions

23. Prior to taking CS 2704, the largest program you have written for a class at Virginia Tech contained:

1) no user-defined classes
2) less than 5 user-defined classes
3) more than 5 user-defined classes

Prior to taking CS 2704, in classes at Virginia Tech,

24. ...what external design documents were required for your programs?

1) outlines
2) modular structure charts
3) class diagrams
4) class/operation forms
5) all of the above
6) 1 and 2 only
7) 3 and 4 only
8) 2 and 3 only
9) 1, 2 and 3 only
10) None of these

25. ...were you required to conform to any formally specified standards for internal documentation (such as the Elements of Programming Style)?

1) Yes
2) No

26. ...did you discuss the runtime stack maintained by the system for an executing process?

1) Yes
2) No

27. ...did you discuss the system heap?

1) Yes
2) No

28. ...did you have programming assignments that involved working in a group?

1) Yes
2) No

29. You were admitted to Virginia Tech as:

1) freshman
2) transfer student
3) Other

30. Your academic level is:

1) Freshman
2) Sophomore
3) Junior
4) Senior
5) other