# Note from John Briggs, Office of Institutional Effectiveness, on data validity

For the employer and alumni survey you had 3 quantitative questions each. You had 15 responses out of 107 employers. This would give you a margin of error +-20%. You had 11 responses out of 200 alumni. This would give you a margin of error of +-25%.

However, the most important questions are the qualitative questions. This is what you are going to use to plan for the future direction of your department. Because this asks about the specific strength and weaknesses in the program. It is a little more difficult to determine validity and reliability for qualitative data but there are methods.

The first, is generalizability, you have approximately 14% of the employers taking the survey. If all said, for instance, that your graduates understand coding very well, then you could generalize to the entire population. If, however, only one person points out that your graduates are lacking in critical thinking, for example, then this is something that needs to be explored further.

This leads us to the second method, triangulation. Triangulation is confirming results through other data. For instance, you did do a survey last year. If you found the same results as in this year's survey as in last, then perhaps critical thinking maybe a problem even though only one person said it was so in this year's survey. Other ways you can collect data is through focus groups and one-on-one interviews. So, if you find results in this year's survey and want to confirm it, I would try to do this.

Data collection doesn't have to be very formal. For instance, you can call people on the phone and ask them about the results you found in the survey and get their opinion about it. The important point is to confirm the results independent of the survey.

I hope this helps chart the future in your completing the accreditation for your department. A good article on validity and reliability can be found,
<http://www.nova.edu/ssss/QR/QR8-4/golafshani.pdf>.