



Sample Diagnostic Report for Computer-Based Exams

Diagnostic Report

The purpose of the diagnostic report on the next page is to provide feedback about your exam performance and to help focus your preparations for retaking the exam. The report cannot be used to determine the passing score.

The **Your Performance column** indicates your result by knowledge area converted to a scaled score of 0–15. The scaled score conversion is necessary to ensure that diagnostic reports are consistent across all computer-based exams. This also allows comparison of results by an examinee on multiple attempts. *The number of questions you answered correctly cannot be determined from this scaled score.*

The **last column** represents your performance in a knowledge area compared to the average performance of passing examinees. For each knowledge area, the portion of the bar between your performance (solid line) and the average performance of the passing examinees (dashed line) indicates the relative difference between your performance and the performance of the passing examinees.

Performance in a **knowledge area significantly below** that of the passing examinees contributed to your failing results. Substantial study of this material is recommended before retaking the exam.

Performance in a **knowledge area near or just above** that of the passing examinees indicates your understanding may be improved by further study, thus improving your chances of passing the exam.

Each exam includes a limited number of **pretest items** that will not be scored and will not have an impact on your results. This is common practice within high-stakes testing and allows NCEES to evaluate the pretest items for potential use in future exams. These items are randomly placed within the exam and are not identifiable as pretest items.

COMPUTER
EXAMS






NCEES

Sample Diagnostic Report for Computer-Based Exams

NCEES provides a diagnostic report to all examinees who do not pass to help them identify the knowledge areas in which they need to improve before retaking the exam. The purpose of this report is to provide general information on the performance of the examinee; it is not designed to be used for any other purpose.

The report shows the knowledge area, along with the number of items in each knowledge area and the examinee's performance in terms of a scaled score from 0–15. The report also provides information showing the examinee's relative performance in each knowledge area compared to the average performance of the passing examinees. The performance comparison chart is not shown to scale and simply indicates the relative performance to assist the examinee in preparing to retake the exam.

Please see the sample diagnostic report for the FE Electrical and Computer exam on the following pages. In reviewing the report, here is how the examinee should interpret the results. Colors shown are for illustrative purposes only. Actual reports are grayscale.

-  Mathematics, Probability and Statistics, Power, and Computer Networks: My performance in these areas ranged from 7.4–8.2, consistently lower than the average score of passing examinees. There is definite room for improvement in these areas.
-  Ethics and Professional Practice, Properties of Electrical Materials, Engineering Sciences, and Electromagnetics: My performance in these areas ranged from 5.3–8.2, significantly lower than the average score of passing examinees. These are areas where I need to focus before retaking the exam.
-  Engineering Economics, Circuit Analysis, Linear Systems, Signal Processing, Electronics, Control Systems, Communications, Digital Systems, Computer Systems, and Software Development: My performance in these areas ranged from 8.1–15 and was very close to the average performance of passing examinees—a little lower in some areas and higher in others. I should review these areas before retaking the exam to try to improve, but there are other areas that need more of my focus.

My study priorities before retaking the exam need to be as follows:

1. Mathematics, Probability and Statistics, Power, and Computer Networks—very strong focus. Even though my performance was closer to the passing examinees than the green topics, there are 26 questions in these areas versus 18 in the blue topics, therefore giving me more opportunity to improve.
2. Ethics and Professional Practice, Properties of Electrical Materials, Engineering Sciences, and Electromagnetics—strong focus
3. Engineering Economics, Circuit Analysis, Linear Systems, Signal Processing, Electronics, Control Systems, Communications, Digital Systems, Computer Systems, and Software Development—general review

For more information on the knowledge areas included in each of the FE and FS exams, download exam specifications at nces.org/exams.

COMPUTER-BASED EXAMS

Sample Diagnostic Report
 Examinee Name - ID, Number
 Exam Date MM/DD/YYYY



FE Electrical and Computer

	Knowledge Area	Number of Items	Your Performance (on a scale of 0-15)	Your Performance Compared to the Average Performance of Passing Examinees
1	Mathematics	11	7.8	
2	Probability and Statistics	4	8.2	
3	Ethics and Professional Practice	3	7.1	
4	Engineering Economics	3	9.4	
5	Properties of Electrical Materials	4	7.1	
6	Engineering Sciences	6	8.2	
7	Circuit Analysis	10	8.3	
8	Linear Systems	5	8.1	
9	Signal Processing	5	8.7	
10	Electronics	7	8.9	
11	Power	8	7.4	
12	Electromagnetics	5	5.3	
13	Control Systems	6	9.1	
14	Communications	5	8.8	
15	Computer Networks	3	7.8	
16	Digital Systems	7	11.0	
17	Computer Systems	4	8.7	
18	Software Development	4	15.0	

