

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.

FE Mechanical

				Your Performance Compared to the Average Performance of Passing Examinees
	Knowledge Area	Number of Items	Your Performance (on a scale of 0 - 15)	Average of Passing Examinees = Your Performance =
1	Mathematics	6	4.4	
2	Probability and Statistics	4	8.0	
3	Ethics and Professional Practice	4	8.3	
4	Engineering Economics	4	10.1	
5	Electricity and Magnetism	5	8.5	
6	Statics	9	7.3	
7	Dynamics, Kinematics, and Vibrations	10	5.8	
8	Mechanics of Materials	9	0.0	
9	Material Properties and Processing	7	8.4	
10	Fluid Mechanics	10	5.7	
11	Thermodynamics	10	5.1	
12	Heat Transfer	7	6.9	
13	Measurements, Instrumentation, and Controls	5	7.1	
14	Mechanical Design and Analysis	10	7.8	