

Principles and Practice of Engineering (PE) Subject Matter Report by Major and Examination Jul 01-Dec 31, 2022 First-Time Examinees from EAC/ABET-Accredited Engineering Programs Examinees testing more than 12 months after graduation date

Name of Institution:		University of Kentucky, Lexington					
Major:	Agricultural	PE Examination:	Civil: Water Resources and Environmental				

	Institution	ABET Comparator ²
No. Examinees Taking ¹	2	12
No. Examinees Passing	1	4
Percent Examinees Passing	50%	33%

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
Hydraulics-Closed Conduit	4	10.6	8.4	3.1	1.26	0.71
Hydraulics-Open Channel	4	11.3	9.8	3.7	1.15	0.41
Hydrology	6	11.9	10.0	2.5	1.19	0.76
Groundwater and Wells	3	12.1	10.8	3.6	1.12	0.36
Wastewater Collection and Treatment	5	10.0	8.0	1.9	1.25	1.05
Water Quality	3	10.5	10.4	3.9	1.01	0.03
Drinking Water Distribution and Treatment	5	12.2	8.3	2.5	1.47	1.56
Engineering Economics Analysis	1	7.5	7.5	7.5	1.00	0.00

<u>0</u> examinees have been removed from this data because they were flagged as a random guesser.
Comparator includes all examinees from programs accredited by the ABET commission noted.
Performance index is based on a 0–15 scale.
These scores are made available for assessment purposes. See the NCEES publication entitled Using the FE as an Outcomes Assessment Tool at https://ncees.org/education/outcomes-assessment/.

TERMS AND CONDITIONS OF DATA USE



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Name of Institution:		University of Kentu	icky, Lexington		
Major:	Agricultural	PE Examination:	Env	vironmental	
			Institution	ABET Comparator ²	

No. Examinees Taking ¹	1	6	
No. Examinees Passing	0	2	
Percent Examinees Passing	0%	33%	
-			

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Scaled Score ⁴
Water: Principles	3	8.8	9.6	2.5	0.92	-0.32
Water: Wastewater	7	10.1	9.7	2.7	1.04	0.15
Water: Stormwater	2	15.0	11.0	5.9	1.36	0.68
Water: Potable Water	7	8.8	8.2	0.8	1.07	0.75
Water: Water Resources	2	8.5	10.1	5.6	0.84	-0.29
Air: Principles	7	9.4	8.1	1.7	1.16	0.76
Air: Pollution Control	7	8.4	6.6	3.3	1.27	0.55
Solid and Hazardous Waste: Principles	5	6.5	7.2	4.5	0.90	-0.16
Solid and Hazardous Waste: Municipal and Industrial Solid Waste	4	8.2	7.5	4.6	1.09	0.15
Solid and Hazardous Waste: Hazardous, Medical, and Radioactive Waste	2	8.3	10.2	3.5	0.81	-0.54
Site Assessment and Remediation: Principles	5	7.5	7.7	1.6	0.97	-0.13
Site Assessment and Remediation: Applications	7	6.9	6.9	1.7	1.00	0.00
Environmental Health and Safety: Principles	3	7.7	10.0	3.5	0.77	-0.66
Environmental Health and Safety: Applications	4	9.1	8.7	3.1	1.05	0.13
Associated Engineering Principles: Principles	2	0.0	7.7	6.1	0.00	-1.26
Associated Engineering Principles: Applications	3	8.8	7.1	1.2	1.24	1.42

Uncertainty Range for Scaled Score ⁴ ± 1.00

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Name of Institution:		University of Kentucky, Lexington				
Major:	Agricultural	PE Examination:	Mechanical: HVAC and Refrigeration			

	Institution	ABET Comparator ²
No. Examinees Taking ¹	1	1
No. Examinees Passing	1	1
Percent Examinees Passing	100%	100%

	Number	Institution Average	ABET Comparator	ABET Comparator	Ratio	Score ⁴ ± 1.00
	of Exam Questions	Performance Index ³	Average Performance Index	Standard Deviation	Score ⁴	Score ⁴
Principles: Basic Engineering Practice	4	15.0	15.0	0.0	1.00	-
Principles: Thermodynamics	4	7.7	7.7	0.0	1.00	-
Principles: Psychrometrics	7	15.0	15.0	0.0	1.00	-
Principles: Heat Transfer	6	10.1	10.1	0.0	1.00	-
Principles: Fluid Mechanics	3	15.0	15.0	0.0	1.00	-
Principles: Energy/Mass Balances	4	9.5	9.5	0.0	1.00	-
Applications: Heating/Cooling Loads	7	8.8	8.8	0.0	1.00	-
Applications: Equipment and Components	16	8.2	8.2	0.0	1.00	-
Applications: Systems and Components	16	9.8	9.8	0.0	1.00	-
Applications: Supportive Knowledge	3	8.3	8.3	0.0	1.00	-

Uncertainty Range for Scaled

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No. Examinees Passing

Percent Examinees Passing

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Name of Institution:	University of Kentucky, Lexington				
Major:	Chemical	PE Examination:		Chemical	
			Institution	ABET Comparator ²	
No. Examinees Taking ¹			2	148	

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Uncertainty Range for Scaled Score ⁴ ± 0.71 Scaled Score ⁴
Mass/Energy Balances/Mass Balances	6	9.7	9.8	3.1	0.99	-0.03
Mass/Energy Balances/Energy Balances	6	7.6	10.1	3.4	0.75	-0.74
Thermodynamics/Basic Thermodynamics	4	9.4	10.4	3.4	0.90	-0.29
Thermodynamics/Chemical Equilibria	3	7.2	9.1	4.3	0.79	-0.44
Thermodynamics/Phase Equilibria	4	11.0	9.6	3.8	1.15	0.37
Heat Transfer/Fundamentals	5	7.9	9.3	3.4	0.85	-0.41
Heat Transfer/Applications	4	9.3	9.3	3.7	1.00	0.00
Chemical Reaction Engineering/Fundamentals	3	7.8	9.8	4.1	0.80	-0.49
Chemical Reaction Engineering/Applications	3	5.7	9.5	4.3	0.60	-0.88
Fluids/Fundamentals	5	8.7	10.2	3.5	0.85	-0.43
Fluids/Applications	5	8.5	9.2	3.1	0.92	-0.23
Mass Transfer/Fundamentals	3	6.2	10.1	4.1	0.61	-0.95
Mass Transfer/Applications	4	11.4	9.4	3.5	1.21	0.57
Plant Design and Operation/Safety, Health, and Environment	4	6.8	10.0	3.3	0.68	-0.97
Plant Design and Operation/Design	7	8.2	8.9	2.3	0.92	-0.30
Plant Design and Operation/Operation and Maintenance	4	8.3	9.1	3.8	0.91	-0.21

1

50%

91

61%

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No. Examinees Passing

Percent Examinees Passing

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Name of Institution:	University of Kentucky, Lexington			
Major: Chemical		Chemical PE Examination:		ronmental
			Institution	ABET Comparator ²
No. Examinees Taking ¹			1	37

						Scaled Score ⁴ ± 1.00
	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Scaled Score ⁴
Water: Principles	3	7.0	10.3	3.4	0.68	-0.97
Water: Wastewater	7	10.6	10.0	2.8	1.06	0.21
Water: Stormwater	2	15.0	11.6	4.6	1.29	0.74
Water: Potable Water	7	9.7	9.9	2.2	0.98	-0.09
Water: Water Resources	2	15.0	10.3	5.2	1.46	0.90
Air: Principles	7	8.4	9.2	2.4	0.91	-0.33
Air: Pollution Control	7	15.0	10.2	2.6	1.47	1.85
Solid and Hazardous Waste: Principles	5	10.4	9.1	2.7	1.14	0.48
Solid and Hazardous Waste: Municipal and Industrial Solid Waste	4	9.3	11.3	3.6	0.82	-0.56
Solid and Hazardous Waste: Hazardous, Medical, and Radioactive Waste	2	6.3	11.5	4.4	0.55	-1.18
Site Assessment and Remediation: Principles	5	7.9	10.3	3.3	0.77	-0.73
Site Assessment and Remediation: Applications	7	15.0	9.9	3.0	1.52	1.70
Environmental Health and Safety: Principles	3	8.9	10.0	4.4	0.89	-0.25
Environmental Health and Safety: Applications	4	9.3	11.2	3.3	0.83	-0.58
Associated Engineering Principles: Principles	2	7.1	11.1	5.7	0.64	-0.70
Associated Engineering Principles: Applications	3	8.5	10.8	3.9	0.79	-0.59

27

73%

Uncertainty Range for

1 100%

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Name of Institution:		University of Kentucky, Lexington			
Major:	Civil	PE Examination:	Civil: Construction		
			ABET		

	Institution	ABET Comparator ²
No. Examinees Taking ¹	6	503
No. Examinees Passing	5	243
Percent Examinees Passing	83%	48%

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Range for Scaled Score ⁴ ± 0.41 Scaled Score ⁴
Estimating Quantities and Costs	5	10.2	8.9	3.0	1.15	0.43
Construction Operations and Methods	6	10.3	8.7	2.5	1.18	0.64
Scheduling	5	8.6	9.4	3.4	0.91	-0.24
Material Quality Control and Production	5	10.6	9.6	3.1	1.10	0.32
Temporary Structures	6	9.4	8.9	2.5	1.06	0.20
Health and Safety	3	11.1	10.8	4.3	1.03	0.07

Uncertainty

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Name of Institution:		University of Kentucky, Lexington				
Major:	Civil	PE Examination:	Civil: Geotechnical			
			Institution ABET			

	Institution	Comparator ²	
No. Examinees Taking ¹	3	251	
No. Examinees Passing	1	116	
Percent Examinees Passing	33%	46%	

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Scaled Scaled ± 0.58
Soil Mechanics, Laboratory Testing, and Analysis	4	7.3	9.5	3.6	0.77	-0.61
Field Materials Testing, Methods, and Safety	3	10.4	9.6	4.1	1.08	0.20
Earthquake Engineering and Dynamic Loads	2	9.6	9.1	5.8	1.05	0.09
Earth Structures	4	10.1	9.8	3.7	1.03	0.08
Groundwater and Seepage	3	6.0	9.2	4.1	0.65	-0.78
Problematic Soil and Rock Conditions	3	9.4	9.0	3.7	1.04	0.11
Earth Retaining Structures (ASD or LRFD)	4	8.0	7.6	3.6	1.05	0.11
Shallow Foundations (ASD or LRFD)	4	8.7	9.3	3.6	0.94	-0.17
Deep Foundations (ASD or LRFD)	4	7.8	8.8	3.7	0.89	-0.27

Uncertainty

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Performance index is based on a 0–15 scale.

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Name of Institution:		University of Kentucky, Lexington			
Major:	Civil	PE Examination:	Civil: Structural		
			ABET		

	Institution	ABE I Comparator ²
No. Examinees Taking ¹	4	893
No. Examinees Passing	2	520
Percent Examinees Passing	50%	58%

						Range for Scaled Score ⁴ ± 0.50
	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Scaled Score ⁴
Analysis of Structures: Loads and load applications	4	11.5	9.3	3.5	1.24	0.63
Analysis of Structures: Forces and load effects	9	7.8	8.9	2.4	0.88	-0.46
Design and Details of Structures: Materials and material properties	4	9.2	9.9	3.5	0.93	-0.20
Design and Details of Structures: Component design and detailing	12	8.4	8.8	1.9	0.95	-0.21
Codes and Construction: Codes, standards, and guidance documents	4	10.7	9.8	3.5	1.09	0.26
Codes and Construction: Temporary structures and other topics	2	11.3	9.8	5.1	1.15	0.29

Uncertainty

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Name of Institution:		University of Kentucky, Lexington			
Major:	Civil	PE Examination:	Civil: Transporta	ation	
			Institution	ABET	
			monution	Comparator ²	

	Institution	Comparator ²	
No. Examinees Taking ¹	6	1,146	
No. Examinees Passing	3	700	
Percent Examinees Passing	50%	61%	

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
Horizontal Design	3	10.1	9.2	4.3	1.10	0.21
Vertical Design	3	11.1	10.1	4.4	1.10	0.23
Intersection Geometry	3	7.7	10.2	4.2	0.75	-0.60
Roadside and Cross-Section Design	3	10.8	10.2	4.0	1.06	0.15
Signal Design	3	9.0	10.5	4.2	0.86	-0.36
Traffic Control Design	3	8.4	11.6	4.0	0.72	-0.80
Geotechnical and Pavement	4	10.7	10.4	3.1	1.03	0.10
Drainage	2	8.6	11.1	4.9	0.77	-0.51
Alternatives Analysis	1	7.5	9.2	7.3	0.82	-0.23

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4.

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Name of Institution:			University of Kentucky, Lexington
Major:	Civil	PE Examination:	Civil: Water Resources and Environmental

	Institution	ABET Comparator ²
No. Examinees Taking ¹	8	993
No. Examinees Passing	5	646
Percent Examinees Passing	63%	65%

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Scaled Score 4 ± 0.35 Scaled Score 4
Hydraulics-Closed Conduit	4	9.6	9.5	3.4	1.01	0.03
Hydraulics–Open Channel	4	10.8	10.0	3.6	1.08	0.22
Hydrology	6	10.1	9.4	2.7	1.07	0.26
Groundwater and Wells	3	10.5	10.3	3.9	1.02	0.05
Wastewater Collection and Treatment	5	7.5	9.1	3.1	0.82	-0.52
Water Quality	3	11.0	9.9	4.3	1.11	0.26
Drinking Water Distribution and Treatment	5	9.0	9.4	3.0	0.96	-0.13
Engineering Economics Analysis	1	7.5	9.1	7.3	0.82	-0.22

Uncertainty

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Name of Institution:			University of Kentucky, Lexington
Major:	Electrical	PE Examination:	Electrical and Computer: Electronics, Controls, and Communications

	Institution	ABET Comparator ²
No. Examinees Taking ¹	2	110
No. Examinees Passing	2	80
Percent Examinees Passing	100%	73%

						Score ⁴ ± 0.71
	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Scaled Score ⁴
General Electrical Engineering Knowledge: Circuit Analysis	16	11.1	9.3	2.0	1.19	0.90
General Electrical Engineering Knowledge: Measurement and Instrumentation	5	9.3	9.1	2.5	1.02	0.08
General Electrical Engineering Knowledge: Safety and Reliability	2	12.0	6.0	5.9	2.00	1.02
General Electrical Engineering Knowledge: Signal Processing	5	8.1	11.6	3.8	0.70	-0.92
Digital Systems: Digital Logic	4	10.2	11.7	4.2	0.87	-0.36
Digital Systems: Digital Components	3	11.7	10.4	4.1	1.13	0.32
Electromagnetics: Electromagnetic Fields	3	15.0	11.5	3.7	1.30	0.95
Electromagnetics: Guided Waves	2	11.8	10.6	4.1	1.11	0.29
Electromagnetics: Antennas	2	4.8	7.3	6.1	0.66	-0.41
Electronics: Electronics Circuits	7	9.3	9.0	2.2	1.03	0.14
Electronics: Electronic Components and Applications	7	10.2	9.0	1.9	1.13	0.63
Control Systems: Analysis and Design of Analog or Digital Control Systems	7	9.0	10.4	3.1	0.87	-0.45
Communications: Modulation Techniques	2	7.5	11.8	4.7	0.64	-0.91
Communications: Noise and Interference	3	15.0	11.1	3.6	1.35	1.08
Communications: Communication Systems	2	4.7	7.0	6.0	0.67	-0.38

Uncertainty Range for Scaled

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Name of Institution:		University of Kentucky, Lexington			
Major:	Electrical	PE Examination:	Electrical and Computer: Power		
			ARET		

	Institution	ABET Comparator ²
No. Examinees Taking ¹	8	670
No. Examinees Passing	4	398
Percent Examinees Passing	50%	59%

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Hange for Scaled ± 0.35 Scaled Score ⁴
General Power Engineering: Measurement and Instrumentation	4	10.8	9.9	3.5	1.09	0.26
General Power Engineering: Applications	7	8.4	9.3	2.5	0.90	-0.36
General Power Engineering: Codes and Standards	10	8.3	9.4	2.1	0.88	-0.52
Circuits: Analysis	8	8.3	9.0	2.4	0.92	-0.29
Circuits: Devices and Power Electronic Circuits	6	7.8	9.1	2.4	0.86	-0.54
Rotating Machines and Electric Power Devices: Induction and Synchronous Machines	7	8.9	9.1	2.7	0.98	-0.07
Rotating Machines and Electric Power Devices: Electric Power Devices	7	8.3	9.1	2.8	0.91	-0.29
Transmission and Distribution (High, Medium, and Low Voltage): Power System Analysis	10	8.2	9.0	2.1	0.91	-0.38
Transmission and Distribution (High, Medium, and Low Voltage): Protection	11	8.5	9.0	1.9	0.94	-0.26

Uncertainty

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Name of Institution:	University of Kentucky, Lexington					
Major:	Mechanical	PE Examination:	Mechanical: HVAC and Ref	rigeration		
				ABET		
			Institution	Comparator ²		

	Institution	Comparator ²
No. Examinees Taking ¹	2	416
No. Examinees Passing	2	302
Percent Examinees Passing	100%	73%

	Number of Exam Questions	Institution Average Performance	ABET Comparator Average Performance	ABET Comparator Standard	Ratio Score ⁴	Scaled Score 4 ± 0.71 Scaled Score 4
		Index ³	Index	Deviation	4.07	0.77
Principles: Basic Engineering Practice	4	12.6	9.9	3.5	1.27	0.77
Principles: Thermodynamics	4	7.9	9.9	3.4	0.80	-0.59
Principles: Psychrometrics	7	9.8	10.0	3.0	0.98	-0.07
Principles: Heat Transfer	6	9.1	10.2	3.2	0.89	-0.34
Principles: Fluid Mechanics	3	11.0	10.3	3.9	1.07	0.18
Principles: Energy/Mass Balances	4	12.1	10.3	3.7	1.17	0.49
Applications: Heating/Cooling Loads	7	9.9	10.3	3.2	0.96	-0.13
Applications: Equipment and Components	16	10.1	9.4	1.8	1.07	0.39
Applications: Systems and Components	16	9.0	9.5	1.8	0.95	-0.28
Applications: Supportive Knowledge	3	11.3	10.7	4.0	1.06	0.15

Uncertainty Range for

Q examinees have been removed from this data because they were flagged as a random guesser.
Comparator includes all examinees from programs accredited by the ABET commission noted.
Performance index is based on a 0–15 scale.
These scores are made available for assessment purposes. See the NCEES publication entitled Using the FE as an Outcomes Assessment Tool at https://ncees.org/education/outcomes-assessment/.

TERMS AND CONDITIONS OF DATA USE



Principles and Practice of Engineering (PE) Subject Matter Report by Major and Examination Jul 01-Dec 31, 2022 First-Time Examinees from EAC/ABET-Accredited Engineering Programs Examinees testing more than 12 months after graduation date

Name of Institution:		University of Kentucky, Lexington						
Major:	Mechanical	Iechanical PE Examination: Mechanical: Machine Design and Materials						

	Institution	ABET Comparator ²
No. Examinees Taking ¹	1	228
No. Examinees Passing	0	141
Percent Examinees Passing	0%	62%

	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Range for Scaled ± 1.00 Scaled Score ⁴
Principles: Basic Engineering Practice	7	10.2	9.4	2.7	1.09	0.30
Principles: Engineering Science and Mechanics	9	8.1	9.1	2.0	0.89	-0.50
Principles: Material Properties	7	8.7	9.2	2.1	0.95	-0.24
Principles: Strength of Materials	9	8.4	9.2	2.2	0.91	-0.36
Principles: Vibration	3	6.5	9.1	4.1	0.71	-0.63
Applications: Mechanical Components	16	8.2	9.1	1.6	0.90	-0.56
Applications: Joints and Fasteners	10	8.5	9.1	2.0	0.93	-0.30
Applications: Supportive Knowledge	9	7.7	9.4	2.4	0.82	-0.71

Uncertainty

<u>0</u> examinees have been removed from this data because they were flagged as a random guesser.
Comparator includes all examinees from programs accredited by the ABET commission noted.
Performance index is based on a 0–15 scale.
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TERMS AND CONDITIONS OF DATA USE



Principles and Practice of Engineering (PE) Subject Matter Report by Major and Examination Jul 01-Dec 31, 2022 First-Time Examinees from EAC/ABET-Accredited Engineering Programs Examinees testing more than 12 months after graduation date

Name of Institution:	University of Kentucky, Lexington		
Major:	Mining/Mineral	PE Examination:	Civil: Geotechnical
			ABET

Institution Comparator ²	
No. Examinees Taking ¹ 1 4	
No. Examinees Passing 0 2	
Percent Examinees Passing 0% 50%	

-	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
Soil Mechanics, Laboratory Testing, and Analysis	4	0.0	7.8	5.3	0.00	-1.47
Field Materials Testing, Methods, and Safety	3	9.5	10.4	2.7	0.91	-0.33
Earthquake Engineering and Dynamic Loads	2	6.3	9.8	3.2	0.64	-1.09
Earth Structures	4	7.2	9.6	3.2	0.75	-0.75
Groundwater and Seepage	3	6.8	11.5	3.6	0.59	-1.31
Problematic Soil and Rock Conditions	3	9.0	9.1	0.1	0.99	-1.00
Earth Retaining Structures (ASD or LRFD)	4	0.0	5.4	3.2	0.00	-1.69
Shallow Foundations (ASD or LRFD)	4	9.0	10.0	3.0	0.90	-0.33
Deep Foundations (ASD or LRFD)	4	10.2	7.6	4.4	1.34	0.59

<u>0</u> examinees have been removed from this data because they were flagged as a random guesser.
Comparator includes all examinees from programs accredited by the ABET commission noted.
Performance index is based on a 0–15 scale.

4.

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TERMS AND CONDITIONS OF DATA USE



Principles and Practice of Engineering (PE) Subject Matter Report by Major and Examination Jul 01-Dec 31, 2022 First-Time Examinees from EAC/ABET-Accredited Engineering Programs Examinees testing more than 12 months after graduation date

Name of Institution:		University of Kentucky, Lexington				
Major:	Mining/Mineral PE Examination: Mining and Mineral Processing					

	Institution	ABET Comparator ²
No. Examinees Taking ¹	2	36
No. Examinees Passing	2	23
Percent Examinees Passing	100%	64%

						Score ⁴ ± 0.71
	Number of Exam Questions	Institution Average Performance Index ³	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score ⁴	Scaled Score ⁴
Exploration: Exploration Methods and Techniques	3	10.0	6.9	5.0	1.45	0.62
Exploration: Site Geologic and Geotechnical Conditions	3	12.5	9.9	4.5	1.26	0.58
Exploration: Resources/Reserves	3	10.0	8.1	4.9	1.23	0.39
Mine Planning/Operations: Mining Methods and Layouts	7	9.6	10.7	2.8	0.90	-0.39
Mine Planning/Operations: Mine Equipment, Facilities, and Systems	12	11.9	10.6	2.3	1.12	0.57
Mine Planning/Operations: Ground Control	4	9.4	9.7	3.2	0.97	-0.09
Mine Planning/Operations: Mine Planning and Systems	4	9.4	10.4	3.9	0.90	-0.26
Mineral Processing: Laboratory/Pilot Testing and Results	4	9.4	8.8	3.9	1.07	0.15
Mineral Processing: Process Flow Sheets	7	12.8	9.8	3.2	1.31	0.94
Mineral Processing: Plant Equipment, Facilities, and Systems	6	10.0	8.5	3.4	1.18	0.44
Mineral Processing: Plants and Facilities	4	9.4	8.4	4.0	1.12	0.25
Environment and Reclamation: Site, Mining, and Process Environment	3	5.0	7.8	3.8	0.64	-0.74
Environment and Reclamation: Exploration, Mining, and Processing Impacts	4	13.1	11.5	3.5	1.14	0.46
Environment and Reclamation: Environmental and Reclamation Plan	3	5.0	8.3	4.7	0.60	-0.70
Environment and Reclamation: Reclamation and Postclosure	3	12.5	11.7	3.7	1.07	0.22

Uncertainty Range for Scaled

<u>0</u> examinees have been removed from this data because they were flagged as a random guesser.
Comparator includes all examinees from programs accredited by the ABET commission noted.
Performance index is based on a 0–15 scale.
These scores are made available for assessment purposes. See the NCEES publication entitled

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