

Examination: Fundamentals of Engineering (FE)

Subject Matter Report by Major and Examination Report title:

Exams administered:

Examinees included: First-Time Examinees from EAC/ABET-Accredited Engineering Programs

Graduation Date: Examinees testing more than 12 months after graduation date

Name of Institution:		University of Kentucky, Paducah	Chamical		
Major:	Chemical	FE Examination:	Chemical		

	Institution	ABET Comparator	
No. Examinees Taking ¹	1	230	
No. Examinees Passing	1	155	
Percent Examinees Passing	100%	67%	

Uncertainty Range for 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
Mathematics	6	15.0	10.0	3.4	1.50	1.47
Probability and Statistics	4	9.9	10.2	3.6	0.97	-0.08
Engineering Sciences	4	9.2	9.9	3.5	0.93	-0.20
Materials Science	4	15.0	9.5	3.5	1.58	1.57
Chemistry and Biology	7	9.4	9.6	2.9	0.98	-0.07
Fluid Mechanics/Dynamics	8	7.1	9.5	2.5	0.75	-0.96
Thermodynamics	8	6.7	9.3	2.3	0.72	-1.13
Material/Energy Balances	10	7.6	9.0	2.4	0.84	-0.58
Heat Transfer	8	9.9	9.7	2.8	1.02	0.07
Mass Transfer and Separation	8	8.3	9.2	2.4	0.90	-0.37
Solids Handling	3	10.0	10.2	4.0	0.98	-0.05
Chemical Reaction Engineering	7	6.8	9.2	2.9	0.74	-0.83
Economics	4	9.4	9.9	3.9	0.95	-0.13
Process Design	7	10.8	9.5	2.8	1.14	0.46
Process Control	4	8.4	9.4	3.9	0.89	-0.26
Safety, Health, and Environment	5	8.2	9.2	3.7	0.89	-0.27
Ethics and Professional Practice	3	15.0	11.2	4.8	1.34	0.79

- <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/.

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Report title: Subject Matter Report by Major and Examination

Exams administered:

No. Examinees Taking ¹ No. Examinees Passing Percent Examinees Passing

Examinees included: First-Time Examinees from EAC/ABET-Accredited Engineering Programs

Graduation Date: Examinees testing more than 12 months after graduation date

Name of Institution:	I	University of Kentucky, Paducah			
Major:	Mechanical	FE Examination:	Chemical		

Institution	ABET Comparator ²		
institution			
1	1		
1	1		
100%	100%		

Uncertainty Range for 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
Mathematics	6	15.0	15.0	0.0	1.00	_
Probability and Statistics	4	9.9	9.9	0.0	1.00	_
Engineering Sciences	4	9.2	9.2	0.0	1.00	-
Materials Science	4	15.0	15.0	0.0	1.00	_
Chemistry and Biology	7	9.4	9.4	0.0	1.00	-
Fluid Mechanics/Dynamics	8	7.1	7.1	0.0	1.00	_
Thermodynamics	8	6.7	6.7	0.0	1.00	_
Material/Energy Balances	10	7.6	7.6	0.0	1.00	_
Heat Transfer	8	9.9	9.9	0.0	1.00	-
Mass Transfer and Separation	8	8.3	8.3	0.0	1.00	_
Solids Handling	3	10.0	10.0	0.0	1.00	_
Chemical Reaction Engineering	7	6.8	6.8	0.0	1.00	_
Economics	4	9.4	9.4	0.0	1.00	-
Process Design	7	10.8	10.8	0.0	1.00	_
Process Control	4	8.4	8.4	0.0	1.00	-
Safety, Health, and Environment	5	8.2	8.2	0.0	1.00	-
Ethics and Professional Practice	3	15.0	15.0	0.0	1.00	-

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