

**Examination:** Fundamentals of Engineering (FE)  
**Report title:** Subject Matter Report by Major and Examination  
**Exams administered:** Jul 01—Nov 30, 2014  
**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:		<b>University of Kentucky, Lexington</b>	
Major:	<b>Civil</b>	FE Examination:	<b>Civil</b>

	Institution	ABET Comparator <sup>2</sup>
No. Examinees Taking <sup>1</sup>	1	236
No. Examinees Passing	1	108
Percent Examinees Passing	100%	46%

<b>Uncertainty Range for Scaled Score <sup>4</sup></b> ± 1.00
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	Number of Exam Questions	Institution Average Performance Index <sup>3</sup>	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score <sup>4</sup>	Scaled Score <sup>4</sup>
Mathematics	7	8.5	9.2	2.8	0.92	-0.25
Probability and Statistics	4	10.6	9.1	3.6	1.16	0.42
Computational Tools	4	10.0	9.3	3.8	1.08	0.18
Ethics and Professional Practice	4	15.0	11.4	3.8	1.32	0.95
Engineering Economics	4	15.0	9.4	3.6	1.60	1.56
Statics	7	8.9	8.8	2.9	1.01	0.03
Dynamics	4	15.0	9.7	3.8	1.55	1.39
Mechanics of Materials	7	10.1	9.2	2.8	1.10	0.32
Materials	4	7.3	8.3	3.8	0.88	-0.26
Fluid Mechanics	4	8.9	10.0	3.6	0.89	-0.31
Hydraulics and Hydrologic Systems	8	15.0	8.7	2.2	1.72	2.86
Structural Analysis	6	7.6	8.1	2.9	0.94	-0.17
Structural Design	6	7.0	8.2	2.8	0.85	-0.43
Geotechnical Engineering	9	10.0	8.5	1.9	1.18	0.79
Transportation Engineering	8	8.4	8.3	2.0	1.01	0.05
Environmental Engineering	6	7.1	8.1	3.1	0.88	-0.32
Construction	4	15.0	9.1	4.0	1.65	1.48
Surveying	4	7.9	7.0	4.0	1.13	0.23

- 0 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 <http://ncees.org/licensure/educator-resources/>.

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Name of Institution: <b>University of Kentucky, Lexington</b>	
Major: <b>Electrical</b>	FE Examination: <b>Electrical and Computer</b>

	Institution	ABET Comparator <sup>2</sup>
No. Examinees Taking <sup>1</sup>	1	271
No. Examinees Passing	1	195
Percent Examinees Passing	100%	72%

<b>Uncertainty Range for Scaled Score <sup>4</sup></b> ± 1.00
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	Number of Exam Questions	Institution Average Performance Index <sup>3</sup>	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score <sup>4</sup>	Scaled Score <sup>4</sup>
Mathematics	11	10.0	10.0	2.6	1.00	0.00
Probability and Statistics	4	6.7	10.3	3.3	0.65	-1.09
Ethics and Professional Practice	3	7.6	12.2	3.7	0.62	-1.24
Engineering Economics	3	15.0	10.1	4.3	1.49	1.14
Properties of Electrical Materials	4	9.9	11.1	3.1	0.89	-0.39
Engineering Sciences	6	10.0	11.3	3.4	0.88	-0.38
Circuit Analysis	10	7.6	9.6	2.6	0.79	-0.77
Linear Systems	5	7.5	9.5	3.2	0.79	-0.63
Signal Processing	5	8.0	9.4	3.1	0.85	-0.45
Electronics	7	9.9	9.5	2.5	1.04	0.16
Power	8	11.5	9.5	2.4	1.21	0.83
Electromagnetics	5	9.4	10.0	3.3	0.94	-0.18
Control Systems	6	7.1	8.8	2.5	0.81	-0.68
Communications	5	15.0	8.9	2.3	1.69	2.65
Computer Networks	3	8.9	9.9	3.8	0.90	-0.26
Digital Systems	7	7.5	9.1	2.7	0.82	-0.59
Computer Systems	4	6.5	8.5	4.3	0.76	-0.47
Software Development	4	9.4	9.8	4.4	0.96	-0.09

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Name of Institution: <b>University of Kentucky, Lexington</b>	
Major: <b>Mechanical</b>	FE Examination: <b>Mechanical</b>

	Institution	ABET Comparator <sup>2</sup>
No. Examinees Taking <sup>1</sup>	1	313
No. Examinees Passing	1	252
Percent Examinees Passing	100%	81%

<b>Uncertainty Range for Scaled Score <sup>4</sup></b> ± 1.00
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	Number of Exam Questions	Institution Average Performance Index <sup>3</sup>	ABET Comparator Average Performance Index	ABET Comparator Standard Deviation	Ratio Score <sup>4</sup>	Scaled Score <sup>4</sup>
Mathematics	6	15.0	10.7	3.2	1.40	1.34
Probability and Statistics	4	15.0	10.6	3.2	1.42	1.38
Computational Tools	3	15.0	11.1	4.1	1.35	0.95
Ethics and Professional Practice	3	15.0	11.9	3.7	1.26	0.84
Engineering Economics	3	9.3	10.9	3.7	0.85	-0.43
Electricity and Magnetism	3	15.0	10.7	4.1	1.40	1.05
Statics	8	8.7	10.4	2.7	0.84	-0.63
Dynamics, Kinematics, and Vibrations	9	11.0	10.2	2.5	1.08	0.32
Mechanics of Materials	8	9.3	9.9	2.4	0.94	-0.25
Material Properties and Processing	8	15.0	10.0	2.3	1.50	2.17
Fluid Mechanics	9	15.0	10.7	2.5	1.40	1.72
Thermodynamics	13	11.4	9.7	1.8	1.18	0.94
Heat Transfer	9	11.4	9.7	2.3	1.18	0.74
Measurements, Instrumentation, and Controls	5	9.9	9.2	3.5	1.08	0.20
Mechanical Design and Analysis	9	7.7	9.0	3.0	0.86	-0.43

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