

SLO Performance - By Department, Course, CSLO

Program: Engineering

Date: 06/18/2018

Terms: Summer 2018, Spring 2018, Fall 2017

ENGRB17: Introduction to Electric Circuits

Upon completion the student will be able to: Formulate efficient strategies to find unknown voltage, current and power values through circuits based on component arrangement.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Calculate voltage, current and power values at any part of a circuit through simplification and application of basic laws.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Design circuits for desired output values based on selection of components selection.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	22	84.62%	2	7.69%	2	7.69%	26	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	22	84.62%	2	7.69%	2	7.69%	26	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	22	84.62%	2	7.69%	2	7.69%	26	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	22	84.62%	2	7.69%	2	7.69%	26	100.00%

ENGRB17L: Electric Circuit Laboratory

Upon completion the student will be able to: use the most basic functions of electrical test and measurement equipment including oscilloscopes, multimeters, function generators and power supplies.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	27	61.36%	16	36.36%	1	2.27%	44	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	27	61.36%	16	36.36%	1	2.27%	44	100.00%

Read circuit schematics and construct linear circuits using resistors, capacitors, inductors, and op amps.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	26	59.09%	17	38.64%	1	2.27%	44	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	26	59.09%	17	38.64%	1	2.27%	44	100.00%

Measure resistance, DC and AC voltages, current, and power, and experimentally verify the results for a variety of electrical circuits.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	26	59.09%	18	40.91%	0	0.00%	44	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	26	59.09%	18	40.91%	0	0.00%	44	100.00%

Test circuits, critically analyze data and compare measured performance to theory.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	27	61.36%	15	34.09%	2	4.55%	44	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	27	61.36%	15	34.09%	2	4.55%	44	100.00%

Use a circuit simulation program and other computer applications to predict or describe circuit behavior.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	3	13.64%	18	81.82%	1	4.55%	22	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	3	13.64%	18	81.82%	1	4.55%	22	100.00%

Using critical and logical methods, troubleshoot and repair simple electric circuits.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	27	61.36%	16	36.36%	1	2.27%	44	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	27	61.36%	16	36.36%	1	2.27%	44	100.00%

Record and document results of lab work using text and graphs.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	25	56.82%	19	43.18%	0	0.00%	44	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	25	56.82%	19	43.18%	0	0.00%	44	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	161	56.29%	119	41.61%	6	2.10%	286	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	161	56.29%	119	41.61%	6	2.10%	286	100.00%

ENGRB19C: Introduction to Programming Concepts and Methodologies for Engineers

Upon completion the student will be able to: Describe the basics of the architecture of a computer and its components.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Describe the principles of structured programming.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Describe, design, implement, and test structured programs using currently accepted methodology, and in particular to be able to do so for programs that control or otherwise interface with hardware by means of software.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Explain what an algorithm is and its importance in computer programming.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Apply numerical techniques to analyze and solve engineering-related problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

ENGRB19C: Introduction to Programming Concepts and Methodologies for Engineers

1. Upon successful completion of the course, the student will be able to apply the principles of structured programming.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will be able to apply numerical techniques to analyze and solve engineering-related problems

CSLO not included in any Assessment Rubric

3. Upon successful completion of the course, the student will be able to compare computer algorithms and software/hardware interfaces in developing efficient programming code

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

ENGRB20: Programming and Problem-Solving in MATLAB

Upon completion the student will be able to: Demonstrate the ability to apply a top down design methodology to develop computer algorithms.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	1	14.29%	3	42.86%	2	28.57%	1	14.29%	7	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	14.29%	3	42.86%	2	28.57%	1	14.29%	7	100.00%

Upon completion the student will be able to: Demonstrate the ability to create, test, and debug sequential MATLAB programs, as well as programs that use object-orientated techniques, in order to achieve computational objectives.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	4	28.57%	4	28.57%	4	28.57%	2	14.29%	14	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	4	28.57%	4	28.57%	4	28.57%	2	14.29%	14	100.00%

Upon completion the student will be able to: Explain and apply numeric techniques and computer simulations to analyze and solve engineering related problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	1	14.29%	2	28.57%	4	57.14%	0	0.00%	7	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	14.29%	2	28.57%	4	57.14%	0	0.00%	7	100.00%

Upon completion the student will be able to: Demonstrate the ability to use MATLAB effectively to analyze and visualize data.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	3	42.86%	2	28.57%	2	28.57%	0	0.00%	7	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	42.86%	2	28.57%	2	28.57%	0	0.00%	7	100.00%

Upon completion the student will be able to: Demonstrate knowledge, understanding, and the ability to use standard data structures.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	3	42.86%	2	28.57%	2	28.57%	0	0.00%	7	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	42.86%	2	28.57%	2	28.57%	0	0.00%	7	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	12	28.57%	13	30.95%	14	33.33%	3	7.14%	42	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	12	28.57%	13	30.95%	14	33.33%	3	7.14%	42	100.00%

ENGRB24: Engineering Graphics and Descriptive Geometry

Upon completion the student will be able to: Apply rules of orthographic projection to create multiview drawings

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Create pictorials from orthographic views.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Use CAD software to create 2D engineering drawings and 3D models and assemblies.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	4	19.05%	15	71.43%	2	9.52%	21	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	4	19.05%	15	71.43%	2	9.52%	21	100.00%

Create auxiliary and section views of an object following correct conventions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Apply standards of dimensioning and tolerancing to engineering drawings.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Apply the engineering design process to a design project.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	4	19.05%	15	71.43%	2	9.52%	21	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	4	19.05%	15	71.43%	2	9.52%	21	100.00%

ENGRB24: Engineering Graphics and Descriptive Geometry

1. Upon successful completion of the course, the student will calculate precision fit tolerances

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will demonstrate use of extrusion process for solid modeling.

CSLO not included in any Assessment Rubric

3. Upon successful completion of the course, the student will prepare detailed and assembly drawings for the portfolio

CSLO not included in any Assessment Rubric

4. Upon successful completion of the course, the student will be able to insert text and data in drawings

CSLO not included in any Assessment Rubric

5. Upon successful completion of the course, the student will be apply good dimensioning techniques using CA

CSLO not included in any Assessment Rubric

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

ENGRB36: Engineering Mechanics-Statics

Upon completion the student will be able to: Effectively communicate legible problem solutions to be understood by engineers in and out of their specific discipline

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Determine the forces that act on rigid bodies including external forces, weight, normal, distributed loads, friction and reactions at supports.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Calculate internal forces in members and create shear and bending moment diagrams for beams.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Perform vector analysis methods addressing forces acting on rigid bodies, trusses, frames, and machines.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	17	50.00%	8	23.53%	9	26.47%	34	100.00%
Totals	0	0.00%	17	50.00%	8	23.53%	9	26.47%	34	100.00%

Upon completion the student will be able to: Analyze two- and three-dimensional force systems on rigid bodies in static equilibrium.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	17	50.00%	6	17.65%	11	32.35%	34	100.00%
Totals	0	0.00%	17	50.00%	6	17.65%	11	32.35%	34	100.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	34	50.00%	14	20.59%	20	29.41%	68	100.00%
Totals	0	0.00%	34	50.00%	14	20.59%	20	29.41%	68	100.00%

ENGRB37: Engineering Mechanics-Dynamics

Upon completion the student will be able to: Derive and apply the relationships between position, velocity, and acceleration of a particle in motion.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Derive relations defining the velocity and acceleration of a particle on a rigid body for translation, rotation, and general plane motion.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Apply Newton's second law to analyze the motion of a particle acted upon by forces or a rigid body acted upon by forces and moments..

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Apply the method of work and energy to problems modeled as a single particle, system of particles, or a rigid body.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Apply the method of impulse and momentum to problems modeled as a single particle, system of particles, or a rigid body.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Describe and analyze the motion of a particle relative to a rotating frame.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Apply the principle of impulse and momentum to impact problems.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Communicate legible and understandable engineering solutions.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

ENGRB40: Surveying

1. Upon successful completion of the course, the student will perform office computations and design for differential leveling; traversing; area calculations; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; and error analysis.

CSLO not included in any Assessment Rubric

2. Upon successful completion of the course, the student will operate survey equipment: tape, level, transit, theodolite, compass, total station, GPS.

CSLO not included in any Assessment Rubric

3. Upon successful completion of the course, the student will reduce field notes using various mathematical techniques to generate meaningful records describing horizontal and vertical control of landforms.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

4. Upon successful completion of the course, the student will plot plans and maps from field work data using manual and computer-aided drafting.

CSLO not included in any Assessment Rubric

5. Upon successful completion of the course, the student will work effectively in groups during field surveying and engineering design project which involve problem solving, report writing, and oral presentations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

ENGRB40: Surveying

Upon completion the student will be able to; Perform office computations and design for differential leveling; traversing; area calculations; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; and error analysis.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Operate survey equipment: tape, level, transit, theodolite, compass, total station, GPS.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

3. Upon successful completion of the course, the student will reduce field notes using various mathematical techniques to generate meaningful records describing horizontal and vertical control of landforms.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Plot plans and maps from field work data using manual and computer-aided drafting.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

5. Upon successful completion of the course, the student will work effectively in groups during field surveying and engineering design project which involve problem solving, report writing, and oral presentations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

ENGRB45: Properties of Materials

Upon completion the student will be able to: 1. Analyze the connection between atomic structure and macroscopic behavior in materials.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	20	66.67%	4	13.33%	6	20.00%	30	100.00%
Totals	0	0.00%	20	66.67%	4	13.33%	6	20.00%	30	100.00%

2. Calculate or estimate material performance based on reference properties or measured values.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	30	100.00%	0	0.00%	0	0.00%	30	100.00%
Totals	0	0.00%	30	100.00%	0	0.00%	0	0.00%	30	100.00%

3. Evaluate, design and select proper materials for given applications.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	50	83.33%	4	6.67%	6	10.00%	60	100.00%
Totals	0	0.00%	50	83.33%	4	6.67%	6	10.00%	60	100.00%

ENGRB47: Introduction to Engineering and Design

Upon completion the student will be able to: Describe the role of engineers in society and classify the different engineering branches, the functions of an engineer, and industries in which they work.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Identify and describe academic pathways to a bachelor's degree.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Develop and apply effective strategies to succeed academically.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Explain engineering ethical principles and standards.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Demonstrate knowledge of effective practices for writing technical engineering documents and making oral presentations.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	50	87.72%	0	0.00%	7	12.28%	57	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	50	87.72%	0	0.00%	7	12.28%	57	100.00%

Analyze engineering problems using the engineering design process.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	3	4.23%	67	94.37%	0	0.00%	1	1.41%	71	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	4.23%	67	94.37%	0	0.00%	1	1.41%	71	100.00%

Demonstrate teamwork skills in working on an engineering design team.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Totals for CSLOs

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	3	2.34%	117	91.41%	0	0.00%	8	6.25%	128	100.00%
Fall 2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	3	2.34%	117	91.41%	0	0.00%	8	6.25%	128	100.00%

Report Totals:

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Summer 2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Spring 2018	15	2.98%	317	63.02%	150	29.82%	21	4.17%	503	100.00%
Fall 2017	0	0.00%	84	65.62%	18	14.06%	26	20.31%	128	100.00%
Totals	15	2.38%	401	63.55%	168	26.62%	47	7.45%	631	100.00%