Electrical Engineering Assessment Plan Dashboard - 2019/20

SO	Description	Met Target?		
		Method 1	Method 2	Method 3
1	An ability to identify, formulate, and solve complex engineering problems by applying knowledge of math, science and engineering	Not met	Not met	NR
2	Design a system to meet needs within realistic constraints (Old outcome: c)	Exceeded	NR	N/A
3	An ability to communicate effectively with a range of audiences (old outcome: g)	Exceeded	NR	N/A
4	An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must conisder the impact ofo engineering solutions in global, economic, environmental, and societal contexts (old outcome: f)	Exceeded	NR	N/A
5	An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives (old outcome: d)	Exceeded	NR	N/A
6	An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions (old outcome: b)	Exceeded	NR	NR
7	An ability to acquire and apply new knowledge (old outcome: I)	Exceeded	NR	N/A
8	Christian worldview and character (old outcome: I)	Exceeded	NR	N/A

Key	
n/a	not applicable, method not used
NR	not reported, no results reported
Exceeded	exceeded the target
Met	target met, no action required
Not Met	target not met
New	new measurement, results not gathered yet
IP	in process, interpretation of results is in work

Electrical Engineering Assessment Plan Dashboard Detail - 2019/20

SO 1 - An ability to identify, formulate, and solve complex engineering problems by applying knowledge of math, science and engineering			
Method 1	Course Level Assessment (CLA) EGR3164 Communicatyion Systems (assignments 1-5, quiz 1-2, mid-term)	80% will be ≥ 3 out of 4	Not met
Method 2	Major Field Test (MFT)	80% of students receive ≥ 50% correct	Not met
Method 3	Recent Graduate Surveys (RGS)	Average ranking 80% (4 on a 5-point scale)	NR
SO 2 - Design a system to meet needs within realistic constraints (Old outcome: c)			
Method 1	Course Level Assessment (CLA) EGR4022 Senior Design Project II (final report)	80% will be ≥ 3 out of 4	Exceeded
Method 2	Recent Graduate Surveys (RGS)	Average of 80% (4 on a 5-point scale)	NR
Method 3	-----		N/A
SO 3 - An ability to communicate effectively with a range of audiences (old outcome: g)			
Method 1	Course Level Assessment (CLA) EGR4022 Senior Design Project II (final design review overall presentation)	80% will be ≥ 3 out of 4	Exceeded
Method 2	Recent Graduate Surveys (RGS)	Average of 80% (4 on a 5-point scale)	NR
Method 3	-----		N/A

SO 4 - An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must conisder the impact of engineering solutions in global, economic, environmental, and societal contexts (old outcome: f)			
Method 1	Course Level Assessment (CLA) EGR4001 Engineering Ethics (case study presentation and final report)	80% will be ≥ 3 out of 4	Exceeded
Method 2	Recent Graduate Surveys (RGS)	Average of 80% (4 on a 5-point scale)	NR
Method 3	-----		N/A
SO 5 - An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives (old outcome: d)			
Method 1	Course Level Assessment (CLA) EGR3014 - Mechanics of Materials* *(no longer used)*	80% will be ≥ 3 out of 4	Exceeded
Method 2	Course Level Assessment (CLA) EGR3033 Automatic Control Systems *(previously EGR3033 System Dynamics)*	Average of 80% (4 on a 5-point scale)	NR
Method 3	-----		N/A
SO 6 - An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgement to draw conclusions (old outcome: b)			
Method 1	Course Level Assessment (CLA) EGR3174 Analog Electronics (Labs 1-8)	80% will be ≥ 3 out of 4	Exceeded
Method 2	Course Level Assessment (CLA) EGR3164 Communicatyion Systems (Lab reports - not assessed this year)	80% will be ≥ 3 out of 4	NR
Method 3	Recent Graduate Surveys (RGS)	Average of 80% (4 on a 5-point scale)	NR

SO 7 - An ability to acquire and apply new knowledge (old outcome: I)			
Method 1	Course Level Assessment (CLA) EGR4022 Senior design project II (FDR grade)	80% will be ≥ 3 out of 4	Exceeded
Method 2	Recent Graduate Surveys (RGS)	Average of 80% (4 on a 5-point scale)	NR
Method 3	-----		N/A
SO8 - Christian worldview and character (old outcome: I)			
Method 1	Engineering Ethics EGR 4001 (Quiz 6)	80% will be ≥ 3 out of 4	Exceeded
Method 2	Recent Graduate Surveys (RGS)	Average of 80% (4 on a 5-point scale)	NR
Method 3	-----		N/A

Notes:

2020 is the first time students majoring in EE concentration graduated.

The reason for non-attainment in EGR 3164 could be attributed to the extremely small sample size.

Data from recent graduate surveys not available at the moment.

Due to the pandemic, not many labs could be conducted to assess the student outcome in EGR 3164.