

**Program:** Engineering

**Degree:** Associate in Science

**Program Learning Outcomes:**

We expect that upon graduation, students in the Engineering program at Bismarck State College with an Associate in Science degree will have:

1. an ability to apply knowledge of mathematics, science, and engineering
2. an ability to design and conduct experiments, as well as to analyze and interpret data
3. an ability to identify, formulate, and solve engineering problems
4. an understanding of professional and ethical responsibility
5. an ability to communicate effectively using graphical, oral, written and presentation communication skills
6. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice
7. an ability to make an informed transfer decision appropriate to their interests, desired working conditions, and career goals

**Assessment Cycle:**

	AY 2018-2019	AY 2019-2020	AY 2020-2021	AY 2021-2022
<b>Outcome #1</b>	R	A	R	A
<b>Outcome #2</b>	R	A	R	A
<b>Outcome #3</b>	A	R	A	R
<b>Outcome #4</b>	A	R	A	R
<b>Outcome #5</b>	A	R	A	R
<b>Outcome #6</b>	R	A	R	A
<b>Outcome #7</b>	A	R	A	R
<b>IELO – Problem Solving</b>	R	A	R	A

A = Assessment evidence collected

R = Reflect on data, action plan devised, prep year

## Program Curriculum Map

	PROGRAM LEARNING OUTCOMES							IELO
	#1	#2	#3	#4	#5	#6	#7	Problem Solving
CAD 211					X, A			
CT 251/251L	X	X, A	X			X		
ENGR 101				X	X, A		X	X
ENGR 201			X, A		X			X, A
ENGR 202			X		X			X
ENGR 203	X		X, A	X, A	X			X
ENGR 204/204L			X			X, A		X
ENGR 241	X, A		X					X
EE 206	X					X, A		X
CHEM 121/121L	X	X						IELO Assessment performed within these respective disciplines
CHEM 122/122L	X, A	X, A						
MATH 165	X							
MATH 166	X							
MATH 265	X							
MATH 266	X, A							
Advising Methods/Survey							X, A	

X = Material introduced, reinforced, and/or opportunity to practice

A = Assessment evidence collected (e.g., lab activity, exam, paper, assignment, etc.)