Outcome A. Graduates will have an ability to apply knowledge of mathematics, science and engineering.

Course	Performance indicators
MAE 241, 242, 316, 335, 336, 343,365, 476	Use of concepts of physics or chemistry in the formulation of engineering problems.
MAE 241, 242, 316, 335, 336, 343,365, 476	Application of mathematics methods in solving engineering problem.
MAE 241, 242, 316, 335, 336, 343,365, 476	Grade distribution.

Tools used:	Course assessment by faculty, Alumni survey, Employer survey.
Data Collection:	The data are collected every semester based on the course offerings.
Frequency of data collection:	The data are collected every time courses are taught.
Data Analysis:	The data obtained are analyzed every year.
Closing the loop:	This outcome is subject to review every year based on performance criteria and metrics and specific action items are developed, if necessary, to revise the content of the courses. The analyzed data are presented separately to the following groups in meetings. a) Feedback to students on all assignments b) Feedback to faculty, particular from majors.

Outcome and Performance Indictor		Performance Indicator Rubric				
Assessment Outcome A. **"Graduates will have an ability to apply knowledge of mathematics, science and engineering"**		**Poor**	**Fair**	**Good**	**Very Good**	**Excellent**
PI1	Use of concepts of physics or chemistry in the formulation of engineering problems	Concepts absent	Concepts barely noticeable	Concepts mentioned	Concepts applied	Concepts applied and explained
PI2	Application of mathematics methods in solving engineering problem	Methods absent	Methods barely noticeable	Methods used	Methods used correctly	Methods applied explained
PI3	Grade distribution	1 (F)	2 (D)	3 (C)	4 (B)	5 (A)

Explanations:

Performance Indicator 1. (PI1). "Use of concepts of physics or chemistry in the formulation of engineering problems." Engineering problems in mechanical engineering often require the use of concepts of physics or chemistry in their formulation, as opposed to use of formulas, graphs or tables as "black boxes." Engineering exercises thus require students to use and apply science concepts when they formulate problems. The following rubrics are used to assess this indicator:

- **Poor.** This rubric is used when a problem formulation lacks a reference to any concept of science, and resources to the use of formulas, tables or other means without clear rationale of the fundamentals principles being used.
- **Fair.** This rubric is used when **s**ome marginal reference of a concept of science is made but in such a way that the connection between the concept and the problem is marginal or weak.
- **Good.** This rubric is used when the concepts of science used in a particular engineering problem formulation are stated in a way that the connection between the concept invoked and the problem is clear and relevant.
- **Very Good.** This rubric is used when the formulation of an engineering problem is clearly related to a concept of science, which is relevant to the problem and the solution, and the application of the science concept is clear and correctly posed.
- **Excellent.** This rubric is used when a problem formulation uses clear and proper concepts of science, which are relevant and in addition the application of these concepts is well documented, explained and presented in a logic progression.

Performance Indicator 2. (PI2). "Application of mathematics methods in solving engineering problem." Problems in mechanical engineering often require the use of mathematical methods, procedures and models. Students develop skills to apply mathematical procedures to model mechanical systems and to find meaningful solutions to engineering problems. The following rubrics are used to assess this indicator:

- **Poor.** This rubric is used when a problem formulation lacks a reference to any math concept, and resources to the use of formulas, tables or other means without clear rationale of the fundamentals principles being used.
- **Fair.** This rubric is used when **s**ome marginal reference of a math concept is made but in such a way that the connection between the concept and the problem is marginal or weak.
- **Good.** This rubric is used when the math concepts used in a particular engineering problem formulation are stated in a way that the connection between the concept invoked and the problem is clear and relevant.
- **Very Good.** This rubric is used when the formulation of an engineering problem is clearly related to a math concept, which is relevant to the problem and the solution, and the application of the math concept is clear and correctly posed.
- **Excellent.** This rubric is used when a problem formulation uses clear and proper math concepts, which are relevant and in addition the application of these concepts is well documented, explained and presented in a logic progression.

Performance Indicator 3. (PI3). Grade distribution from class on applicable assignments or exercises. A, B, C, D ,F

Assessment Tool:

Course Assessment Rubric by Faculty

Aerospace Engineering Program Course-Outcome Matrix

(August 16, 2013)

ABET Outcome		***a***	***b***	***c***	***d***	***e***	***f***	***g***	***h***	***i***	***j***	***k***	
Required Course **K** = Key Course r = related Course	Credit Hours	Apply Math, Science, and Engr	Design Experiments and Analyze and	Design System, Component, or Process	Multi-disciplinary Teams	Identify, Formulate and Solve Engr Problems	Professional and Ethical Responsibility	Communicate Effectively	Broad Education - Global and Societal	Life-long Learning	Contemporary Issues	Techniques, Skills, and Modern Engr Tools	Number of Outcomes per course
ENGR 101 *Engr. Problem Solving 1*	3						F	G					2
MAE 215 *Intro to Aero Engr*	3			C			F						2
MAE 241 *Statics*	3	A											1
MAE 242 *Dynamics*	3	A											1
MAE 243 *Mech. of Materials*	3					E							1
MAE 244 *Dynam. & Strength Lab*	1		B		D							K	3
MAE 316 *Analy. of Engr. Sys.*	3	A										K	2
MAE 320 *Thermodynamics*	3					E			H		J		3
MAE 335 *Incomp Aerodynamics*	3	A								I	J		3
MAE 336 *Comp Aerodynamics*	3	A								I			2
MAE 343 *Intermed. Mech. Matls.*	3	A								I			2
MAE 345 *Aerospace Structures*	3			C	D	E							3
MAE 365 *Flight Dynamics*	3	A										K	2
MAE 423 *Heat Transfer*	3			C					H		J		3
MAE 426 *Flt Vehicle Propulsion*	3			C		E							2
MAE 434 *Exp Aerodynamics*	3		B					G				K	3
MAE 456 *CAD & Finite Elem. Ana.*	3			C		E						K	3
MAE 460 *Automatic Controls*	3					E						K	2
MAE 475 *Flt Vehicle Design*	3			C	D		**F**	G					4
MAE 476 *Space Flight*	3	A							H		J		3
No. of courses/outcome	58	8	2	6	**2**	6	**3**	3	3	3	4	6	
MATH 155 *Calculus 1*	4	r											
CHEM 115 *Fund. of Chemistry*	4	r	r				r						
ENGR 199 *Orientation to Engr.*	1	r		r		r	r	r		r	r		
ENGL 101 *Composition and Rhetoric*	3							r					
MATH 156 *Calculus 2*	4	r								r			
ENGR 102 *Engr. Problem Solving 2*	3	r		r		r							
PHYS 111 *General Physics*	4	r	r			r		r					
PHYS 112 *General Physics*	4	r	r			r		r		r			
ENGL 102 *Composition & Rhetoric*	3							r		r			
MATH 251 *Multivariable Calculus*	4	r								r			
MATH 261 *Elem. Diff. Equations*	4	r								r			
IENG 302 *Manufacturing Processes*	2	r		r	r								
IENG 303 *Manufact. Processes Lab*	1	r	r	r	r								
EE 221 *Intro. to Electrical Engr.*	3	r		r	r	r							
EE 222 *Intro. to Electrical Engr. Lab*	1	r	r	r	r							r	
GEC (21 hours) (Econ)	21							r	r	r	r		
Technical Electives (6 hours)	6								r	r	r	r	

Outcome	ABET Assessment Team members To conduct Assessment of Year 2014	
a	Ismail Celik, Yu Gu, Mario Perhinschi and Pat Browning	**Outcome a** "Graduates will have an ability to apply knowledge of mathematics, science and engineering."
b	Marvin Cheng, Alfred Lynam and Marcello Napolitano	**Outcome b** "Graduates will have an ability to design and conduct experiments, as well as to analyze data."
c	Ken Means, Terry Musho and Greg Thompson	**Outcome c** "Graduates will have an ability to design a system, component or process to meet desired needs."
d	Kostas Sierros, Jim Smith and Scott Wayne	**Outcome d** "Graduates will have an ability to function on multidisciplinary teams."
e	Ever Barbero, John Kuhlman, Andrew Nix and Jason Gross	**Outcome e** "Graduates will have an ability to identify, formulate and solve engineering problems."
f	Wade Huebsch and David Mebane	**Outcome f** "Graduates will have an understanding of professional and ethical responsibility."
g	Salva Akkerman, Cosmin Dumitrescu and Nithi Sivaneri	**Outcome g** "Graduates will have an ability to communicate effectively."
h	Victor Mucino and John Christian	**Outcome h** "Graduates will have the broad education necessary to understand the impact of engineering solutions in a global and societal context".
i	Xingbo Liu, Ed Sabolsky and Samir Shoukry	**Outcome i** "Graduates will have a recognition of the need for, and an ability to engage in, life-long learning".
j	Bruce Kang, Sam Mukdadi and Nick Wu	**Outcome j** "Graduates will have knowledge of contemporary issues."
k	Larry Banta, Hailin Li and Xueyan Song	**Outcome k** "Graduates will have an ability to use the techniques, skills and modern engineering tools necessary for engineering practice."

AEROSPACE ENGINEERING	A	Summary Outcome A-2014
Assessment Outcome A. "Graduates will have an ability to apply knowledge of mathematics, science and engineering"		**Assessment Team:** Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators: PI1. Use of concepts of physics in the formulation of engineering problems PI2. Application of mathematics methods in solving engineering problem PI3. Grade average for the entire class.	Rubrics for Performance Indicators:					
		Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
Performance: P = (PI1 + PI2 + GA) / 3 **P= Performance** **PI1 = Performance Indicator 1** **PI2 = Performance Indicator 2** **GA= Average grade of class in assignment** **(if GA is based on 100 pt. scale, divide by 20; if GA is based on 4 pt. scale, multiply by 1.25)**	PI1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
	PI2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Contributing Course/Term	**PI1**	**PI2**	**Grade Average***	**Performance**	**Observations (Score explanation)**
MAE 241					
MAE 242					
MAE316					
MAE 335					
MAE336					
MAE 343					
MAE 365					
MAE 476					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	**Responsible Person/Team/Cmte.**

	To: AE CC
	To: Instructor (by Course)
	To: Instructor (by Course)

AEROSPACE ENGINEERING	MAE 241	Outcome A-2014

Assessment Outcome A.
"Graduates will have an ability to apply knowledge of mathematics, science and engineering"

Assessment Team:
Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators:
PI1. Use of concepts of physics in the formulation of engineering problems
PI2. Application of mathematics methods in solving engineering problem

Performance: P = (PI1 + PI2 + GA) / 3
P= Performance
PI1 = Performance Indicator 1
PI2 = Performance Indicator 2
GA= Average grade of class in assignment*
(if GA is based on 100 pt scale, divide by 20; if GA is based on 4 pt scale, multiply by 1.25)

Rubrics for Performance Indicators:

	Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
PI-1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
PI-2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Course MAE 241	PI1	PI2	Class Grade Ave.	Average	Observations (Score explanation)
Key Asg. 1 (HW)					
Key Asg. 2 (HW)					
Key Asg. 3 (HW)					
Test 1 (Problem)					
Test 2 (Problem)					
Other (Project)					
Total Average					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	Responsible Person/Team/Cmte.

	To: AE CC
	To: Instructor (by Course)

AEROSPACE ENGINEERING	MAE 242	Outcome A-2014

Assessment Outcome A.
"Graduates will have an ability to apply knowledge of mathematics, science and engineering"

Assessment Team:
Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators:
PI1. Use of concepts of physics in the formulation of engineering problems
PI2. Application of mathematics methods in solving engineering problem

Performance: P = (PI1 + PI2 + GA) / 3
P= Performance
PI1 = Performance Indicator 1
PI2 = Performance Indicator 2
GA= Average grade of class in assignment*
(if GA is based on 100 pt scale, divide by 20; if GA is based on 4 pt scale, multiply by 1.25)

Rubrics for Performance Indicators:

	Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
PI-1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
PI-2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Course MAE 242	PI1	PI2	Class Grade Ave.	Average	Observations (Score explanation)
Key Asg. 1 (HW)					
Key Asg. 2 (HW)					
Key Asg. 3 (HW)					
Test 1 (Problem)					
Test 2 (Problem)					
Other (Project)					
Total Average					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	**Responsible Person/Team/Cmte.**
	To: AE CC
	To: Instructor (by Course)

AEROSPACE ENGINEERING	MAE 316	Outcome A-2014

Assessment Outcome A.
"Graduates will have an ability to apply knowledge of mathematics, science and engineering"

Assessment Team:
Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators:
PI1. Use of concepts of physics in the formulation of engineering problems
PI2. Application of mathematics methods in solving engineering problem

Performance: P = (PI1 + PI2 + GA) / 3
P= Performance
PI1 = Performance Indicator 1
PI2 = Performance Indicator 2
GA= Average grade of class in assignment*
(if GA is based on 100 pt scale, divide by 20; if GA is based on 4 pt scale, multiply by 1.25)

Rubrics for Performance Indicators:

	Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
PI-1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
PI-2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Course MAE 316	PI1	PI2	Class Grade Ave.	Average	Observations (Score explanation)
Key Asg. 1 (HW)					
Key Asg. 2 (HW)					
Key Asg. 3 (HW)					
Test 1 (Problem)					
Test 2 (Problem)					
Other (Project)					
Total Average					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	**Responsible Person/Team/Cmte.**
	To: AE CC
	To: Instructor (by Course)

AEROSPACE ENGINEERING	MAE 335	Outcome A-2014

Assessment Outcome A.
"Graduates will have an ability to apply knowledge of mathematics, science and engineering"

Assessment Team:
Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators:
PI1. Use of concepts of physics in the formulation of engineering problems
PI2. Application of mathematics methods in solving engineering problem

Performance: P = (PI1 + PI2 + GA) / 3
P= Performance
PI1 = Performance Indicator 1
PI2 = Performance Indicator 2
GA= Average grade of class in assignment*
(if GA is based on 100 pt scale, divide by 20; if GA is based on 4 pt scale, multiply by 1.25)

Rubrics for Performance Indicators:

	Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
PI-1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
PI-2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Course MAE 335	PI1	PI2	Class Grade Ave.	Average	Observations (Score explanation)
Key Asg. 1 (HW)					
Key Asg. 2 (HW)					
Key Asg. 3 (HW)					
Test 1 (Problem)					
Test 2 (Problem)					
Other (Project)					
Total Average					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	**Responsible Person/Team/Cmte.**
	To: AE CC
	To: Instructor (by Course)

AEROSPACE ENGINEERING	MAE 336	Outcome A-2014

Assessment Outcome A.
"Graduates will have an ability to apply knowledge of mathematics, science and engineering"

Assessment Team:
Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators:
PI1. Use of concepts of physics in the formulation of engineering problems
PI2. Application of mathematics methods in solving engineering problem

Performance: P = (PI1 + PI2 + GA) / 3
P= Performance
PI1 = Performance Indicator 1
PI2 = Performance Indicator 2
GA= Average grade of class in assignment*
(if GA is based on 100 pt scale, divide by 20; if GA is based on 4 pt scale, multiply by 1.25)

Rubrics for Performance Indicators:

	Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
PI-1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
PI-2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Course MAE 336	PI1	PI2	Class Grade Ave.	Average	Observations (Score explanation)
Key Asg. 1 (HW)					
Key Asg. 2 (HW)					
Key Asg. 3 (HW)					
Test 1 (Problem)					
Test 2 (Problem)					
Other (Project)					
Total Average					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	**Responsible Person/Team/Cmte.**
	To: AE CC
	To: Instructor (by Course)

AEROSPACE ENGINEERING	MAE 343	Outcome A-2014

Assessment Outcome A.
"Graduates will have an ability to apply knowledge of mathematics, science and engineering"

Assessment Team:
Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators:
PI1. Use of concepts of physics in the formulation of engineering problems
PI2. Application of mathematics methods in solving engineering problem

Performance: P = (PI1 + PI2 + GA) / 3
P= Performance
PI1 = Performance Indicator 1
PI2 = Performance Indicator 2
GA= Average grade of class in assignment*
(if GA is based on 100 pt scale, divide by 20; if GA is based on 4 pt scale, multiply by 1.25)

Rubrics for Performance Indicators:

	Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
PI-1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
PI-2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Course MAE 241	PI1	PI2	Class Grade Ave.	Average	Observations (Score explanation)
Key Asg. 1 (HW)					
Key Asg. 2 (HW)					
Key Asg. 3 (HW)					
Test 1 (Problem)					
Test 2 (Problem)					
Other (Project)					
Total Average					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	**Responsible Person/Team/Cmte.**
	To: AE CC
	To: Instructor (by Course)

AEROSPACE ENGINEERING	MAE 365	Outcome A-2014

Assessment Outcome A.
"Graduates will have an ability to apply knowledge of mathematics, science and engineering"

Assessment Team:
Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators:
PI1. Use of concepts of physics in the formulation of engineering problems
PI2. Application of mathematics methods in solving engineering problem

Performance: P = (PI1 + PI2 + GA) / 3
P= Performance
PI1 = Performance Indicator 1
PI2 = Performance Indicator 2
GA= Average grade of class in assignment*
(if GA is based on 100 pt scale, divide by 20; if GA is based on 4 pt scale, multiply by 1.25)

Rubrics for Performance Indicators:

	Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
PI-1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
PI-2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Course MAE 365	PI1	PI2	Class Grade Ave.	Average	Observations (Score explanation)
Key Asg. 1 (HW)					
Key Asg. 2 (HW)					
Key Asg. 3 (HW)					
Test 1 (Problem)					
Test 2 (Problem)					
Other (Project)					
Total Average					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	**Responsible Person/Team/Cmte.**
	To: AE CC
	To: Instructor (by Course)

AEROSPACE ENGINEERING	MAE 476	Outcome A-2014

Assessment Outcome A.
"Graduates will have an ability to apply knowledge of mathematics, science and engineering"

Assessment Team:
Ismail Celik, Yu Gu , Mario Perhinschi, Pat Browning

Performance Indicators:
PI1. Use of concepts of physics in the formulation of engineering problems
PI2. Application of mathematics methods in solving engineering problem

Performance: P = (PI1 + PI2 + GA) / 3
P= Performance
PI1 = Performance Indicator 1
PI2 = Performance Indicator 2
GA= Average grade of class in assignment*
(if GA is based on 100 pt scale, divide by 20; if GA is based on 4 pt scale, multiply by 1.25)

Rubrics for Performance Indicators:

	Poor (1)	Fair (2)	Good (3)	Very good (4)	Excellent (5)
PI-1	Physics/Chem. concepts not used	Physics/Chem. concepts used, but not correctly	Physics/Chem. concepts used correctly	Physics/Chem. concepts used correctly, some explanation offered	Physics/Chem. concepts used correctly and explained well
PI-2	Math methods absent	Math methods applied but not correctly	Math methods applied correctly	Math methods applied correctly and some explanation offered	Math methods applied correctly and explained well

Course MAE 476	PI1	PI2	Class Grade Ave.	Average	Observations (Score explanation)
Key Asg. 1 (HW)					
Key Asg. 2 (HW)					
Key Asg. 3 (HW)					
Test 1 (Problem)					
Test 2 (Problem)					
Other (Project)					
Total Average					
Overall Performance 2014					
Overall Performance 2013					

Follow-up or Corrective Actions:	**Responsible Person/Team/Cmte.**
	To: AE CC
	To: Instructor (by Course)

Assessment Tool:

Alumni Survey

MAE Alumni Survey of Educational Success

Dear Alum, in an effort to improve the quality of our Educational Programs in Mechanical and Aerospace Engineering, we would like to request few minutes of your time to help us assess the level of attainment of our Educational Objectives and Learning Outcomes that our graduates exhibit in the development of their professional activity. This survey will serve as a tool for the assessment of our Program and is not intended to be used to evaluate you individually.

Please tell us your year of graduation and the degree that you earned.

This is a required question

In my work, I am able to apply knowledge of math, science and engineering effectively.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I am able to design and conduct experiments, and analyze data.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I am able to design a system, component or process to meet desired needs and constraints.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I am able to function productively on multidisciplinary teams.

- Strongly Agree
- Agree
- Neutral

- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I am able to identify, formulate and solve engineering problems.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I have a good understanding of professional and ethical responsibility.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I am able to communicate effectively, both verbally and in writing.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I understand the impact of engineering solutions in a global and societal context.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I recognize the need for, and engage in, life-long learning.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I am aware of and appreciate contemporary engineering issues.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I am proficient in the use of techniques, skills and modern tools necessary for engineering practice.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

In my work, I am prepared to meet the varying demands of the workforce in the technological arena.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

Please add comments below to clarify or add to any of your answers above, or to provide general comments about the level of satisfaction you have with the way your education in the MAE department has prepared you for your career.

This is a required question

In general, How would you rate yourself in the following categories

	Poor	Fair	Good	Very Good	Excellent
Your proficiency in your field					
Your drive to learn on your own.					
Your preparedness to meet the demands of the job-market					

Please enter one response per row

Submit

Never submit passwords through Google Forms.

Assessment Tool:

Employer Survey

Employer Survey of MAE Graduates

Dear Employer, in an effort to improve the quality of our Educational Programs in Mechanical and Aerospace Engineering, we would like to request few minutes of your time to help us assess the level of attainment of our Educational Objectives and Learning Outcomes that our graduates exhibit in the development of their professional activity in your company. This survey will serve as a tool for the assessment of our Program and is not intended to be used to evaluate the graduate's work for you or in your company.

Please tell us how many WVU MAE graduates you employ, and for how long.

This is a required question

WVU MAE graduates in my employ are able to apply knowledge of math, science and engineering effectively.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ are able to design and conduct experiments, and analyze data.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ are able to design a system, component or process to meet desired needs and constraints.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ are able to function productively on multidisciplinary teams.

- Strongly Agree
- Agree

- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ are able to identify, formulate and solve engineering problems.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ have a good understanding of professional and ethical responsibility.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ are able to communicate effectively, both verbally and in writing.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ understand the impact of engineering solutions in a global and societal context.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ recognize the need for, and engage in, life-long learning.

- Strongly Agree
- Agree
- Neutral

- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ are aware of and appreciate contemporary engineering issues.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ are proficient in the use of techniques, skills and modern tools necessary for engineering practice.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

WVU MAE graduates in my employ are prepared to meet the varying demands of the workforce in the technological arena.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly Disagree
- Not Applicable

This is a required question

Please add comments below to clarify or add to any of your answers above, or to provide general comments about the level of satisfaction you have with graduates of the MAE department at WVU.

This is a required question

In general, How would you rate WVU MAE graduates in the following categories

	Poor	Fair	Good	Very Good	Excellent
Proficiency in his/her field					
Drive to learn on his/her own					
Preparedness to meet the demands of the job market					

Please enter one response per row

Submit

Never submit passwords through Google Forms.