

ASSESSMENT DAY

College of Business, Engineering and Technology

School of Engineering Technology

February 14, 2017

Academic Assessment

	LEVEL	FOCUS	CONDUCTED BY	FREQUENCY
Academic Success Committee	Program	<ul style="list-style-type: none"> Quality of assessment practices 	Committee of peers	Years 1 & 2
Instructional Program Review	Program / Cluster	<ul style="list-style-type: none"> Enrollment, retention, completion Industry certifications and job placement Program budget and staffing Advisory committees Curriculum changes 	Committee of peers	Year 3
Assessment Day	Course/ Program	<ul style="list-style-type: none"> Enrollment by demographics Graduation and retention Average class size Course success rate Placement rate SLOs, PLOs and ILOs 	Program Chair and Faculty	Years 1, 2, 3

Programs

[6334 - Bachelor of Science Information Technology - BSIT](#)

[6331 - Bachelor of Science in Engineering Technology \(BSET\)](#)

[6333 - Bachelor of Science in Engineering Technology - Electrical Engineering Technology Concentration](#)

[3004 - Construction and Design](#)

[3002 - Cybersecurity and Cyberforensics](#)

[3003 - Web Systems Software Development](#)

Action Items from Last Assessment Day

Assessment Day (02/23/2016)

Institutional Effectiveness:

1. Student with disability data.

School of Engineering Technology:

1. Develop policy for statute of limitation for retaking courses or changing catalog year;
2. Develop an Alumni database;
3. Develop alumni survey;
4. Frequent and continuous communication with IAB to review and provide feedback in terms of assessment instruments and others in a formalized process;
5. Emphasize the business and quality side of engineering.

Program Educational Objectives (PEO)

1. Career: Graduates will have a broad understanding of the key principles and practices of engineering technology, the written and oral communications skills, and the ability to work with others to apply these skills and knowledge to the design, implementation, and maintenance of systems.
2. Skills: Graduates will have an understanding of the mathematical and scientific concepts that underlie engineering technology applications, will apply this understanding, and acquire new skills and knowledge necessary to analyze technology problems and develop suitable solutions.
3. Professionalism and Ethics: Graduates will have an understanding of the ethical, human, and social issues of their field and will be involved members of the local and global communities acting as responsible technical professionals.
4. Life-Long Learning: Graduates will be active contributors to their profession with a strong commitment to continuous individual and organizational improvement, effective communication, teamwork, quality, and timeliness.

Program Learning Outcomes

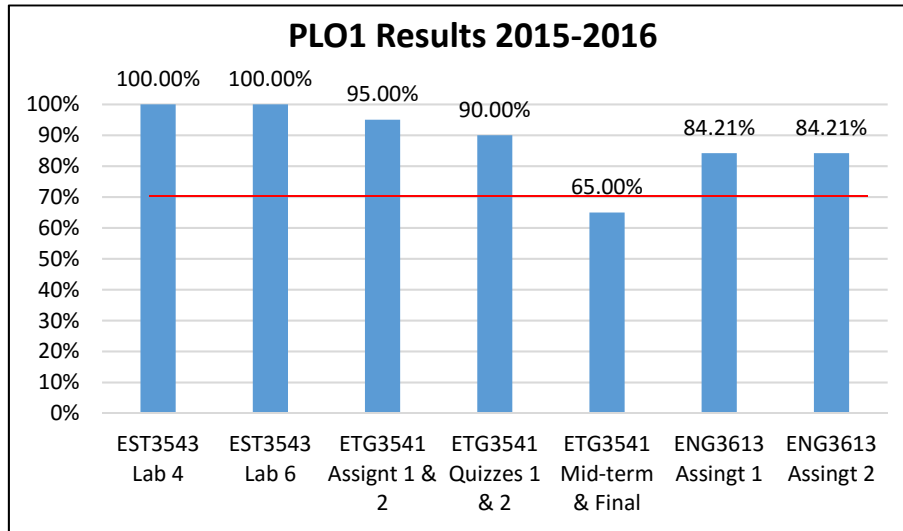
BS Engineering Technology (BSET) # 6331

BS Engineering Technology with Electrical Engineering Technology Concentration #6333

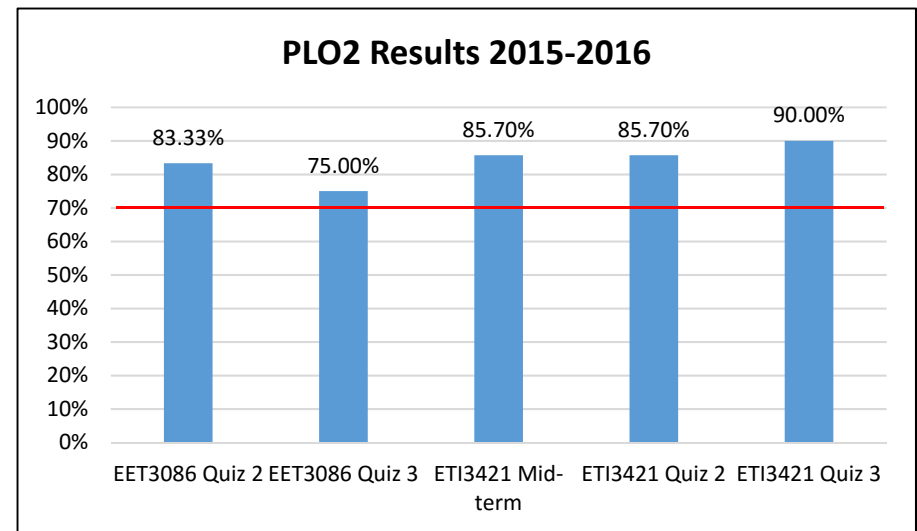
Graduates of the program will be able to:

1. Demonstrate an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities.
2. Demonstrate an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies.
3. Demonstrate an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes.
4. Demonstrate an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives.
5. Demonstrate an ability to function effectively as a member or leader on a technical team.
6. Demonstrate an ability to identify, analyze, and solve broadly-defined engineering technology problems.
7. Demonstrate an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature.
8. Demonstrate an understanding of the need for and an ability to engage in self-directed continuing professional development.
9. Demonstrate an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity.
10. Demonstrate a knowledge of the impact of engineering technology solutions in a societal and global context.
11. Display a commitment to quality, timeliness, and continuous improvement.

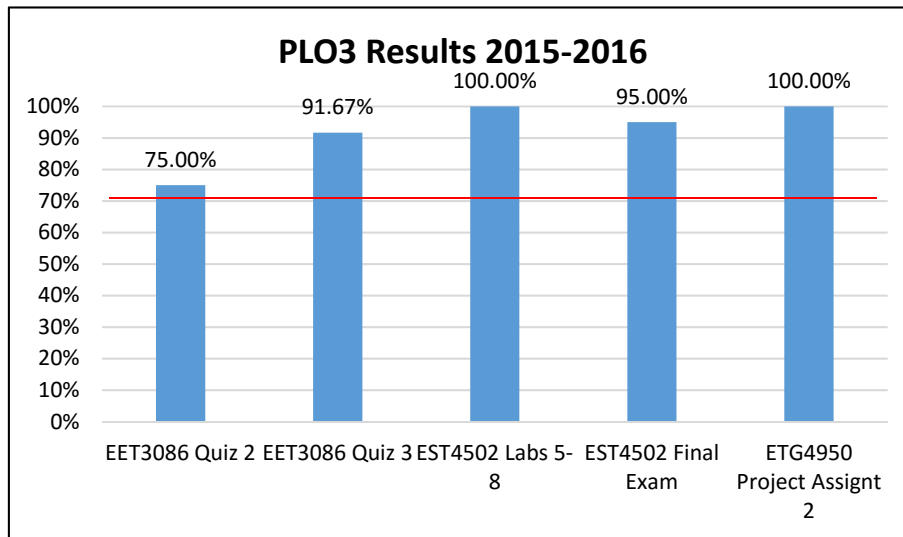
Assessment Results



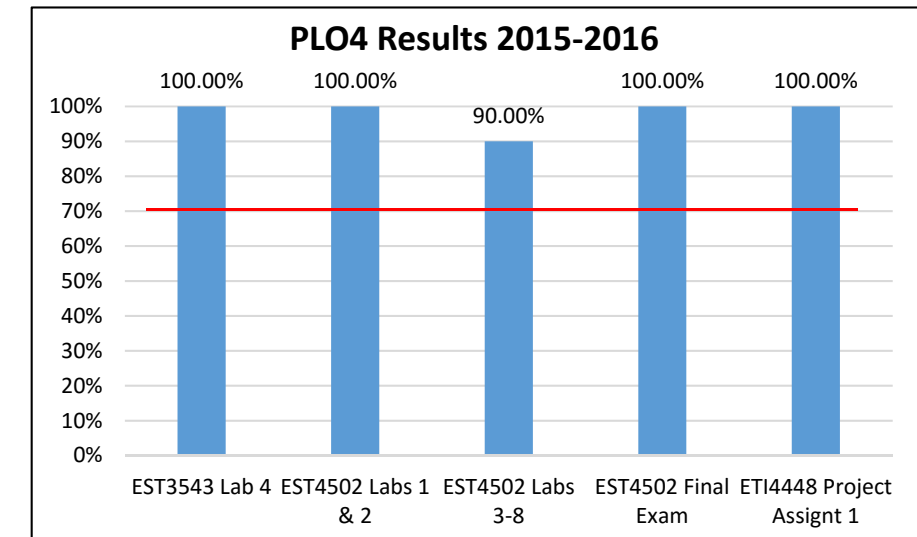
PLO1: Demonstrate an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities



PLO2: Demonstrate an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies

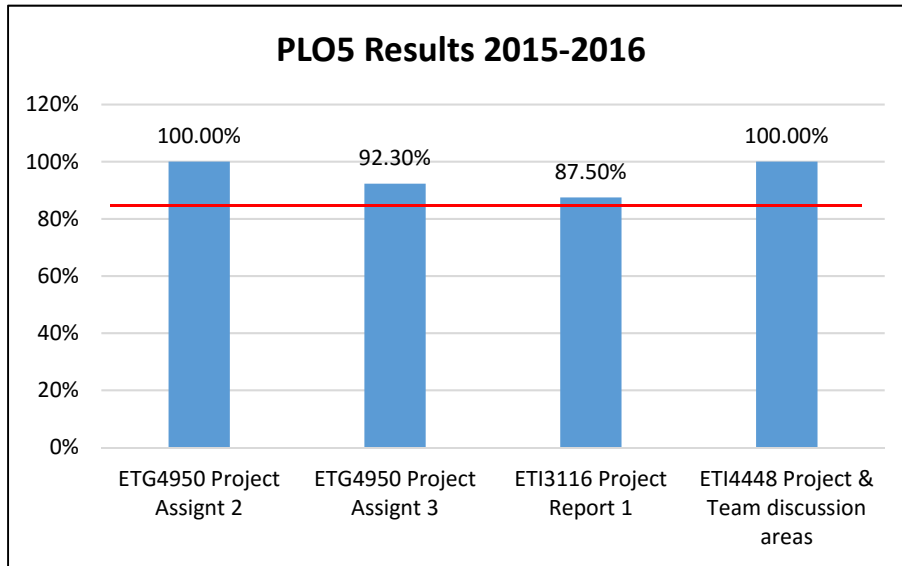


PLO3: Demonstrate an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes

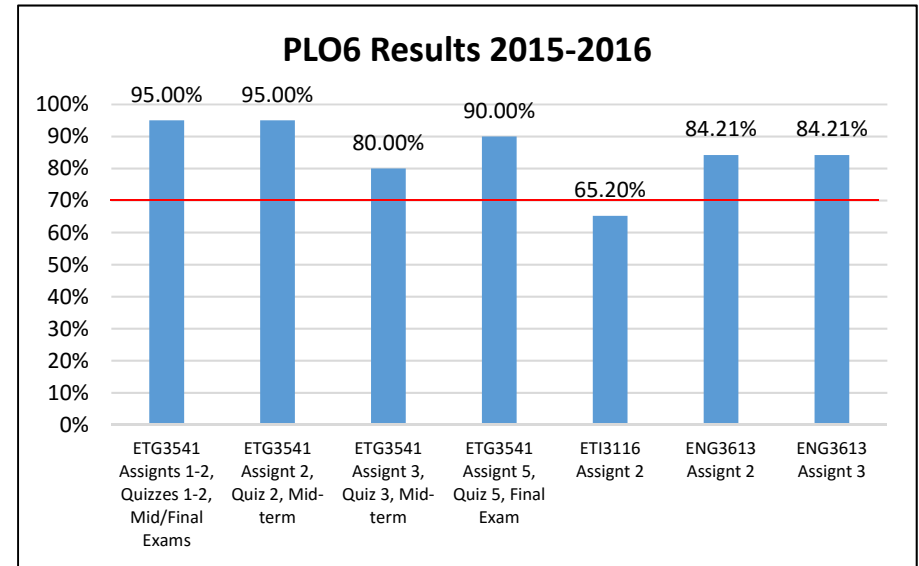


PLO4: Demonstrate an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to PEO

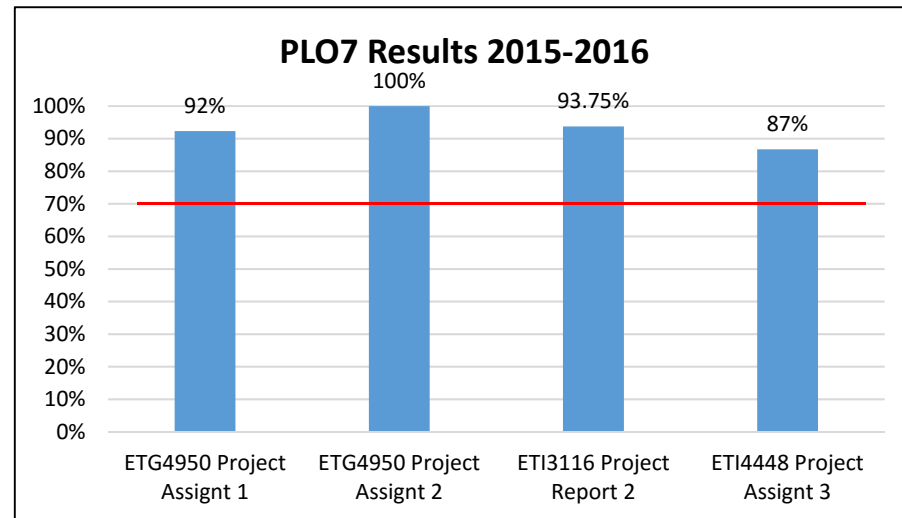
Assessment Results



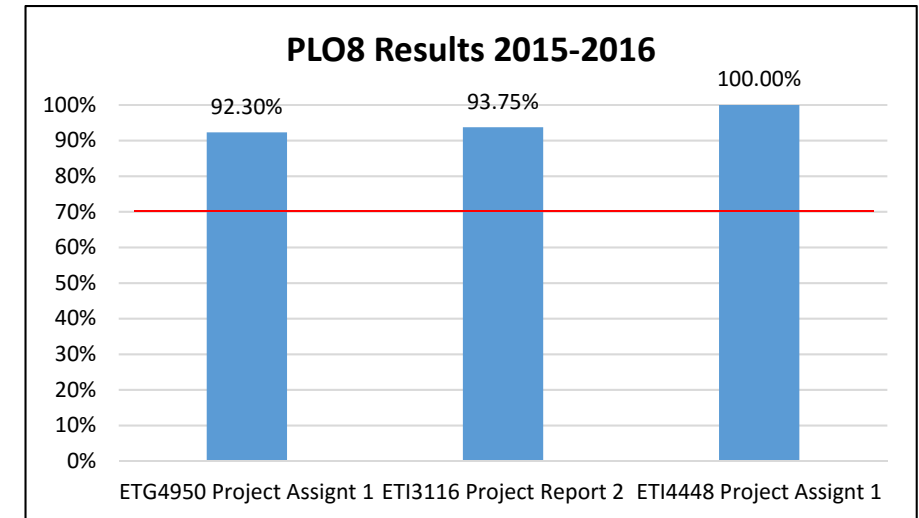
PLO5: Demonstrate an ability to function effectively as a member or leader on a technical team



PLO6: Demonstrate an ability to identify, analyze, and solve broadly-defined engineering technology problems

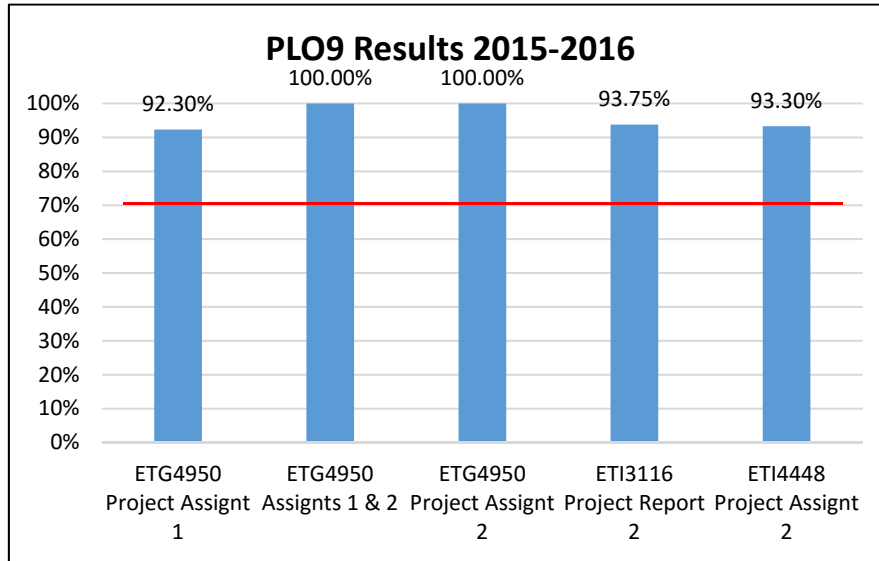


PLO7: Demonstrate an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature

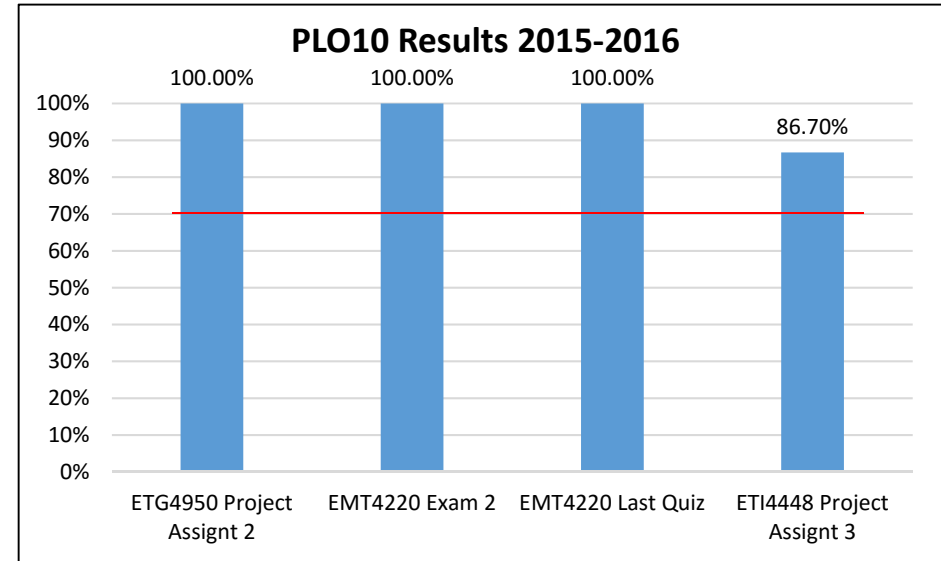


PLO8: Demonstrate an understanding of the need for and an ability to engage in self-directed continuing professional development

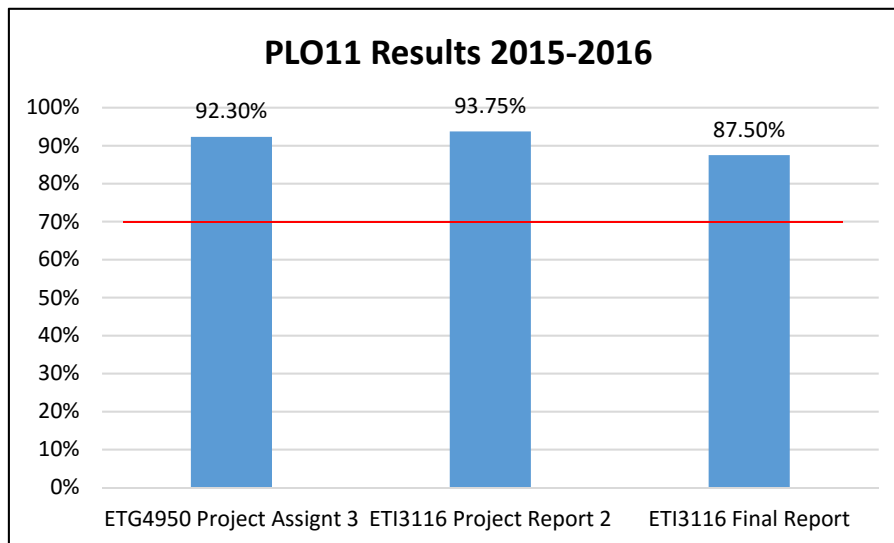
Assessment Results 2015-2016



PLO9: Demonstrate an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity



PLO10: Demonstrate a knowledge of the impact of engineering technology solutions in a societal and global context



PLO11: Display a commitment to quality, timeliness, and continuous improvement

Assessment Data 2014-2015 and 2015-2016: Programs and Institutional Learning Outcomes

Program	Critical/ Creative Thinking		Communication		Cultural Literacy		Information and Technical Literacy	
	14/15	15/16	14/15	15/16	14/15	15/16	14/15	15/16
Bachelor of Science in Engineering Technology (6331)	92%	92.3%-100%	92%	92.3%-100%	70.6%-92%	92.3%-100%	76.5%-92%	86.7%-100%
Bachelor of Science in Engineering Technology - Electrical Engineering Technology Concentration (6333)	92%	92.3%-100%	92%	92.3%-100%	70.6%-92%	92.3%-100%	76.5%-92%	86.7%-100%

Course Success Rates (1 of 2)

Major	Course	2012-2013		2013-2014		2014-2015		2015-2016	
		Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
6331- BS Engineering Technology	CET3906	10	100%	5	100%	11	82%		
	CIS4510					11	91%	8	88%
	EET3085	30	57%	34	79%	21	71%	41	71%
	EET3086	78	69%	94	67%	103	74%	63	81%
	EGN3311	9	100%	10	90%	15	67%	15	93%
	EGN3343	16	94%					25	76%
	ETI3671/ EGN3613	76	71%	27	78%	32	91%	6	83%
	ETC4241	6	100%	11	100%	9	89%	12	83%
	ETG3533	8	100%			15	93%	23	83%
	ETG3541	41	85%	35	83%	23	83%		
	ETG3907	1	100%	1	100%	2	100%		
	ETG4950	42	95%	31	90%	28	96%	25	92%
	ETI3116	48	83%	58	78%	36	75%	46	80%
	ETI3421	32	81%	34	88%	12	83%	22	91%
	ETI4186					16	100%		
	ETI4205	15	100%	11	100%			22	100%
	ETI4448	40	93%	40	80%	33	85%	35	77%
	ETI4640	15	100%	13	92%	15	87%	23	91%
	ETI4704	25	100%	19	100%	22	100%	21	90%
	ETM4220	30	93%	33	97%	15	93%	21	100%
ETM4331	13	92%	14	86%	18	83%	15	87%	
ETS4502	22	95%	9	89%	19	100%	19	95%	
MAP3401	27	93%	36	81%	27	74%			
	Major	584	84%	515	82%	483	83%	526	84%

■ Indicates a success rate of 90% or higher
■ Indicates a success rate between 70% and 89%
■ Indicates a success rate below 70%

Source: IR Program Assessment Data

Course Success Rates (2 of 2)

Major	Course	2012-2013		2013-2014		2014-2015		2015-2016	
		Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
6333- BS Engineering Technology - EE	CET3198	11	82%	11	82%	11	73%	14	64%
	CET4138	3	100%	1	100%	2	100%		
	EET3716	10	100%	5	80%	15	93%	9	78%
	EET4158	8	100%	6	100%	12	100%	6	83%
	EET4732	9	100%	5	100%	13	100%	5	100%
	EST3543	11	82%						
	ETP4240	7	100%	7	100%	14	93%	9	56%
	ETS3543	64	81%	65	71%	67	64%	69	77%
	Major	123	87%	100	78%	134	78%	146	75%
Department	1,437	86%	1,432	81%	1,585	81%	1,749	80%	

■ Indicates a success rate of 90% or higher
■ Indicates a success rate between 70% and 89%
■ Indicates a success rate below 70%

Source: IR Program Assessment Data

Course Success Rates by Instructional Method – Multiple Methods Only

Major or Dept., Associated Courses and Instructional Method			2015-2016	
			Attempted	% Successful
6331- BS Engineering Technology	ETG4950L	Lab	11	91%
		Online	14	93%
		Course Total	25	92%
	ETI4640	DIS	3	100%
		Online	20	90%
		Course Total	23	91%
6333 - BS Engineering Technology - EE	EET4158	DIS	1	100%
		Online	5	80%
		Course Total	6	83%
	ETS3543L	Lab	24	71%
		Online	45	80%
		Course Total	69	77%

Daytona State College Averages for 2015-2015	
Hybrid	81%
Lecture	80%
Online	78%

■ Indicates a success rate of 90% or higher
■ Indicates a success rate between 70% and 89%
■ Indicates a success rate below 70%

Source: IR Program Assessment Data

Course Success Rates by Multiple Session/Sub-session Only (1 of 3)

Major, Associated Courses and Sub-session			2012-2013		2013-2014		2014-2015		2015-2016	
			Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
6331 - BS Engineering Technology	CET3906	B term	1	100%						
		FA Full term	2	100%	2	100%	9	78%		
		Session	3	100%	2	100%	9	78%		
		SP Full term	3	100%	2	100%				
		SU Full term	4	100%	1	100%	2	100%		
	Course	10	100%	5	100%	11	82%			
	EET3085	FA Full term	15	47%	22	68%	10	100%	19	68%
		SP Full term	13	62%	12	100%	11	45%	22	73%
		SU Full term	2	100%						
		Course	30	57%	34	79%	21	71%	41	71%
	EET3086	FA Full term	40	70%	32	69%	42	74%	29	76%
		SP Full term	23	61%	27	67%	34	71%	13	85%
		SU Full term	15	80%	35	66%	27	78%	21	86%
		Course	78	69%	94	67%	103	74%	63	81%
	EGN3613	FA Full term			13	85%			20	75%
		SP Full term			14	71%	22	86%		
		SU Full term					10	100%	5	80%
		Course			27	78%	32	91%	25	76%
	ETG3541	SP Full term	22	77%	22	82%	23	83%		
		SU Full term	19	95%	13	85%				
		Course	41	85%	35	83%	23	83%		
	ETG3907	SP B term					2	100%		
		Full term	1	100%	1	100%				
		Course	1	100%	1	100%	2	100%		

■ Indicates a success rate of 90% or higher
■ Indicates a success rate between 70% and 89%
■ Indicates a success rate below 70%

Source: IR Program Assessment Data

Course Success Rates by Multiple Session/Sub-session Only (2 of 3)

Major or Dept., Associated Courses and Sub-session			2012-2013		2013-2014		2014-2015		2015-2016	
			Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
6331 - BS Engineering Technology	ETG4950	FA Full term	15	93%	11	91%	12	100%	11	91%
		SP Full term	27	96%	20	90%	16	94%	14	93%
		Course	42	95%	31	90%	28	96%	25	92%
	ETI3116	FA Full term	20	80%	24	79%	19	68%	27	81%
		SP Full term	17	88%	34	76%	17	82%	19	79%
		SU Full term	11	82%						
		Course	48	83%	58	78%	36	75%	46	80%
	ETI3421	FA Full term	15	87%	17	76%	12	83%	14	86%
		SP Full term	17	76%	17	100%			8	100%
		Course	32	81%	34	88%	12	83%	22	91%
	ETI3671	FA Full term	34	82%	<i>New course prefix and number</i>					
		SP Full term	26	62%						
		SU Full term	16	63%						
		Course	76	71%						
	ETI4448	FA Full term	25	96%	23	83%	22	77%	19	79%
		SP Full term	15	87%	17	76%	11	100%	16	75%
		Course	40	93%	40	80%	33	85%	35	77%
	ETI4640	FA Full term							3	100%
		SP Full term							20	90%
		Course							23	91%
ETM4220	FA Full term	8	88%	18	94%					
	SP Full term	10	90%	15	100%	15	93%			
	SU Full term	12	100%							
	Course	30	93%	33	97%	15	93%			
MAP3401	FA Full term	27	93%							
	SP Full term			36	81%	27	74%			
	Course	27	93%	36	81%	27	74%			

Indicates a success rate of 90% or higher
 Indicates a success rate between 70% and 89%
 Indicates a success rate below 70%

Source: IR Program Assessment Data

Course Success Rates by Multiple Session/Sub-session Only (3 of 3)

Major, Associated Courses and Sub-session			2012-2013		2013-2014		2014-2015		2015-2016	
			Attempted	% Successful	Attempted	% Successful	Attempted	% Successful	Attempted	% Successful
6333 - BS Engineering Technology - EE	CET3198	FA Full term	11	82%	10	80%	11	73%		
		SP Full term			1	100%				
		Course	11	82%	11	82%	11	73%		
	CET4138	SP Full term			1	100%	2	100%		
		SU Full term	3	100%						
		Course	3	100%	1	100%	2	100%		
	EET4158	SP Full term							1	100%
		SU Full term							5	80%
		Course							6	83%
	EET3716	FA Full term	10	100%	5	80%	14	93%		
		SP Full term					1	100%		
		Course	10	100%	5	80%	15	93%		
	ETP4240	FA Full term	7	100%	7	100%	11	91%		
		SP Full term					3	100%		
		Course	7	100%	7	100%	14	93%		
ETS3543	FA Full term	36	83%	25	76%	25	60%	28	79%	
	SP Full term	28	79%	19	47%	25	64%	28	71%	
	SU Full term			21	86%	17	71%	13	85%	
	Course	64	81%	65	71%	67	64%	69	77%	

Indicates a success rate of 90% or higher
 Indicates a success rate between 70% and 89%
 Indicates a success rate below 70%

Source: IR Program Assessment Data

Average Class Size by Course (1 of 2)

Major and Associated Courses		2012-2013		2013-2014		2014-2015		2015-2016	
		Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size
6331 - Engineering Tech	CET3906	1	3	1	2	2	6		
	CIS4510					1	11	1	8
	EET3085	3	10	2	17	2	10	2	21
	EET3086	4	20	3	31	3	34	3	21
	EGN3311	1	9	1	10	1	15	1	15
	EGN3343	2	8						
	ETI3671/ EGN3613	4	19	2	14	2	16	2	13
	ETC4241	1	6	1	11	1	9	1	6
	ETG3533	1	8			1	15	1	12
	ETG3541	2	21	2	18	1	23	1	23
	ETG3907	1	1	1	1	1	2		
	ETG4950	3	14	2	16	2	14	2	13
	ETI3116	3	16	2	29	2	18	2	23
	ETI3421	2	16	2	17	1	12	2	11
	ETI4186					1	16		
	ETI4205	1	15	1	11			1	22
	ETI4448	3	13	2	20	2	17	2	18
	ETI4640	2	8	1	13	1	15	1	20
	ETI4704	1	25	1	19	1	22	1	21
	ETM4220	4	8	2	17	1	15	1	21
	ETM4331	1	13	1	14	1	18	1	15
ETS4502	1	22	1	9	1	19	1	19	
MAP3401	2	14	1	36	1	27			
	Major	43	13	29	18	29	17	29	16

To prevent data from skewing, the following instructional methods are excluded: Labs associated with lectures, Private/Performance, Clinicals, Co-op, DIS, Field trips and Internships.

Source: IR Program Assessment Data

Average Class Size by Course (2 of 2)

Major and Associated Courses		2012-2013		2013-2014		2014-2015		2015-2016	
		Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size	Sections	Avg. Size
6333 – Engineering Tech - EE	CET3198	1	11	1	10	1	11	1	14
	CET4138	1	3	1	1	1	2		
	EET3716	1	10	1	5	2	8	1	9
	EET4158	1	8	1	6	1	12	1	5
	EET4732	1	9	1	5	1	13	1	5
	EST3543	1	11	<i>New course prefix and number</i>					
	ETP4240	1	7	1	7	2	7	1	9
	ETS3543	2	32	4	16	3	22	3	23
	Major	9	14	10	10	11	12	8	14
Department	86	17	79	18	75	21	84	19	

To prevent data from skewing, the following instructional methods are excluded: Labs associated with lectures, Private/Performance, Clinicals, Co-op, DIS, Field trips and Internships.

Source: IR Program Assessment Data

Performance Funding - Graduation Rates

Major	Fall Cohort Year	# in Cohort	150% Graduates	150% Graduation Rate	200% Graduates	200% Graduation Rate
6331- Engineering Tech	2010	32	12	37.5%	13	40.6%
	2011	22	6	27.3%	7	31.8%
	2012 – In progress	29	7	24.1%	10	34.5%
	2013 – In progress	27	8	29.6%	8	29.6%
6333- Engineering Tech- EE	2010	13	5	38.5%	5	38.5%
	2011	12	4	33.3%	4	33.3%
	2012 – In progress	4	1	25.0%	1	25.0%
	2013– In progress	14	3	21.4%	3	21.4%

Less than College average (150%- 44.8%, 200%- 49.23%)

Fall terms include prior Summer term enrollment in major.

Graduation within 200% time includes graduates within 150% time.

Source: IR Program Assessment Data

Performance Funding - Retention Rates

Program and Cohort Year		Registered	Exclusions	Adjusted Cohort	Retained by DSC		Retained by Program		DSC Total Retained
					N	%	N	%	
6331 BS-Engr. Tech	2011	72	11	61	5	8.20%	37	60.66%	68.85%
	2012	86	23	63	0	0.00%	39	61.90%	61.90%
	2013	90	7	84	3	3.57%	55	65.48%	69.05%
	2014	99	20	79	6	7.59%	49	62.03%	69.62%
6333 BS-Engr. Tech - EE	2011	31	4	30	1	3.33%	14	56.67%	60.00%
	2012	29	6	23	1	4.35%	15	65.22%	69.57%
	2013	47	9	40	4	10.00%	18	45.00%	55.00%
	2014	43	7	36	4	11.11%	23	63.89%	75.00%

Less than College average (FT- 60.48%, PT- 52.08%)

Registered - Includes all students enrolled in the fall term of the specified year, with the specified program as their primary major.

Exclusions - Includes students who are deceased or graduated fall of the specified year or the following spring or summer.

Not retained - Students who were not registered the following fall term.

Retained by DSC - Students who were still registered at DSC the following fall but with a different primary major.

Retained by Program - Students who were registered the following fall with the same primary major.

Source: IR Program Assessment Data

Performance Funding - Placement Rates							
Program Title	Cohort Year	Grads Reported	Continuing Education	Employed		Estimated Average Annual Full-Time Wage	
				DSC	FCS	DSC	FCS
BS Engineering Technology (ET)	2013/14	41	4%	95%	97%	\$37,952	\$49,832
	2012/13	65	11%	52%	52%	\$ 45,092	\$ 45,092
	2011/12	17	12%	59%	59%	\$**,***	\$**,***
	2010/11	2	*	50%	50%	\$**,***	\$**,***

Source: Florida Education Training Placement Information Program (FETPIP)

■ Indicates the College average above the State Averages
■ Indicates the College average same as the State Averages
■ Indicates the College average below the State Averages

*Currently Inactive Program

N/A - No placement data for the program.

\$**,*** Less than 10 graduates found employed.

Source: IR Program Assessment Data

Headcount by Major

Major	2012-2013	2013-2014	2014-2015	2015-2016
6331 - BS-ENGR TECH	120	131	136	130
6333 - BS-ENGR TECH - EE	46	65	56	73
School Total	397	429	468	474

College Enrollment Decreased: 7.9%(12/13); 3%(13/14); 0.73%(14/15); 1.14% (15/16)

Graduates in Major

Major	2012-2013	2013-2014	2014-2015	2015-2016
6331 - BS-Engr Tech	23	13	21	18
6333 - BS-Engr Tech - EE	6	8	7	7
Total	65	47	64	73

Blank cells or missing years indicate no graduates.

Average Age by Program

Program	2012-2013	2013-2014	2014-2015	2015-2016
6331 - BS-Engr Tech	30.6	31.3	31.0	32.0
6333 - BS-Engr Tech - EE	33.6	34.0	33.0	33.0

Calculation excludes individuals whose birthdates are not reported.

	2012-2013	2013-2014	2014-2015	2015-2016
All Programs	32	32	32	32
Daytona State College	26.7	26.6	26.4	26

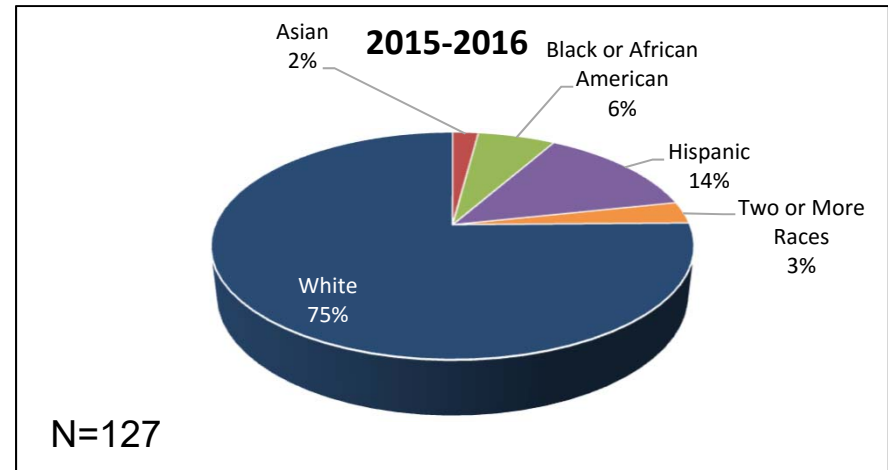
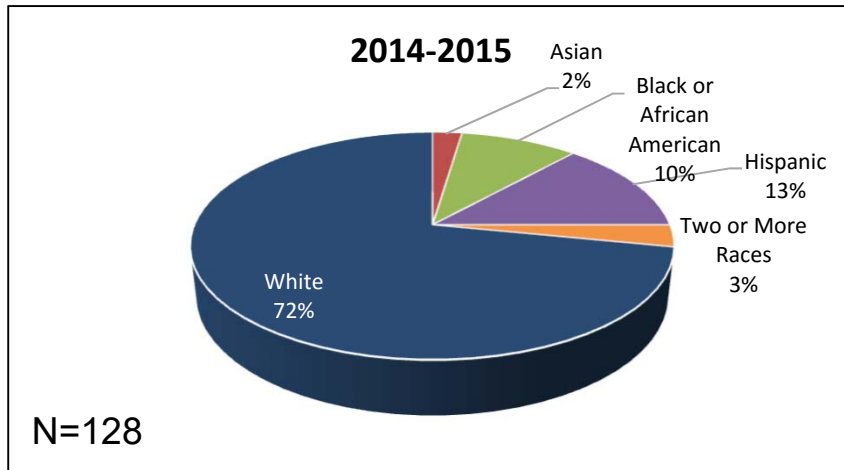
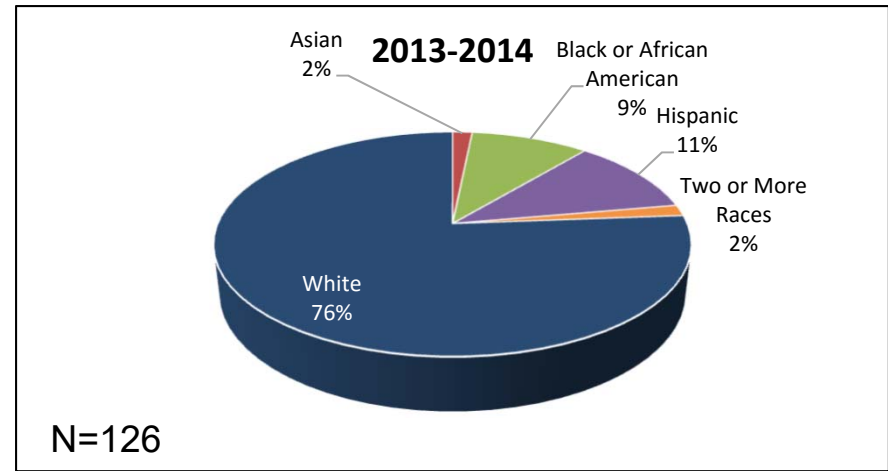
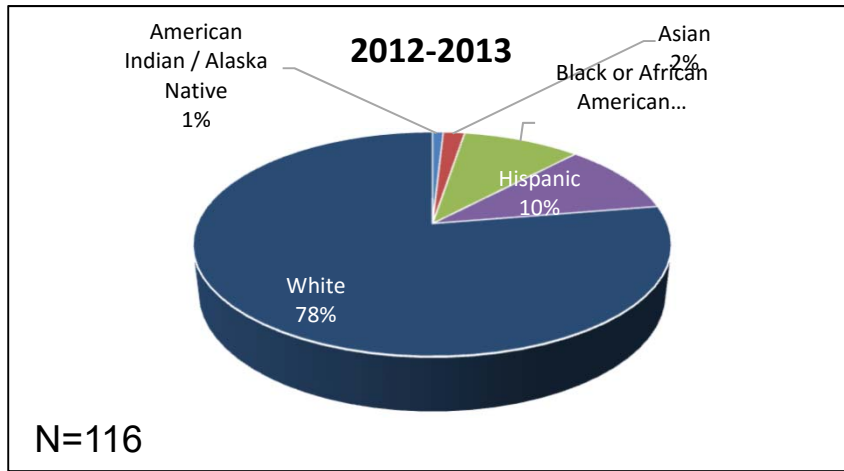
Gender

Program	2012-2013		2013-2014		2014-2015		2015-2016	
	Female	Male	Female	Male	Female	Male	Female	Male
6331 - BS-Engr. Tech	21%	79%	18%	82%	17%	83%	15%	85%
6333 - BS-Engr. Tech - EE	15%	85%	14%	86%	9%	91%	10%	90%

Blank cells or missing years indicate no enrollment. Excludes individuals whose gender is not reported.

Major	2012-2013		2013-2014		2014-2015		2015-2016	
	Female	Male	Female	Male	Female	Male	Female	Male
Daytona State College	60%	40%	59%	41%	60%	40%	60%	40%

Race / Ethnicity by Program 6331 – BS Engineering Technology

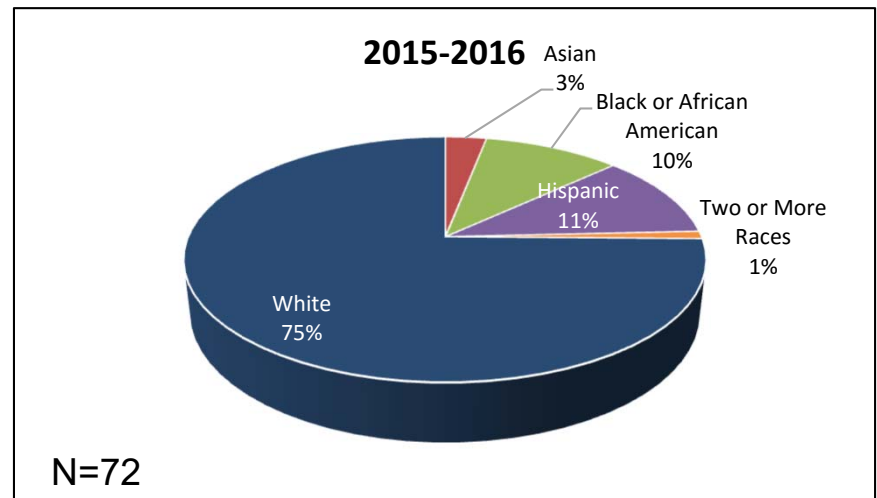
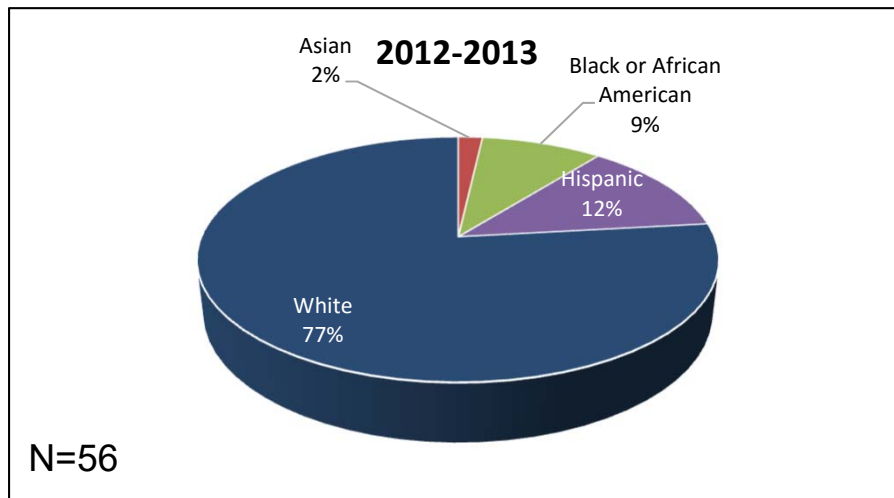
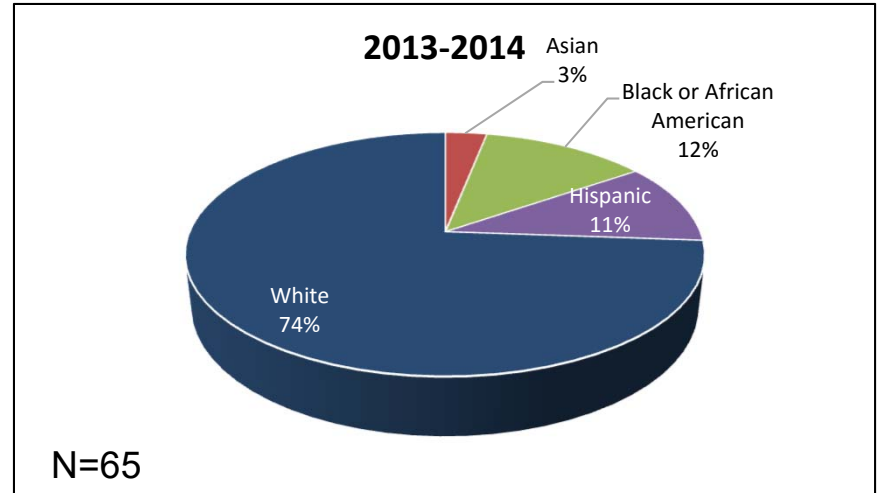
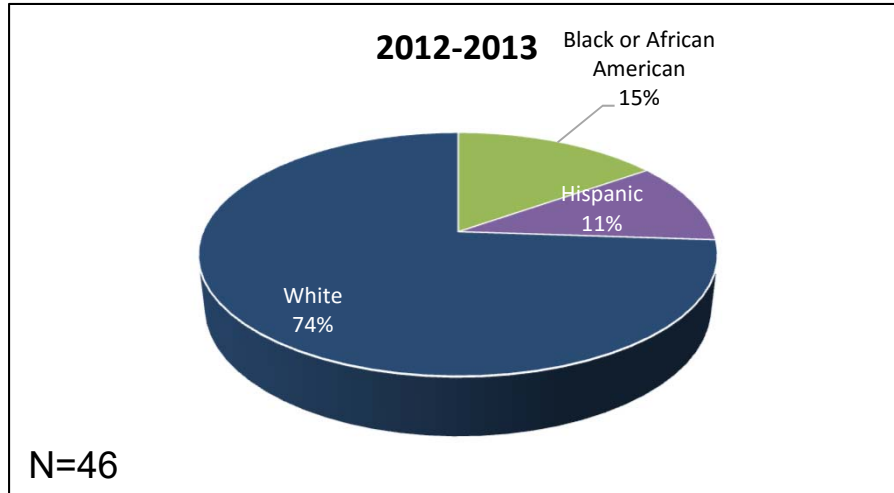


DSC Averages 2015-2016							
Amer Indian/ Alaska Native	Asian	Black or African Amer	Hispanic	Nat Hawaiian	Pacif Islander	2 or More Races	White
0%	2%	14%	14%	0%	0%	2%	66%

Excludes individuals whose race / ethnicity is not reported.
Blank cells or missing years indicate no enrollment.

Source: IR Program Assessment Data

Race / Ethnicity by Program 6333 – BS Engineering Technology - EE

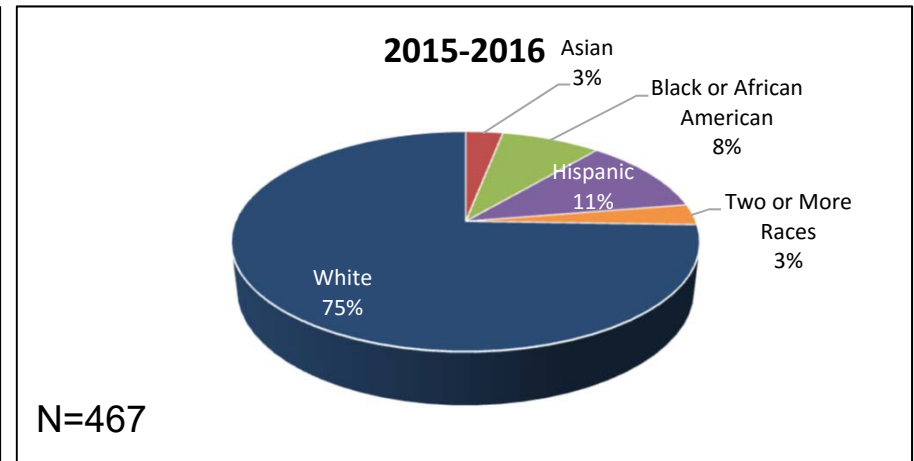
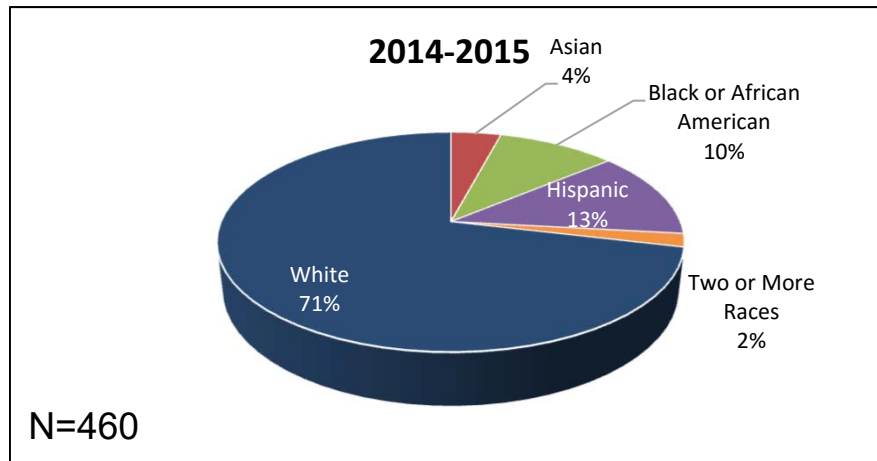
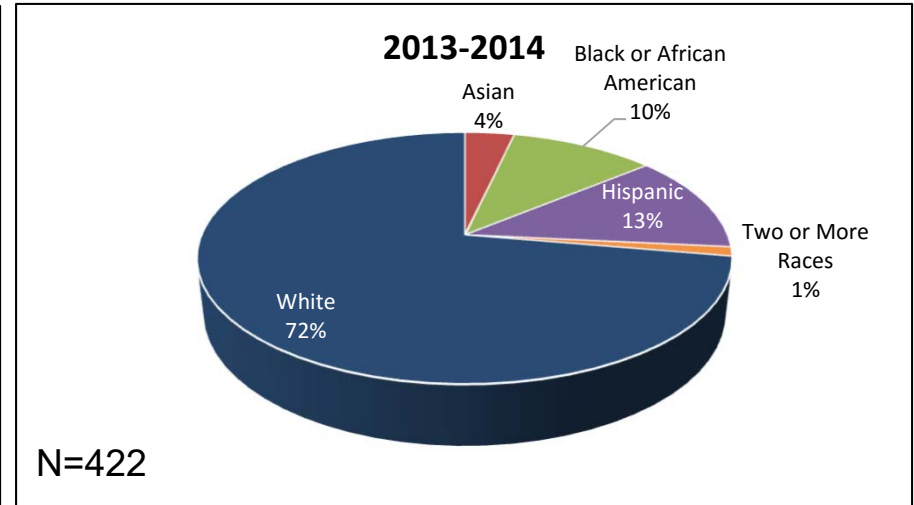
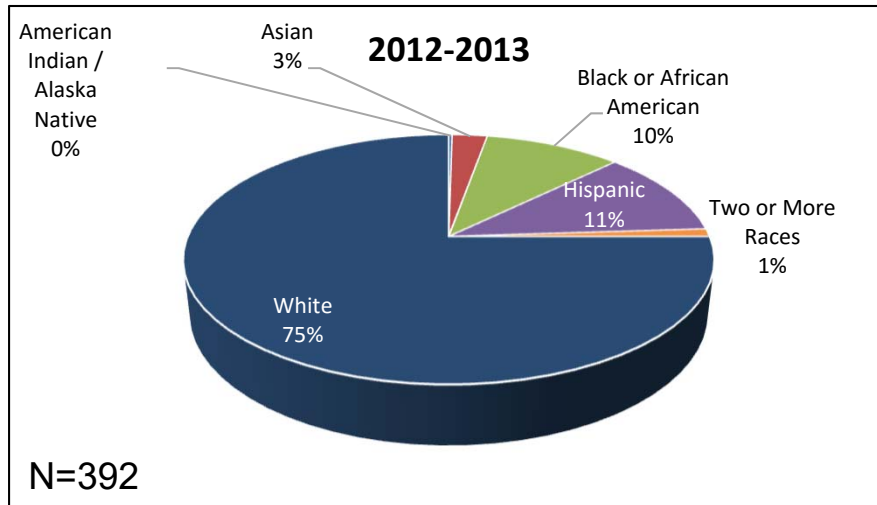


DSC Averages 2015-2016							
Amer Indian/ Alaska Native	Asian	Black or African Amer	Hispanic	Nat Hawaiian	Pacif Islander	2 or More Races	White
0%	2%	14%	14%	0%		2%	66%

Excludes individuals whose race / ethnicity is not reported.
Blank cells or missing years indicate no enrollment.

Source: IR Program Assessment Data

Race / Ethnicity by Program School of Engineering Technology



DSC Averages 2015-2016							
Amer Indian/ Alaska Native	Asian	Black or African Amer	Hispanic	Nat Hawaiian	Pacif Islander	2 or More Races	White
0%	2%	14%	14%	0%		2%	66%

Excludes individuals whose race / ethnicity is not reported.
Blank cells or missing years indicate no enrollment.

Source: IR Program Assessment Data