

Program Assessment Plan for Computer Engineering

Program Mission

To serve Northeastern Pennsylvania and the world community through the education of professional engineers practiced in the application of basic scientific principles and the laws of nature leading to the development of innovative ways to use electricity and computers to improve people’s lives. That education will be personally focused on the needs of each student, centered on core liberal studies consistent with Jesuit principles of higher education, and grounded in the intellectual and faith traditions of the Catholic Church. It will be unexcelled in quality of instruction and content, employing the latest in laboratory, simulation and modeling techniques, with an emphasis on engineering design throughout the curriculum.

Curriculum

The curriculum provides more than one opportunity for students to meet the Program Learning Objectives

Key Courses And Assignments

Phys 140 (I), Phys 140L (I), Phys 141 (I), Phys 141L (I), Phys 270/270L (R) ENGR 150 (I), E/CE 240 (R,A), EE 241/241L, ENGR 250 (R), E/CE 340 , EE 343/343L, EE 344/L, EE 346 , EE 450(M), EE 449/EE449L (Capstone/Senior Design I) (M,A), EE 454 (Capstone/Se

Program Learning Outcomes to be Assessed

PLO	A).An Ability to apply knowledge of mathematics, science and engineering.	ILOs to which the PLOs map	1,3
Year:	Year 2 AY 2015-16		
Is the evidence Direct or Indirect	Both direct and indirect		
Where in the program does the evidence reside?	Department files stored in LSC 235		
What tools are necessary to collect evidence? (Rubrics, Portfolio, Embedded Exam Questions etc.)	No special tools necessary		
Benchmarks	TBD		
ListOfSources	Aggregate scores on embedded questions; course exit survey		

Program Learning Outcomes to be Assessed

PLO	B).An ability to design and conduct experiments, as well as to analyze and interpret data.	ILOs to which the PLOs map	1,2
Year:	Year 1 Spring 2015		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools necessary		
Benchmarks	TBD		
ListOfSources	Rubric to score samples of student work, aggregate scores on embedded questions, student survey		

Program Learning Outcomes to be Assessed

PLO	C).An ability to design a system, component, or process to meet desired needs.	ILOs to which the PLOs map	1,3
Year:	Year 2 AY 2015-16		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235, Robotics LSC 142		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools necessary		
Benchmarks	TBD		
ListOfSources	Aggregate scores on embedded questions, lab reports, senior design, student survey		

Program Learning Outcomes to be Assessed

PLO	D).An ability to function on multidisciplinary teams.	ILOs to which the PLOs map	3
Year:	Year 1 Spring 2015		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools required		
Benchmarks	TBD		
ListOfSources	Rubric; course exit survey		

Program Learning Outcomes to be Assessed

PLO	E).An ability to identify, formulate and solve engineering problems.	ILOs to which the PLOs map	3,4
Year:	Year 2 AY 2015-16		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools necessary		
Benchmarks	TBD		
ListOfSources	Aggregate scores on embedded questions, student survey		

Program Learning Outcomes to be Assessed

PLO	F).An understanding of professional and ethical responsibility.	ILOs to which the PLOs map	1
Year:	Year 3 AY 2016-17		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235, D2L files		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools necessary		
Benchmarks	TBD		
ListOfSources	Rubric to score samples of student writing, aggregate scores on embedded questions, student survey		

Program Learning Outcomes to be Assessed

PLO	G).An ability to communicate effectively.	ILOs to which the PLOs map	2,4
Year:	Year 1 Spring 2015		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235, D2L files		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools required		
Benchmarks	TBD		
ListOfSources	Rubric to score samples of student work; course exit survey		

Program Learning Outcomes to be Assessed

PLO	H).The broad education necessary to understand the impact of engineering solutions in a global and societal context.	ILOs to which the PLOs map	2
Year:	Year 3 AY 2016-17		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235, D2L files		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools required		
Benchmarks	TBD		
ListOfSources	Rubric to score samples of student writing, aggregate scores on embedded quiz questions, student survey		

Program Learning Outcomes to be Assessed

PLO	I).A recognition of the need for, and an ability to engage in life-long learning.	ILOs to which the PLOs map	1
Year:	Year 3 AY 2016-17		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools required		
Benchmarks	TBD		
ListOfSources	Rubric to score samples of student work; course exit survey; alumni survey		

Program Learning Outcomes to be Assessed

PLO	J).A knowledge of contemporary issues.	ILOs to which the PLOs map	1
Year:	Year 3 AY 2016-17		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools required		
Benchmarks	TBD		
ListOfSources	Aggregate scores on embedded questions; course exit survey		

Program Learning Outcomes to be Assessed

PLO	K).An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	ILOs to which the PLOs map	3
Year:	Year 1 Spring 2015		
Is the evidence Direct or Indirect	Both direct and indirec		
Where in the program does the evidence reside?	Department files stored in LSC 235		
What tools are necessary to collect evidence? (Rubics, Portfolio,Embedded Exam Questions etc.)	No special tools required		
Benchmarks	TBD		
ListOfSources	Aggregate scores on embedded questions; course exit survey		