Program Assessment Plan for Pre-Engineering

Program Mission   The Pre-Engineering program at The University of Scranton 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. This two-year, non-degree program provides students with a broad experience in general education courses and a solid technical foundation in engineering, mathematics, computing and the physical sciences to prepare students to transfer to another university to complete their desired field of study, or to remain here at The University of Scranton if they chose to major in Electrical Engineering or Computer Engineering.

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

KeyCourses And Assignments   ENGR 150 (I), PHYS 140 (I), PHYS 140L (I), PHYS 141 (I), PHYS 141L, ENGR 253L, ENGR 254LMajor/Cognate Electives such as Phys 270/270L, E/CE 240, EE 241/L (R,A), ENGR 250, ENGR 352

Program Learning Outcomes to be Assessed

PLO	1). An ability to apply knowledge of mathematics, science, and engineering.	ILOs to which the PLOs map	1,4

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; course exit survey

Pre-Engineering

PLO   2).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   3).An ability to work effectively in a group to accomplish an objective, and make significant contribution to its outcome   ILOs to which the PLOs map

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   4).An ability to communicate effectively.   ILOs to which the PLOs map

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   5).The broad education necessary to understand the impact of   ILOs to which the PLOs map   4
engineering solutions in a global, economic, environmental,

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; aggregate scores on embedded questions; course exit
survey

Program Learning Outcomes to be Assessed

PLO   6).An ability to use the techniques, skills, and modern   ILOs to which the PLOs map   1,3
                   engineering tools necessary for engineering practice.

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