### Swanson School of Engineering Diversity Management Education Plan and Curriculum

Diversity is one of the five priorities in the Swanson School of Engineering (SSoE). Integration of a variety of diversity education activities, workshops and seminars are created to support the school mission to "produce highly qualified engineers and useful creative research and technology through academic excellence." The primary purpose of SSoE Diversity education is to create healthy awareness of the school diversity and inclusion goals and to foster intercultural sensitivity and a positive non-discriminatory working, teaching and learning climate in an inclusive engineering community. SSoE diversity vision is a welcoming community that engages all of its diversity in research, teaching, and general education and learning of students. The 2-3 hours workshops and 1-2 hour seminars are offered on a variety of topics and are open to all in SSoE and university community.

Some of the unique aspects and brand of SSoE diversity management education plan include:

- All incoming freshman students are required to take 1-2 hours seminar/workshop Global engineering education/Culture within by the end of the freshman year at PITT
- All new graduate students are required to take a 3-hour diversity education workshop on Global engineering education/Team Building within their first year at PITT
- Faculty members and departments are evaluated annually on their contributions to diversity and inclusion
- Departments and faculty compete for SSoE Faculty/ Department Diversity Award
- Dedicated Engineering Office of Diversity

## **Curriculum for Global Skills**

- Understanding Multi-cultural self
- Cultural Navigation and Negotiation
- Valuing and celebrating Diversity
- Inter-cultural Competency/Sensitivity/Communication skills
- Boundary-crossing skills
- Skills for managing and resolving problems
- Diversity management skills for acceptable classroom behavior
- Transformation Leadership skills

## Learning Objectives of Diversity Education

- 1. To appreciate the contributions of different groups who have contributed to our knowledge base.
- 2. To develop positive attitudes about groups of people who are different from ourselves.
- 3. To become good citizens of the school, the community, the country and the world community.
- 4. To enrich and evaluate knowledge from different perspectives.
- 5. To provide decision making skills and critical analysis skills so the students can make better choices in their everyday lives.
- 6. To develop an ethnic, national and global identity.

7. Understanding sources and pitfalls of prejudice/discrimination; and developing strong self-awareness and empathy.

# **Students Engineering Global Skills**

- Communication skills
  - Lack of communication skills weakens the professional engineer
  - Understanding e-business and having the electronic skills required for international communication
- Boundary-crossing skills
  - Skills to cross national and cultural boundaries
  - Being able to analyze other cultures' needs, and design products and services to fit those needs
  - Being aware of customs, laws, and ways of thinking in other countries
  - Understanding and accepting other cultures' attitudes, behaviors and beliefs without compromising your own
  - Valuing your own cultural heritage while acknowledging its strength and weaknesses
  - Understanding local negotiating strategies
  - Learning about other countries' key business and political leaders and being aware of their philosophies
- Team Building Skills
  - Collaborations in Problem solving
  - Understanding the culture /climate environment in a research group
  - Building Community Identity to create a sense of place and promote an individual's sense of well-being and level of personal satisfaction.
  - Learning Community Interaction among members of the team to allow sharing of ideas, concerns, and information that permit members to know each other.
  - Learning Community Involvement which is more than interaction or identity.

## Faculty

- Diversity management skills for acceptable classroom behavior
- Empower your students in their own learning
- Help your students develop good learning skills
- Value diversity (differences) each student brings
- Work to develop or change to positive attitude
- Communicate Responsibly
  - Communicate expectations
  - Learn to understand your students
  - Listen and show empathy.
  - Develop clarity across cultures and language differences
  - Provide ongoing feedback with sensitivity to students' differences
  - Respect people's spaces, especially of the opposite sex
  - Acknowledge that students learn differently
  - Project good role model to students-avoid foul language

#### Administrator

- Transformation Leadership skills-
  - Openness to collaborate to make connections
  - Confidence in others
  - Building Coalition
  - Using SWOT to Transform
- Skills for managing and resolving problems
  - Being able to unite individuals' diverse skills and interests into a common purpose
  - Be self-confident yet humble, listening and learning from people whose value systems differ from yours
  - Developing and suing Diversity Scorecard
- Modeling Servant-leadership
  - Developing the Attributes of the Servant-Leadership
  - Understanding the foundation of effective
  - $\circ$  Developing the vision and leading in 21<sup>st</sup> century engineering school