GLOBAL COMPETENCE MATRIX FOR ENGINEERING AND TECHNOLOGY EDUCATION

Global Competence is the capacity and disposition to understand and act on issues of global significance.

INVESTIGATE THE WORLD	RECOGNIZE PERSPECTIVES	COMMUNICATE IDEAS	TAKE ACTION
Students investigate technology beyond their immediate environment and how it affects societies around the world.	Students recognize their own and others' perspectives as applied to an ever changing world with the use and integration of technologies in different societies.	Students communicate their ideas, knowledge, and experiences effectively with diverse audiences.	Students use their knowledge and skills to translate their ideas and findings into actions to improve conditions.

Students:

INVESTIGATE THE WORLD

- Identify themes or issues and frame researchable questions of local, regional, or global significance that call for or emerge from investigations into developments of various technologies.

- Use a variety of technical terminologies and domestic and international sources of media to identify and weigh relevant evidence to address global technological developments.

- Analyze and synthesize information using knowledge, research methods, and critical thinking skills to construct coherent responses to globally significant issues that pertain to the application of technologies.

- Develop an argument based on technical research that considers multiple perspectives and draws defensible conclusions from a study of technology.

RECOGNIZE PERSPECTIVES

Students:

- Recognize their own and others' perspectives on situations, events, issues, or phenomena, involving technology and the philosophy of its use, and determine how that perspective along with their entire understanding of the world influences those perspectives.

- Examine how the perspectives of other people, groups, or schools of thought influence the ways technological research findings are interpreted and applied.

- Explain how the development of technologies is based on the contributions of different cultures and influenced by cultural interactions and how societies and cultures are influenced by different technologies.

- Explore and describe how differential access to knowledge, technology, and resources affects quality of life and perspectives of that society.

COMMUNICATE IDEAS

Students:

- Recognize and express how diverse audiences may interpret differently and/or make different assumptions about technologies and how that affects communication and collaboration.

- Communicate effectively with diverse people, using appropriate verbal and nonverbal behavior, technical terminology, and strategies.

- Select and use appropriate technologies to communicate with diverse audiences and collaborate with experts and peers around the world regarding technology.

- Reflect on how effective application of technology affects understanding in a technologically diverse world.

TAKE ACTION

Students:

- Identify and create opportunities for the appropriate use of technologies that enable personal or collaborative action that improves conditions in a specific society.

- Assess and evaluate technologies in a society using scientific evidence, technical advancements, and the potential for impact, taking into account previous approaches, varied perspectives, and potential consequences.

- Use technologies to personally or collaboratively act in creative and ethical ways to contribute to sustainable improvement locally, regionally, or globally and assess the impact of the actions taken.

- Reflect on how the use of technologies and their affect contribute to their capacity to advocate for improvement locally, regionally, or globally.