



Teaching the Technology Gateway

How is the curriculum delivered?

Interdisciplinary teaching teams or teachers with multiple credentials/certifications deliver the Technology Gateway. Teaching team members work together to plan sequenced instruction but are not required to be in the classroom simultaneously.

Who should use Technology Gateway?

What is Technology Gateway?

Technology Gateway is an integrated, multi-discipline (mathematics, communications, and science/technology), problem-based curriculum to prepare students for success in technology-based careers. The curriculum is specifically designed to improve mathematics skills of students who have had some algebra but are not yet prepared for the study of pre-calculus (college algebra and trigonometry).

Mathematics is taught "just-in-time" and in context through 6 problem scenarios that provide open-ended problems for student teams to solve: all problem scenarios have multiple (but not infinite) possible solutions. Problem-solving techniques are imbedded, encouraging students to consider multiple possible solutions and then to pursue, and defend, their choice of one solution.

Technical college students

As three coordinated courses taken together in one college semester (or 1-2 high school terms), Technology Gateway is designed to prepare students for success in engineering technology or as a core of study for industrial technology or other technology-based majors. Technology Gateway classes can also be taken as an introduction to technology for other associate degree majors.

High school students

Technology Gateway may meet a variety of needs at the high school level. Some students may need more skills in mathematics, science, and/or communications to qualify for college-level technology programs. Other students may be interested in the Technology Gateway to get a "taste" of engineering or experience a hands-on environment enabling them to learn teaming and other workplace readiness skills. Technology Gateway generates technical elective or other credit in high school. A dual credit option is often available through articulation with a local community college.

Educators

Training for teaching the Technology Gateway is available through the SC Advanced Technological Education (SC ATE) Center of Excellence. Training includes teaching methods, faculty/student teamwork, and instruction in how to use the curriculum materials.

In addition to workplace/industry problem scenarios, the Technology Gateway instructor guide includes:

- Objectives and instructor tips with each project.
- Scope and sequence charts.
- Suggested student workshop activities.
- Content strands.
- Print and non-print resources.
- Assessment rubrics.
- Problem-based learning "Need-to-Know" template.
- Student competencies.
- Equipment and resource lists.