Instructional Technology Guidelines
Rule 505-3-.54

The Instructional Technology standards are based on a framework for technology integration known as Technological Pedagogical Content Knowledge (TPACK) (Mishra & Koehler, 2006). This framework adds to Shulman's description of pedagogical content knowledge (PCK) by including technology knowledge (T). Teaching effectively with technology requires developing expertise in the following three (3) knowledge domains: pedagogy (P), content (C), and technology (T), as well as in the domains that exist between and among them including technological pedagogical knowledge (TPK), pedagogical content knowledge (PCK), technological content knowledge (TCK), and of course, technological pedagogical content knowledge (TPACK), the convergence of the three domains. The purpose of the Instructional Technology standards is to improve P-12 teaching and learning by providing educators with broader and deeper Technological Pedagogical Content Knowledge (TPACK).

Programs based upon the Instructional Technology standards prepare educators who wish to effectively integrate technology into their own teaching practice and to assist other educators in utilizing technology to improve the teaching and learning process. Instructional Technology is a new field of certification and will be classified as a Service (S) certificate (P-12) when it is added to an existing clear renewable Georgia certificate.

The following guidelines are provided to assist in the development of advanced degrees and/or certification-only programs in Instructional Technology at the Masters, Education Specialist, and Doctoral levels. They are intended to offer clarification and to give guidance in meeting the intent of the standards. Guidelines are provided to clarify the content or content pedagogy hours required for the Instructional Technology degree programs (Guideline #1). Guidelines are also provided for non-degree, certification-only programs (Guideline #2). Additionally, guidelines for a conversion mechanism (bridge program) is provided to allow educators who have earned an Instructional Technology degree before standards were developed and before Instructional Technology was a certification area to add the Instructional Technology certification field to their certificate (Guideline #3). Finally, guidelines are included for field experiences (Guideline #4).

While these are guidelines and not mandated, variances should be justifiable.

Guideline #1: Content or Content Pedagogy Requirement

Masters degree programs in Instructional Technology must include a minimum of twelve (12) semester hours (or the quarter hours equivalent) of advanced level coursework focused on the content or content pedagogy of a certificate field held by the educator. All twelve (12) hours may be satisfied through advanced level content or content pedagogy courses in which educators are required to demonstrate advanced skills related to their field of certification. Three (3) of the twelve (12) semester hours may be satisfied through a thesis, research project or capstone directly focused on the content of a certificate field held by the educator.

Programs at the Specialist or Doctoral degree levels in Instructional Technology must include a minimum of nine (9) semester hours (or the quarter hours equivalent) of advanced level coursework focused on the content or content pedagogy of a certificate field held by the educator. All nine (9)

hours may be satisfied through advanced level content or content pedagogy courses in which educators are required to demonstrate advanced skills related to an existing field of certification, or these hours may be satisfied through work on a thesis, research project or dissertation directly focused on the content of a certificate field held by the educator.

The requirement of content or content pedagogy courses for all degree levels may be met in a variety of ways. One way might include a pedagogy course that is offered to a number of educators with a variety of content backgrounds. If this occurs, the assignments and experiences must be tailored to the individual educator so that his/her certification/content field is expanded or enhanced. However, it must be clear in the program that these 9 hours (Specialist or Doctoral levels) or 12 hours (Masters), depending upon the degree level, are to be used only for that purpose. These 9 or 12 hours CANNOT be used to add a new endorsement to a certificate. The intent of the content or content pedagogy requirement is to expand or enhance the knowledge, skills and dispositions reflected in a previously awarded certificate area.

Examples of coursework appropriate to satisfy the content or content pedagogy requirement include, but are not limited to, the following:

- Content specific to the subject area in which the educator holds certification
- Methods or education strategies specific to the content area in which the educator holds certification
- Methods of teaching reading and writing to support learning in content areas
- Coursework focused on teaching specific content to students with special needs
- Coursework in integrating technology into content area instruction
- In-depth study of assessments of a content area
- Study of pedagogical content knowledge of specific content areas
- Study of curriculum models specific to a content area

Guideline #2: Non-Degree, Certification-Only Options

The non-degree certification-only option is available to educators who already hold an advanced degree and seek to add the Instructional Technology initial certification to their certificate. The certification-only option may be achieved through a stand-alone or embedded program. The stand alone program is a planned sequence of courses and field experiences that lead to an educator meeting all Instructional Technology standards for initial certification. The embedded program is a planned sequence of courses and field experiences that lead to an educator meeting all advanced degree requirements as well as all of the Instructional Technology standards for initial certification.

Certification-only programs in Instructional Technology must include appropriate field-based experiences allowing the educator to merge practice and theory in job-embedded, performance-based practice.

Recommendation for initial certification in Instructional Technology requires a passing score on the state-approved content assessment.

Certification-only programs in Instructional Technology do NOT require a minimum number of hours of advanced level coursework focused on the content or content pedagogy of a certificate field held by the educator.

Certification-only programs must be approved by the GaPSC as separate programs.

Guideline #3: Conversion Mechanism (Bridge Program)

Individuals wishing to acquire certification in Instructional Technology based upon previously completed Instructional Technology (or equivalent) degree programs must meet the following criteria:
- Hold an advanced Instructional Technology or equivalent degree,
- Submit a passing score on the Georgia state-approved content assessment in the area of Instructional Technology, and
- Provide evidence of meeting GaPSC Instructional Technology standards through a mechanism decided upon by the approved program provider.

GaPSC approved institutions with approved Instructional Technology programs must review transcripts, artifacts, and professional and/or educational experiences against program standards. Educators who meet all standards may be recommended for certification. In the event that the educator does not meet all standards, the institution will require additional coursework or experiences.

The institution will determine if the degree meets the guidelines for recency of study of its institution, but no degree should be older than ten (10) years.

Only GaPSC approved units with approved Instructional Technology programs may be approved for offering the conversion mechanism. The conversion mechanism will be reviewed as part of the review process.

Each institution will maintain evidence of completing this process for each educator.

Guideline #4: Field Experiences

Field experiences must be embedded in Instructional Technology certification programs as they are in all approved programs. Program providers must provide appropriate field experiences for educators. A minimum of 100 clock hours of field work is recommended. The field experiences must allow the educator to provide evidence of performance-based opportunities at all P-12 levels and allow educators to hone their skills in Instructional Technology. Educators must document experiences working in settings that affect the learning of students at all P-12 levels. This might include working directly with students, teachers, other educational professionals or pre-service teachers through coaching, professional development or research. Institutions should schedule these hours dependent upon the needs of the educators.