

Information Resources Employees Continuing Education Guidelines for Cybersecurity

Continuing Education Guidelines for
Information Resources Employees of Texas



Texas Department of
Information Resources

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Overview

In fiscal year 2016, the State of Texas invested more than \$3.4 billion annually in information resources and telecommunications to support government functions serving the needs of its citizens.¹ These strategic technology assets must be managed as valuable resources.

The nature of information technology (IT) is one of rapid advancement and an ever-changing landscape. Consequently, those who manage the state's IT investment must embrace continuous learning to provide effective solutions, support business objectives, and plan for future needs.

The Texas Cybersecurity Act² directs the Texas Department of Information Resources (DIR) to establish mandatory continuing education guidelines for cybersecurity training that must be completed by all Information Resources Employees (IREs) of state agencies and institutions of higher education.

Note: For the purposes of this guide, the term *agencies* represents both state agencies and institutions of higher education.

IREs are free to select whatever educational activities that best suit their specific needs and expertise. The guidelines can be fulfilled by participating in training classes, conferences, webinars, and other educational activities.

1 DIR, "Report on State Technology Expenditures," *2016 Biennial Performance Report*, page 16, November 2016. Available online at <www.dir.texas.gov>.

2 Texas House Bill 8, 85th Regular Legislative Session; §2054.076(b-1) of the Texas Government Code

IRE Continuing Education Guidelines

IREs are agency employees performing administrative, security, governance, or compliance activities on information technology systems. These types of employees generally have an occupational Category of “Information Technology” per the Texas State Auditor’s Office. IRE continuing education guidelines are based on the premise that IREs should strive for continual awareness of technological threats, and stay abreast on opportunities to expand their cybersecurity knowledge.

Classification Levels

For the purposes of this program, DIR has classified IREs into levels based on their position duties. Continuing education guidelines grow the more an employee’s responsibilities grow. *Table 1* presents the IRE Classification Levels and the yearly hours of continuing education required for each level.

Table 1: IRE Classification Levels

CLASSIFICATION	DESCRIPTION	EDUCATION GUIDELINE
IRE Level 1	All IREs	1 hours per fiscal year
IRE Level 2	IREs with administrative privileges or responsibilities.	3 hours per fiscal year
IRE Level 3	Information security or cybersecurity staff.	6 hours per fiscal year

Verification of Classification Level

DIR believes that continuing education in the cybersecurity field is of vital importance to the continued security of State systems. As such, training guidelines for IREs shall be the highest level that corresponds to any portion of an IRE’s job duties. For IRE Level 2 and 3, consider if IREs with responsibilities or duties relating to sensitive and/or confidential data should be prioritized.

Activities that May Count for IRE Continuing Education Credit

While many types of professional activities enhance an IRE’s experience and aid learning, those that can be counted for IRE credit are listed below.

Category A

Attending a qualified educational event such as a conference, seminar, or training class may be used to satisfy up to 100% of an IRE’s yearly hours.

Category B

Presenting at qualified educational events may be used to satisfy up to 33% of an IRE’s yearly hours.

Category C

Certifications may be used to satisfy the yearly guideline. The agency's IRM should determine which certifications are suitable to be used to satisfy the guidelines. IREs should keep their current certifications on file with their agency.

Qualified Educational Events

Qualified educational events are those that meet the following guidelines and enhance the IRE's understanding of securing information resources.

To qualify for credit an event must meet *all* of the following criteria:

- Supports information or cybersecurity
- Provides some type of attendee interaction or knowledge transfer (class exercises, discussion, group work, opportunity for question and answer, survey, or a written report of the event prepared by the IRE, etc.)
- Provides for proof of participation (host issues a completion form/certificate, transcript available, host maintains a roster of attendees, IRE's report with details on the time/place/presenter and summary of the experience)
- Meets generally accepted standards as an educational event:
 - is planned in response to an identified educational need
 - has legitimate educational objectives
 - is designed/conducted by qualified personnel
 - has content/delivery methods that support the intended learning outcomes
 - is evaluated by participants in some manner or IRE prepares a suitable report for their management
 - lasts at least 30 minutes

Examples of Qualified Educational Events

- Classroom training
- Educational conferences
- Self-paced/online training
- College coursework
- A defined educational component of a meeting
- Seminars taken as part of a professional certification
- Learning held via interactive video/web conferencing
- DIR's annual Information Security Forum

Measuring Continuing Education

Throughout the year, IREs participate in qualified educational activities that support cybersecurity and earn continuing education credits

Definition of Continuing Professional Education Unit

One unit of IRE continuing professional education (CPE) equals one *contact hour*. The term *contact hour* is defined as a 60-minute interval in which interactive learning takes place as part of a structured educational or training experience.

The terms *CPE unit*, *CPE hour*, *IRE CPE*, or *CPE* refer to 60 minutes of continuing education credit—these terms are used interchangeably in these guidelines. Additionally, the terms *contact hours* and *clock hours* are common generic terms indicating 60 minutes of continuing education.

Calculating the Number of IRE CPEs per Event for Category A – Attending

An IRE may earn one CPE unit for each hour of attendance. To determine the IRE CPEs for an eligible event:

1. Calculate the total length of the event in hours
2. Subtract any time spent on breaks, meals, or non-educational activities
3. Round the remainder up or down to the nearest half hour

An event must last at least 30 minutes to be counted. The ideal minimum is one hour, especially for an in-person event. However, with the infusion of shorter online training, 30-minute modules are not uncommon. The IRE should make sure that any event attended, especially one of very short duration, is of sufficient quality and depth to provide appropriate benefit.

The IRE must attend the entire module, session, or event as is appropriate to fulfill the learning objectives.

Example: Calculating contact hours for an event attended

An IRE attends a one-day class lasting from 8:30 a.m. to 4:30 p.m. with a 30-minute morning break, a one-hour lunch, and a 30-minute afternoon break.

$$\begin{array}{rcl} 8:30 \text{ to } 4:30 & = & 8:00 \text{ hours total} \\ & - & 0:30 \text{ minute morning break} \\ & - & 0:30 \text{ minute afternoon break} \\ & - & \underline{0:60 \text{ minute lunch break}} \\ & = & 6 \text{ contact hours (6 IRE CPEs)} \end{array}$$

If the lunch includes a formal educational activity, that time can also be counted toward total CPEs. Examples might include a lunch speaker, a working lunch where teams complete a class exercise, or structured topic table discussions. This does not include informal networking with other attendees.

Calculating the Number of IRE CPEs per Event for Category B – Presenting

An IRE may earn 1 CPE credit for each hour presenting at qualified educational events plus credit for preparation time up to three times the presentation length.

- For preparation, IREs may count actual time or session presentation length times 3, whichever is less.
- CPE hours cannot be earned for subsequent presentations of the same material unless the material substantially changed.
- If multiple presenters are involved in the session, total possible credit is divided by the number of presenters speaking on the topic.
- Total Category B hours may not exceed 33% of the IRE’s total yearly CPE hours.

Example: Calculating contact hours for presenting at a qualified event

A Level 3 IRE with a 6 hour per year guideline serves as a presenter at one industry conference with the following scenarios.

Session Length (Hours)	Actual Prep Time	Max Prep Time (Session x 3)	# of Presenters	Possible CPEs (Subject to max 25% yearly)
<i>Round to ½ hour</i>	<i>Choose whichever is less</i>		<i>ppl</i>	<i>(Session + Prep) / # of Presenters</i>
1	3	3	1	1 hr + 3 hrs = 4 CPEs
1	3	3	2	(1 + 3 = 4 hrs) / 2 ppl = 2 CPEs
2	1	6	1	2 hr + 1 hr = 3 CPEs
3	3	9	3	(3 + 3 = 6 hrs) / 3 ppl = 2 CPEs
3	9	9	1	3 hrs + 9 hrs = 12 CPEs but max is 25% of 6, so 1.5 CPEs

Documentation

IREs should retain proof of participation for each educational activity.

Examples of attendee documentation may include a certificate of completion, statement by the sponsoring body, or copy of registration confirmation with actual course materials.

Examples of documentation as a presenter may include the event program or agenda, correspondence with the sponsoring body, copies of the material presented.

There is no reporting requirement defined for these guidelines, however, DIR highly recommends that IREs save their documentation.

Rules, Restrictions, and Exceptions

The following section outlines some of the detailed points of the rules, provides examples for specific situations, and answers some commonly asked questions regarding compliance.

General Rules

- IREs must complete the minimum number of CPE hours specified during each fiscal year
- An IRE transferring from one agency to another as the IRE may transfer his/her CPE records/hours.
- For self-paced educational activities that meet all other CPE requirements, the creator or sponsor of the activity should establish a standard number of contact hours based upon the average completion time. The IRE may count stated contact hours or the actual completion time, whichever is less, toward IRE credit.
- Programs delivered via distance learning technologies may be considered for inclusion as long as (1) they provide for participant interaction/understanding and (2) there is an objective means of verifying program completion.
- CPEs earned and utilized for the maintenance of industry recognized cybersecurity certifications may count toward an IRE's CPE hours. These CPEs may include activities which are not considered eligible under these guidelines but are considered eligible by the issuer of the IRE's certification.

Interactivity of Educational Events

Interactivity is a useful component of qualified events. Typically, the more interactive, the more learning that occurs. The amount of interactivity varies significantly among different situations.

Examples of interaction and levels of interactivity include

- A seminar may include group exercises as well as other class interactions.
- While listening to a keynote at a large conference, interaction may be limited to the opportunity to ask questions and discuss the topic with peers.
- Participants of a live webinar can usually submit questions, vote on polls, indicate yes/no, and perhaps chat.
- Self-paced online learning modules often have pop-up questions and quizzes—simply reading onscreen text and pressing a NEXT button does not qualify.
- Passive activities, such as watching a video or webinar recording may not always qualify. A report developed by the IRE may suffice to show a knowledge transfer occurred to the IRE may be necessary to demonstrate understanding. An exception might also be if the item is used as a resource in a live event.

Special Considerations for First-Year IREs

Prorated Education

DIR prorates the yearly minimum hours for IREs designated, promoted to a new IRE classification (Table 1), or hired after October 31:

November-December	75%
January–March	50%
April–May	25%
June–August	0%

IREs Designated or Promoted

An IRE may count any qualified education completed during the fiscal year towards satisfying the guidelines, even if the activity was held before their designation, promotion, or hire date.

Example: IRE designated in November

An IRE promoted to a higher classification in November may still count activities from September and October towards the fiscal year hours.

New Hire Year Zero Grandfather Clause

Educational activities completed in the fiscal year immediately prior to hiring may qualify for continuing education credit, if those activities covered cybersecurity.

Example: IRE hired on October 1

An IRE who attended a one-day (6 CPE) course the previous summer may count those hours toward the hours in these guidelines.

Activities for Which Continuing Education Credit is Not Eligible

Many of the activities below **are worthy endeavors and are encouraged**. However, these activities do not fall within the scope of IRE continuing education guidelines for the purpose of CPE credit.

- Any educational activity that does not support cybersecurity
- Programs that do not meet generally accepted standards for a continuation educational activity
- Courses in software applications used for general office automation (word processing, spreadsheets, etc.)

Note: while training to increase one’s productivity in these tools is encouraged, this type of training is not recognized within the scope of this program

- Any educational program that is not completed by the participant—

Note: to meet the educational objectives of a program, the IRE must attend and complete all modules that relate to the program objectives

- Reading technical journals, newsletters, magazines, and books.

- Meetings of focus groups, advisory committees, workgroups, etc.

Note: educational presentations scheduled within such meetings may count if they meet the program guidelines

- Viewing of mass media programs presented via television, radio, newspaper, etc.

Note: no interactivity, no proof of attendance

- Meetings/events designed for information sharing or training on agency administration or human resources functions rather than for educational purposes

Example: An IRE attends an internal training session on how to use the organization's timekeeping system—this would not qualify for CPE credit

- Authoring articles, white papers, books that are not on the subject related to cybersecurity

- Professional organization membership, including serving as an officer or on a committee

Note: while the general meeting and networking activities do not apply, educational components hosted by the organization may qualify; e.g., a one-hour educational program embedded in a meeting, educational seminars or annual conference hosted by the group.

Waivers for Continuing Education Guidelines

Exemptions or Re-Classifications

Continuing education is a critical piece of successful cybersecurity, so it is imperative that IREs stay abreast of current technology and continue to develop their knowledge areas. These guidelines are designed to help IREs obtain ongoing training, while at the same time, enabling them to choose courses and conferences that meet their individual needs.

Waivers exempting or re-classifying individual IREs or specific job classifications of employees may be granted by the agency's IRM. IREs affected by the waiver and the IRM should keep a copy of the waiver in their records, and the waiver should be reviewed annually or whenever the IREs job description or position changes to determine if the waiver should still be applicable.

Rollovers

Agencies may also grant waivers for educational activities that qualify under these guidelines to apply to the following fiscal year, if the event occurs within the preceding three months of the fiscal year end. Such educational events may not be counted towards meeting the IRE's guideline hours for two separate reporting periods. IRE's participating in an educational activity their agency's IRM has determined may be counted toward their next year's hours, and planning to do so, should keep a copy of the waiver documentation on file.

Example: IRE attending conference in July wishing to apply the hours in September.

If the agency's IRM has granted a waiver for the conference to count toward the next fiscal year, the IRE may not count those hours in both July's fiscal year and September's fiscal year.