



Transforming How Texas
Government Serves Texans

Continuing Education Guide for State Agency Information Resources Managers (IRMs)

Texas Department of Information Resources 2023

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Program Overview

Information technology (IT) is a rapidly advancing field with 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 Information Resources Management Act¹ directs the Texas Department of Information Resources (DIR) to establish mandatory initial and continuing education requirements for Information Resources Managers (IRMs) of state agencies and institutions of higher education².

To meet the IRM Continuing Education Program requirements established by DIR, each IRM must:

- Earn a minimum number of continuing education hours in core knowledge areas each fiscal year;
- Complete an initial set of one-time required topic hours within two years of being designated an IRM; and
- Report completed continuing education hours to DIR by August 31 of each fiscal year.

IRMs can fulfill the requirements by participating in training classes, conferences, webinars, and other educational activities that meet their specific needs and expertise.

IRM Continuing Education Requirements

IRM continuing education requirements focus on key knowledge areas that enable IRMs to build expertise in the use and management of information resources.

Classification Levels

For the purposes of this program, DIR has classified agencies into levels based on their biennial information resources (IR) budget. As an agency's IR budget grows, the IRM's continuing education requirements increase. Appendix A explains the components that comprise an entity's

1 Government Code Section 2054.076.

2 References to agencies found in the document include both state agencies and IHEs unless stated otherwise.

biennial IR budget. Appendix B provides more information on IRM classification levels. The table below shows the yearly hours of continuing education required for each classification level.

IRM Classification Levels per Biennial IR Budget

Classification	Biennial IR Budget	Education Requirement
IRM Level 1	Less than \$100,000	None
IRM Level 2	\$100,000–\$999,999	12 hours per fiscal year
IRM Level 3	\$1,000,000–\$9,999,999	18 hours per fiscal year
IRM Level 4	\$10,000,000–\$20,000,000	24 hours per fiscal year
IRM Level 5	More than \$20,000,000	30 hours per fiscal year

Verification of Classification Level

If there is a modification or amendment to an agency’s biennial IR budget, and the agency believes the modification may affect its IRM classification level, the IRM should contact DIR immediately to determine how the change may impact continuing education requirements.

DIR consults with each newly designated IRM to verify that the IRM is classified correctly by validating the classification level against the agency’s reported IR expenditures.

Joint IRMs

IRMs designated to serve more than one agency (Joint IRM) will report at a level commensurate with the collective budget of all entities represented.

A Joint IRM reports only under one agency, identified as the IRM’s agency of employment. However, if the IRM does not satisfy the continuing education requirements, every agency the IRM represents is deemed out of compliance, regardless of individual IR budget or classification level.

Core Knowledge Areas

With assistance from an IRM Education Advisory Committee, DIR has identified the following eight core knowledge areas for IRMs to consider when planning for professional development:

1. Strategic Planning and Policy
2. Managerial and Leadership Competencies
3. IT Performance Assessment
4. Project/Program Management
5. Capital Planning, Investment Assessment, and IT Acquisition
6. Cybersecurity/Information Assurance
7. IT Controls
8. IT Topics and Trends

Within these broad areas, IRMs should select educational activities that best suit the need of their agency as well as their own level of expertise.

An IRM with little experience in an area should seek introductory topics. An IRM with extensive expertise should pursue more advanced subjects. Appendix C provides a list of sample topics in each core knowledge area.

Activities that May Count for IRM Continuing Education Credit

Professional activities that can be counted for IRM credit are listed below.

Category A: Attending

Attending a *qualified educational event* such as a conference, seminar, or training class may be used to satisfy up to 100% of an IRM's yearly requirement.

Category B: Presenting

Presenting at *qualified educational events* may be used to satisfy up to 25% of an IRM's yearly requirement.

Qualified Educational Events

Qualified educational events that count for IRM Continuing Professional Education (CPE) credit enhance the IRM's management of information resources and meet the below requirements.

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

- Supports one or more of the specified IRM knowledge areas.
- Provides some type of attendee interaction (class exercises, discussion, group work, opportunity for question and answer, polling, quiz, etc.).
- Provides for proof of participation (host issues a completion form or certificate, host maintains a roster of attendees, or a transcript is available).
- Meets generally accepted standards as an educational event such as:
 - 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
 - lasts at least 30 minutes.

Examples of Qualified Educational Events:

- ▶ Educational conferences.

- ▶ Webinars with an interactive element.
- ▶ Classroom training.
- ▶ Online training.
- ▶ Seminars taken as part of a professional certification.

Measuring Continuing Education

Throughout the fiscal year, IRMs participate in qualified educational events that support one or more of the core knowledge areas and earn continuing education credit toward the requirements of the IRM Continuing Education Program.

Definition of Continuing Professional Education Unit

DIR counts each CPE unit that an IRM earns as 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 term CPE is not unique to this program and definitions, rules, and calculations vary across fields. For example, an accounting or auditing CPE has different requirements than an IRM CPE.

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

An IRM may earn one CPE unit for each hour of attendance. To determine the IRM 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 IRM should make sure that any event attended, especially one of short duration, is of sufficient quality and depth to provide appropriate benefit.

The IRM must attend the entire module, session, or event to fulfill the learning objectives.

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

The following guidelines direct how to calculate CPE credits for presenting at an event.

- For preparation, IRMs may count actual time or session presentation length multiplied by three, whichever is less.
- IRMs cannot earn CPE hours for subsequent presentations of the same material unless the material is substantially changed.
- If an IRM participates in a session with multiple presenters, total possible credit is divided by the number of presenters speaking on the topic.
- Total Category B hours may not exceed 25% of the IRM's total yearly CPE requirement.

Program Requirements Step-by-Step

The IRM Continuing Education Program is organized into three requirements:

Requirement 1: Complete a set of one-time required topics within two years of being designated an IRM (initial training.)

Required topics are specific areas of knowledge deemed high priority for IRMs to acquire as part of their professional development. Each IRM (Levels 2–5) must complete a one-time set of required topics within the first two years of being designated. Level 1 IRMs have no requirements. One-time required topic hours represent a portion of the minimum yearly CPE hours and are considered a subset of annual CPE hours.

IRM One-Time Required Topics Include:

- ▶ **Strategic Planning** – understand strategic planning, steps, and benefits of the planning effort. An IRM who is not familiar with the mechanics of strategic planning should take an introductory class. Those who are more experienced should seek topics that supplement current skills and aid the IRM in strategic planning efforts.
- ▶ **Communication** – ensure the IRM’s role as an effective communicator, especially regarding the sharing of technical information with non-technical stakeholders. This may include formal presentation skills, writing, verbal negotiation, and using communication styles strategically to best fit the audience.
- ▶ **Quality Assurance** – implement quality assurance programs and minimize risk on IT projects. The success of the state’s IT projects is of paramount importance. Events that satisfy this topic deal with project management quality assurance, quality management, and risk management.
- ▶ **Business Value of IT** – ability to balance the technical aspects of information resources and IT with the agency’s business needs. A common theme is the focus on linking the importance of IT programs to the organizational mission and goals. This might involve planning, monitoring, or measuring the success of IT activities to demonstrate their value to the organization.
- ▶ **Contracting** – the effective procurement of IT products and services, including the performance management of contracted services and deliverables. IRMs new to contracting should seek entry level subjects. Those experienced in contracting should look for advanced or specialty topics that supplement their existing knowledge.
- ▶ **Security** – understand the IRM role and responsibility for cybersecurity and information assurance. The IRM plays a pivotal role in the assurance of information security/cybersecurity and should work closely with the agency’s Information Security Officer.
- ▶ **Continuity Planning and Disaster Recovery** – understand the role and responsibility of IT in business continuity planning and preparing for the recovery of data and technology infrastructure in the event of an incident.

- ▶ **Technology Skillset** – ensure expertise and development of appropriate skills for those who use the agency’s information resources and technologies.

Required Topic Hours Based on IRM Classification Level*

Corresponding Core Knowledge Area	Required Topic	Level 2	Level 3	Level 4	Level 5
Strategic Planning and Policy	Strategic Planning	3	3	3	3
Managerial and Leadership Competencies	Communication of Technical Information to Non-Technical Staff	0	0	6	6
IT Performance Assessment	Business Value of Information Technology	0	3	3	3
Project/Program Management	Quality Assurance and/or Risk Management	0	0	3	3
Capital Planning, Investment Assessment, and IT Acquisition	Contract Negotiation and/or Contract Management	0	3	3	6
Cybersecurity and Information Assurance	IRM Role and Responsibility for Cybersecurity and Information Assurance	3	3	3	3
IT Controls	Business Continuity and Disaster Recovery	3	3	3	6
IT Topics and Trends	Methods for Ensuring Expertise and Skills of IT Staff and Users	0	0	1	1
Total Required Topic CPE Hours		9	15	25	31

*Hours must be completed within first two years of IRM designation.

Requirement 2: Earn a minimum number of CPEs in the core knowledge areas each fiscal year (continuing education).

IRMs must complete a minimum number of CPE hours each fiscal year based on their classification level. Those CPE hours must fall into at least one of the eight core knowledge areas outlined for IRM continuing education.

DIR supports IRM continuing education by hosting and sponsoring a variety of free or low-cost conferences, briefings, and webinars.

Requirement 3: Report CPE hours to DIR by August 31 each fiscal year.

IRMs must report the completion of qualified educational activities to DIR by August 31 annually. The agency head is responsible for ensuring that the appointed IRM remains qualified to serve in the position by fulfilling the continuing education requirements.

IRMs report completed events and CPEs to DIR through DIR’s approved online system. DIR provides credentials and detailed instructions when the IRM is initially designated.

Only an agency's designated IRM must report CPE hours to DIR. Other IR staff members may voluntarily follow these guidelines but do not report to DIR. CPE Documentation

IRMs should retain proof of participation for each completed event and CPE in their agency records as events do not submit CPE documentation to DIR. 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, or copies of the material presented.

Guidelines, Considerations, and Waiver Requests

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 with the IRM Continuing Education Program.

General Rules

IRMs must complete the minimum number of CPE hours specified during each fiscal year (Level 2 = 12, Level 3 = 18, Level 4 = 24, Level 5 = 30).

CPE hours may contribute towards required topics or elective topics that support the IRM core knowledge areas.

An IRM transferring from one agency to another as the IRM, without a lapse of service, may transfer their CPE records and hours.

For self-paced educational activities that meet all other program requirements, the creator or sponsor of the activity should establish a standard number of contact hours based upon the average completion time. The IRM may count stated contact hours or the actual completion time, whichever is less, toward IRM credit.

Online or virtual learning opportunities may be considered for inclusion if (1) they provide for participant interaction and (2) there is an objective means of verifying program completion.

Interactivity of Educational Events

Interactivity is a key requirement of qualified events. Typically, the more interactive an event is, the more learning that occurs. The amount of interactivity varies significantly among different situations, but an event must include some element of interactivity to qualify for CPE hours.

Examples of interaction and levels of interactivity:

- ▶ 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.

Passive activities, such as watching a video or webinar recording, do not qualify for CPE hours. However, a live event that simply includes a passive activity as a resource may qualify as CPE if there is an element of interactivity at some point during the live event. Example: Attendees watch a video as part of the class and then discuss.

Special Considerations for First Year IRMs

IRMs Designated Mid-Year

DIR pro-rates the yearly minimum requirement for IRMs designated after September 30:

Month that designation occurs	CPE hour adjustment
October–November	75% of required hours
December–February	50% of required hours
March–May	25% of required hours
June–August	0% of required hours

An IRM may count any qualified education completed during the fiscal year towards satisfying requirements, even if the event was held before the designation date.

For example, an IRM designated in November may still count activities from September and October towards their hours for that fiscal year.

Year Zero Grandfather Clause

Educational activities completed in the year immediately prior to the IRM’s designation qualify for continuing education credit, but only if those activities satisfy a required topic.

Only hours taken within the fiscal year may count toward the year’s continuing education requirement; however, the grandfather clause allows IRMs to satisfy required topics with recently completed educational activities.

Single Event Addressing Multiple Required Topics

A single educational activity that covers multiple topics may be used to satisfy more than one required topic. However, the total hours reported cannot exceed the total hours in the class or conference.

For example, if an IRM attends a one-day event that covers two required topics, they may report a portion of their hours in each required topic areas, but the hours cannot be counted twice.

Activities Ineligible for Continuing Education Credit

Although DIR encourages IRMs to pursue the learning opportunities below, they do not fall within the scope of IRM continuing education requirements and are not eligible for CPE credit.

- Entry-level courses in software applications used for general office automation (word processing, spreadsheets, etc.).
- Reading technical journals, newsletters, magazines, and books.
- Meetings of focus groups, advisory committees, workgroups, etc.
- Meetings or events designed for information sharing or training on administrative functions rather than for educational purposes.
- Authoring articles, white papers, or books.
- Professional organization membership, including serving as an officer or on a committee.

Waiver from Continuing Education Requirements

Continuing education is a critical piece of successful IT management so it is imperative that IRMs stay current on technology and develop knowledge areas. This program is designed to help IRMs obtain ongoing training while granting them the flexibility to choose courses and conferences that meet their individual needs.

The DIR Executive Director has the authority to permit a waiver of the mandatory IRM requirements for an agency under [1 Texas Administrative Code § 201.4](#). A request for a waiver must be submitted to DIR in writing and will be considered on a case-by-case basis.

Appendix A – Definition of Biennial Information Resources Budget

The biennial information resources (IR) budget is the sum of all funds allocated to IR operations and projects, including both development efforts and technology maintenance and operations, for the entire organization during the two-year period. It consists of all IR internal staffing costs and IR procurements (purchased, rented, leased, leased for purchase, or licensed) for all hardware, software, and services including:

- ▶ Hardware and Software Products and Services
- ▶ Hardware and Software Maintenance
- ▶ Application/App/Website Development
- ▶ Cloud or Subscription Solutions

- ▶ Data Center Operation Costs
- ▶ Data Center Services
- ▶ Disaster Recovery Services
- ▶ Information Security Solutions and Services
- ▶ IT Contract Services (Consultant and Non-Consultant)
- ▶ IT Staff Augmentation
- ▶ Telecommunications (Voice, Data, Hardware, Maintenance)
- ▶ Training (End-User or IT Professional)
- ▶ Supplies/Other

Appendix B – IRM Classification Levels

The IR budget alone does not provide a complete picture of the IRM’s level of responsibility or training needs. The information below offers additional descriptions of typical IRM responsibilities based on classification level and may be helpful in determining the proper level of training to seek.

IRM Classification Level	Description
<p style="text-align: center;">Level 1</p> <p>Biennial IR Budget of less than \$100,000</p>	<p>A Level 1 agency has no dedicated IR staff. The IRM role is generally an additional assignment for a person whose primary job responsibility is not related to information resources. IR services for this agency generally consist of minimal support for basic off-the-shelf applications. The agency may depend on another agency or contracted resources to provide IR services.</p> <p>Although IRMs for Level 1 agencies have no continuing education requirements, these IRMs are encouraged to consider the IRM knowledge areas and voluntarily seek educational opportunities appropriate to their role.</p>
<p style="text-align: center;">Level 2</p> <p>Biennial IR Budget of \$100,000--\$999,999</p>	<p>Level 2 agencies may have one person assigned responsibility for information resources management. The IRM role may be an additional assignment for a person whose primary job responsibility is not related to information resources. IR services are generally limited to support for off-the-shelf applications.</p>
<p style="text-align: center;">Level 3</p> <p>Biennial IR Budget of \$1,000,000--\$9,999,999</p>	<p>Level 3 agencies generally have a small- to medium-sized IR staff. Management of the IR function may be a full-time responsibility for the IRM. The IR environment for agencies at the lower end of this level is often limited to particular platforms. Some systems development work may be done in-house or contracted but is likely limited. The IR function may provide</p>

	some support beyond the off-the-shelf applications supported at Levels 1 and 2.
<p>Level 4</p> <p>Biennial IR Budget of \$10,000,000--\$20,000,000</p>	<p>Level 4 agencies usually have a medium-sized IR staff with an established department within the organization, and the IRM position is a full-time job. The IR environment for this agency is varied, possibly with a mixture of different platforms. Systems development work may be done in-house or contracted. The IR division typically provides functional support of IR applications as well as technical support for the underlying technology required for agency operations.</p>
<p>Level 5</p> <p>Biennial IR Budget more than \$20,000,000</p>	<p>Level 5 agencies have an IR department that is key within the organization. Management of the IR function is a major responsibility for the IRM, who typically fills the role of Chief Information Officer for the organization. All issues faced by Level 4 agencies are a part of the Level 5 agency's IR operations. In addition, this agency has an even more varied and complex environment.</p>

Appendix C – Core Knowledge Areas and Sample Topics

IRMs should strive for proficiency in core knowledge areas that enable them to increase expertise in the use and management of information resources. Below are sample topics listed within each knowledge area. These can serve as examples of content that may satisfy program requirements.

Strategic Planning and Policy

- Business process redesign/reengineering models, methods
- Governing laws and regulations
- Information management
- IT baseline assessment analysis
- IT governance
- IT planning methodologies
- Legal and policy issues for management
- Linkages and interrelationships among departments and levels of government
- Mission, organization, functions, policies, and procedures

- Operational planning
- Strategic planning partnerships, team building
- Personnel performance management
- Problem solving; conflict resolution
- Process and change management

Managerial/ Leadership Competencies

- Attracting, motivating, and retaining IT personnel
- Defining roles, skill sets, responsibilities of the IRM, IR staff, and stakeholders relative to IT
- Effective communication of technical information to non-technical stakeholders
- Knowledge transfer, workforce planning
- Negotiation skills

IT Performance Assessment

- Defining/selecting effective performance measures
- Evaluating system performance
- Managing IT reviews, oversight processes
- Measuring IT success
- Measuring the business value of IT
- Monitoring/measuring new system development

IT Project Management

- Project communications management
- Project cost management
- Project governance
- Project human resource management
- Project integration management
- Project procurement management
- Project quality management
- Project risk management

- Project scope management
- Project stakeholder management
- Project time management

Capital Planning, Investment Assessment, IT Acquisition

- Acquisition models and methodologies
- Business case analysis
- Contract negotiation
- Cost benefit, economic, and risk analysis
- Investment review process
- IT acquisition best practices
- IT portfolio management
- Post-award contract management
- Performance management
- Vendor management
- Weighing benefits of alternative IT investments

Cybersecurity/Information Assurance

- IRM role/responsibility for cybersecurity and information assurance (IA)
- Compliance, privacy, legal requirements related to cybersecurity/IA
- Cybersecurity threats, mitigation strategies, countermeasures
- Information security program management/oversight
- Strategy, plans, roles, responsibilities for distributed security programs
- Technology risk management/risk assessment principles
- Texas Cybersecurity Framework and information security controls
- Third-party risk management and contract management for risk mitigation

IT Controls

- Application controls
- Change management
- Configuration management

- Disaster recovery and business continuity
- Incident management
- IT control frameworks (e.g., COBIT)
- IT controls in support of the Sarbanes-Oxley Act (as applicable)
- Physical security
- Recovery and backup procedures
- Software Development Life Cycle (SDLC)

IT Topics and Trends

- Cloud computing
- Data and information management
- E-government
- Electronic and information resources (EIR) accessibility
- Emerging technologies
- Enterprise architecture
- Information delivery technologies
- Information systems architectures
- Mobile technologies
- IT relating to specialized fields (medicine, engineering, environmental, etc.)
- Methods for ensuring expertise of IT staff and appropriate skills for those who use technology
- Network, telecommunications, and mobile device technology
- Software development technology
- System life cycle maintenance

Appendix D – Program Notes: Summary of Revisions

DIR conducts a quadrennial review of IRM education requirements in conjunction with the administrative rule concerning IRMs found at 1 Texas Administrative Code Chapter 211.

The 2023 updates to this guide include changes to improve conciseness and clarity and to adhere with current DIR publishing standards.