# IRM Continuing Education Guide

Continuing Education Requirements Guide for Information Resources Managers of Texas State Agencies and Universities

Texas Department of Information Resources

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# Overview

In fiscal year 2014, the State of Texas invested more than $3 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 Information Resources Management Act[2] 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 education.

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

The roles of specific IRMs vary significantly depending on many factors, particularly the budget, size, and mission of their agencies. With assistance from an IRM Education Advisory Committee, DIR established the IRM Continuing Education Program to accommodate these differences. This guide presents the requirements for a set of recommended knowledge areas.

To meet the program requirements, each IRM must
- Earn a minimum number of continuing education hours in core knowledge areas each fiscal year.
- Complete a set of one-time required topics within two years of being designated an IRM.
- Report continuing education hours completed to DIR by August 31 each fiscal year.



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1  DIR, "Report on State Technology Expenditures," *2014 Biennial Performance Report*, pages 40–47, November 2014. Available online at the DIR website.
2  Texas Government Code (TGC) 2054.076.

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

# IRM Continuing Education Requirements

IRM continuing education requirements are based on the premise that IRMs should strive for proficiency in key knowledge areas that will enable them to build expertise in the use and management of information resources.

To comply with the requirements, an IRM must
1. Earn a minimum number of continuing education hours in core knowledge areas each fiscal year.
2. Complete a set of one-time required topics within two years of being designated an IRM.
3. Report continuing education hours completed to DIR by August 31 each fiscal year.

## Classification Levels

For the purposes of this program, DIR has classified agencies into levels based on their biennial information resources (IR) budget. Continuing education requirements grow the more an agency's biennial IR budget increases. *Appendix A* explains the components that comprise the biennial IR budget. *Table 1* presents the IRM Classification Levels and the yearly hours of continuing education required for each level.

Table 1: 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 modifications to an agency's biennial IR budget affect the IRM classification level, the IRM should immediately contact DIR to determine how this change will impact compliance with continuing education requirements.

DIR consults with each newly designated IRM to verify that the IRM's agency budget is classified correctly, validating the classification level against the agency's reported IT expenditures.

## Joint IRMs

IRMs designated to serve more than one agency will report at a level commensurate with the collective budget of all entities represented. A Joint IRM reports only under whichever agency is identified as Primary. However, if the IRM does not satisfy the continuing education requirements, every agency represented by the IRM is deemed out of compliance, regardless of individual budget or level.

## Core Knowledge Areas

With assistance from an IRM Education Advisory Committee, DIR has identified eight core knowledge areas for consideration by Texas IRMs:

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

An IRM should consider the core knowledge areas when planning for professional development. Within these broad areas, IRMs should select educational activities that best suit the need of the 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

While many types of professional activities enhance an IRM's experience and aid learning, those that can be counted for IRM 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 IRM's yearly requirement.

### Category B

**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 are those that meet the following requirements and enhance the IRM's management of information resources.

To qualify for credit an event must meet *all* of 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, etc.)
- Provides for proof of participation (host issues a completion form/certificate, transcript available, host maintains a roster of attendees)
- 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

    − lasts at least 30 minutes

- 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

Any learning activity must meet the criteria previously stated to count for IRM credit.

## Measuring Continuing Education

Throughout the 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

For the IRM Continuing Education Program, one unit of IRM 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, IRM CPE,* or *CPE* refer to 60 minutes of continuing education credit—these terms are used interchangeably in this program. Additionally, the terms *contact hours* and *clock hours* are common generic terms indicating 60 minutes of continuing education.

### 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 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 IRM should make sure that any event attended, especially one of very short duration, is of sufficient quality and depth to provide appropriate benefit.

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

An IRM 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.

    8:30 to 4:30  =  8:00 hours total
                    −  0:30 minute morning break

- 0:30 minute afternoon break
- 0:60 minute lunch break
= 6 contact hours (6 IRM CPEs)

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 IRM CPEs per Event for Category B – Presenting

An IRM 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, IRMs 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 25% of the IRM's total yearly CPE requirement.

Example: Calculating contact hours for presenting at a qualified event

A Level 5 IRM with a 30 hour per year requirement 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) |
|---|---|---|---|---|
| *Round to ½ hour* | | *Choose whichever is less* | *ppl* | *(Session + Prep) / # of Presenters* |
| 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<br>but max is 25% of 30, so **7.5 CPEs** |

# Program Requirements Step-by-Step

The IRM Continuing Education Program is organized into three requirements in which an IRM must
1. Earn a minimum number of CPEs in the core knowledge areas each fiscal year.
2. Complete a set of one-time required topics within two years of being designated an IRM.
3. Report continuing education hours completed to DIR by August 31 each fiscal year.

REQUIREMENT 1
## Earn a minimum number of CPEs in the core knowledge areas each fiscal year

### MINIMUM CPE HOURS PER FISCAL YEAR

IRMs must complete a minimum number of CPE hours each fiscal year. See page 2 for more information of *IRM Classification Levels.*

Table 2. CPE Requirements per Fiscal Year by IRM Classification Level

| IRM CLASSIFICATION | BIENNIAL IR BUDGET | ANNUAL CPE HOURS |
|---|---|---|
| Level 1 | Less than $100,000 | None |
| Level 2 | $100,000–$999,999 | 12 per fiscal year |
| Level 3 | $1,000,000–$9,999,999 | 18 per fiscal year |
| Level 4 | $10,000,000–$20,000,000 | 24 per fiscal year |
| Level 5 | More than $20,000,000 | 30 per fiscal year |

IRMs have great flexibility of choice in earning the CPE hours. Within the context of the broad core knowledge areas, IRMs choose classes, conferences, and events to best fit their own educational needs, location, and budget.

DIR supports IRM continuing education by
* hosting a variety of conferences, briefings, and webinars—most with no cost,
* participating in development of several external conferences to help focus content for government IT leaders, and
* communicating educational opportunities to IRMs.

### CORE KNOWLEDGE AREAS

Texas IRMs should consider continuing education efforts in the following core knowledge areas:
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

*Appendix C* provides a list of **sample** topics in each core knowledge area.

## Complete a set of one-time required topics within two years of being designated IRM

*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.

### REQUIRED TOPICS LIST

- **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 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 technical information to 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 are ones that 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 IR technologies with the agency's business needs. Common themes would be those that focus on linking the importance of IT programs to the organizational mission and goals. It might involve planning, monitoring, or measuring the success of IT activities so that their value to the organization can be demonstrated.
- **Contracting** – the effective procurement of technology products/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 (IA). The IRM has a pivotal role in the assurance of information security/cybersecurity and should work closely with the Information Security Officer (ISO).
- **Continuity Planning and Disaster Recovery** – understand the role and responsibility of IT in Business Continuity Planning (BCP) and preparing for recovery of data and technology infrastructure in the event of an incident.
- **Technology Skillset** – ensure expertise of IT staff and development of appropriate skills for those who use the agency's information resources and IR technologies.

Required topics are based on legislative mandates, trends affecting both technology and government, and critical knowledge areas needed for successful IR management. DIR will notify IRMs of any changes or additions to the list of required topics.

Table 3. One-time Required Topics and Minimum CPEs Required

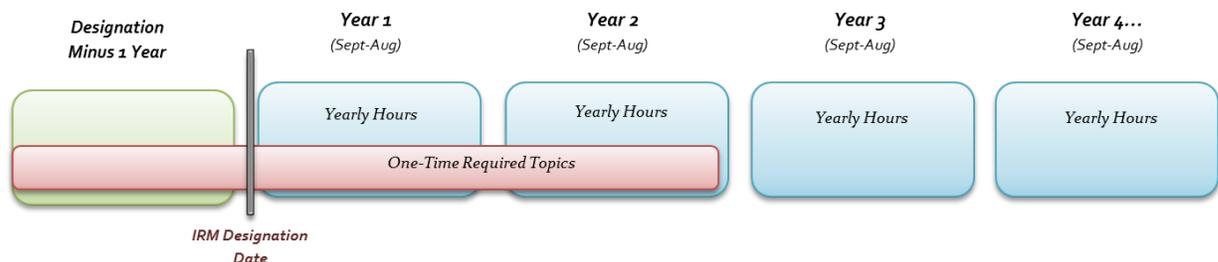| CORE KNOWLEDGE AREA | REQUIRED TOPIC | CPEs LEVEL 2 | CPEs LEVEL 3 | CPEs LEVEL 4 | CPEs LEVEL 5 |
|---|---|---|---|---|---|
| 1. Strategic Planning and Policy | Strategic Planning | 3 | 3 | 3 | 3 |
| 2. Managerial and Leadership Competencies | Communication of Technical Information to Non-Technical Staff | 0 | 0 | 6 | 6 |
| 3. IT Performance Assessment | Business Value of Information Technology | 0 | 3 | 3 | 3 |
| 4. Project/Program Management | Quality Assurance and/or Risk Management | 0 | 0 | 3 | 3 |
| 5. Capital Planning, Investment Assessment, and IT Acquisition | Contract Negotiation and/or Contract Management | 0 | 3 | 3 | 6 |
| 6. Cybersecurity and Information Assurance | IRM role and responsibility for cybersecurity and information assurance | 3 | 3 | 3 | 3 |
| 7. IT Controls | Business Continuity and Disaster Recovery | 3 | 3 | 3 | 6 |
| 8. IT Topics and Trends | Methods for ensuring expertise of IT staff and appropriate skills for those who use technology | 0 | 0 | 1 | 1 |
| Total One-time Required Topic CPEs* | | 9 | 15 | 25 | 31 |

* SUBSET of the total annual hours to be earned.

One-time required topics *must be completed within two years of designation* as agency IRM. One-time required topic hours represent a portion of the minimum yearly CPE hours during the first two years. Any qualified courses/events that do not contribute toward required topics are considered elective. Elective topics support the core knowledge areas and the professional development needs of IRMs.

## Example: Calculating required topic hours

A newly designated Level 5 IRM must complete 60 CPE hours of training in the first two years (30 CPE hours each fiscal year). Of these 60 CPE hours, at least 31 should satisfy required topics.

## Figure 1: Required Topics as a Subset of Ongoing Requirement

# Report CPE hours completed to DIR by August 31 each fiscal year

IRMs must report the completion of qualified educational activities to DIR by August 31 each fiscal year. The head of each agency or university 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 via an online system. DIR provides credentials and detailed instructions when the IRM is initially designated.

The online form requests information on each event, which may include, but is not limited to
- IRM name, agency, contact information, IRM level
- Event name, begin/end dates, location, sponsor
- Brief event description
- CPE hours
- Knowledge areas represented per event
- Required topics satisfied (if applicable)

Only an agency's designated IRM is to 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 educational event.

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.

The documentation is not submitted to DIR unless specifically requested.

# 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 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 may transfer his/her CPE records/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.
- Programs delivered via distance learning technologies may be considered for inclusion as long as (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, the more learning that occurs. The amount of interactivity varies significantly among different situations. However, to qualify for CPE hours, there must be some interactivity.

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 do not normally qualify. An exception might be if the item is used as a resource in a 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

1. DIR prorates the yearly minimum requirement for IRMs designated after September 30:

   | | |
   |---|---|
   | October–November | 75% |
   | December–February | 50% |
   | March–May | 25% |
   | June–August | 0% |

2. 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.

   Example: IRM designated in November

   An IRM designated in November may still count activities from September and October towards the fiscal year hours.

### Year Zero Grandfather Clause

Educational activities completed in the year immediately prior to designation qualify for continuing education credit, 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 taken educational activities, freeing more hours for elective topics.

Example: IRM designated on September 1

A Level 5 IRM who attended a one-day (6 CPE) Contract Management course the previous summer may count that towards the one-time required topic. However, it would not count toward the CPE hours needed for the current fiscal year because the event occurred in the previous fiscal year.

## 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/conference.

EXAMPLE: Multiple Topics within Single Event

The IRM attends a one-day workshop (6 CPE) that includes both quality assurance and contract management topics. The IRM may divide hours between the two topics, but the hours cannot be counted twice.

| | |
|---|---|
| Acceptable: | Quality Assurance @ 3 CPE + Contracting @ 3 CPE = 6 CPE |
| Acceptable: | Quality Assurance @ 2 CPE + Contracting @ 4 CPE = 6 CPE |
| ✗ NOT Acceptable: | Quality Assurance @ 6 CPE + Contracting @ 6 CPE = 12 CPE |

## 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 IRM continuing education requirements for the purpose of CPE credit.

- Any educational activity that does not support the IRM knowledge areas

- Programs that do not meet generally accepted standards for a continuation educational event

- Entry-level 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 IRM 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 administrative functions rather than for educational purposes

  Example: An IRM 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

- 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.

## Waiver from Continuing Education Requirements

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

The DIR Executive Director has authority to grant compliance waivers to state agencies via 1 TAC 201.4 (1 Texas Administrative Code, Chapter 201, General Administration, 201.4):

> (a) The executive director is hereby delegated authority by the board to grant a requesting state agency a compliance waiver from administrative rule, statewide standards, or other board policies. A state agency may request a compliance waiver from administrative rule, statewide standards or other board policy. The agency must clearly demonstrate to the department through written justification any performance or cost advantages to be gained and that the overall economic interests of the state are best served by granting the compliance waiver. The executive director of the department will notify the board when requests for waivers are received.

If an agency believes there is a compelling reason that its IRM should not have to comply with the mandatory requirements specified in the IRM Continuing Education Guide, the agency may submit this request in writing to DIR. Requests for waivers will be reviewed on a case-by-case basis.

# 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

- 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
  - IT Contract Services (consultant and non-consultant)
  - Data Center Services
  - Telecommunications (voice, data, hardware, maintenance)
  - Training (end-user or IT professional)
  - Supplies and Other

The IR budget alone does not provide a complete picture of the IRM's level of responsibility or training needs. The additional descriptive information in this appendix is provided to assist IRMs in determining the proper level of training to seek.

# IRM Classification Levels

The information resources 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 at the various levels.

| CLASSIFICATION/BUDGET | DESCRIPTION |
|---|---|
| **Level 1 IRM**<br><br>Biennial IR Budget less than $100,000 | 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.<br><br>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. |
| **Level 2 IRM**<br><br>Biennial IR Budget $100,000–$999,999 | 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. |
| **Level 3 IRM**<br><br>Biennial IR Budget $1,000,000–$9,999,999 | 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. The IR environment becomes more complex in agencies with larger budgets. Some systems development work may be done in-house or contracted, but is likely limited. The IR function may provide some support beyond the off-the-shelf applications supported at Levels 1 and 2. |
| **Level 4 IRM**<br><br>Biennial IR Budget $10,000,000–$20,000,000 | Level 4 agencies usually have a medium-sized IR staff. IR is 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. |
| **Level 5 IRM**<br><br>Biennial IR Budget more than $20,000,000 | Level 5 agencies have an IR department which 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. |

# 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. **Sample** topics listed within each knowledge area show the scope of each category and serve as examples of content that may satisfy program requirements. Topics vary depending on IRM level (see Table 3).

> ➤ **Bolded list items marked with an arrow indicate potential subjects that may satisfy one-time required topics.**

## 1. 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**

## 2. 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
- Partnerships, team-building
- Personnel performance management
- Problem solving; conflict resolution
- Process and change management

## 3. 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

## 4. 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

*Continued next page*

## 5. 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

## 6. Cybersecurity/Information Assurance

- ➤ **CIO (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

## 7. 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)

## 8. IT Topics and Trends

- Cloud computing
- Data and information management
- E-government
- Electronic and Information Systems (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

# Revisions to the IRM Continuing Education Program

DIR reviews IRM education requirements and the related administrative rule (1 TAC 211) at least once every five years with the assistance of an IRM Education Advisory Committee.

The following changes to the IRM Continuing Education Program take effect September 1, 2015:

- The program requirements have been updated and streamlined in the newly retitled *IRM Continuing Education Guide.*
- The term *competency areas* is replaced by *knowledge areas* to better fit the intent of the program to suggest areas of professional development for IRMs
- Biennial IR budget classification ranges were updated for IRM Levels 2 through 5
- The requirements for *Joint IRMs* are clarified
- The minimum length for a *qualifying event* is changed from 60 to 30 minutes
- IRMs may now include time spent presenting at qualified events (subject to 25% maximum)
- Two *Core Knowledge Areas*, each with a new one-time required topic are added:
  - **Cybersecurity and Information Assurance**

    *Required topic:* understand the IRM role and responsibility for cybersecurity and information assurance
  - **IT Controls**

    *Required topic:* understand the role and responsibility of IT in Business Continuity Planning (BCP) and preparing for recovery of data and technology infrastructure in the event of an incident
- The one-time required topic related to *Training* is now separated from the *Leadership and Management* area and moved to the *IT Topics and Trends* area.
- The Knowledge Areas are renumbered, with *IT Topics and Trends* eighth instead of sixth

## Impact of the New Requirements

The revisions to the IRM Continuing Education Program take effect September 1, 2015.

- The standard completion span for all one-time required topics is two years from point of designation and the ability to count events is one year prior.
  - New IRMs

    IRMs appointed **September 1, 2015 and after** will incorporate all required topics into the normal timeframe (two years from designation, one year prior).
  - Existing IRMs

    IRMs designated **before** September 1, 2015 must complete the new required topics by August 31, 2017. They may also apply events attended in FY 15: September 1, 2014 - August 31, 2015 (two years from implementation date of 9/1/2015, one year prior).
- DIR will work individually with IRMs reclassified to a higher level (with more requirements) to address any gaps.