ISA

CAP® CERTIFIED AUTOMATION PROFESSIONAL

ISA Certified Automation Professional® (CAP®): Continuing Professional Development Program

ISA CAP Steering Committee

October 2011

CAP Steering Committee
rev01112012

Standards

Certification

Education & Training

Publishing

Conferences & Exhibits

CAP Continuing Professional Development (CPD) Program

The ISA Certified Automation Professional® (CAP®) Continuing Professional Development (CDP) Program and its Professional Development Points (PDPs) requirements should be as dynamic as the automation profession the CAP certification program represents and credentials.

Automation professionals are the practitioners responsible for the direction, design, deployment, and support of automation systems and equipment. In the interest of protecting the health, safety, and welfare of the public—and helping industry achieve and maintain profitability—it is vital for automation professionals to engage in continuous, lifelong learning. The CAP CPD Program has been designed to assure and enforce continued, relevant professional development in our dynamic professional context.

Professional Development Points (PDPs) are used as a common denominator because there is such a broad range of educational and professional opportunities relating to automation/instrumentation in which credits for professional development activities can be obtained. The following text will define the PDP equivalencies of the various accepted activities.

The CAP CPD Program institutes a PDP reporting process that includes minimum professional development benchmarks. These minimum requirements do not constitute nor do they imply a competency level that is adequate for all certified individuals. To maintain relevancy and competency, it is recommended that you assess your own professional development needs while planning and executing your unique CPD program as you practices in the automation profession. In assessing your individual needs, input from mentors, supervisors, and colleagues may be helpful.

CAP CPD Program Requirements:

1. Maintain documentation of all CPD activities
2. Report your CPD activities every three years (during certification renewal) on your CAP CDP Activity Record
3. Submit your documentation for your CAP CPD Activity Record upon request (if selected for audit)

Note: For audit purposes, you must have and be able to provide upon request documentation for all recorded activities claimed for renewal.

Your CAP CPD Activity Record must include the following information for each CPD activity submitted for certification renewal:

- A description of the activity
- The date(s) the activity occurred
- The organizer/provider of the activity
- The CPD category for the activity (see below for more details)
- The number of PDPs being claimed for the activity

The CAP Steering Committee will be responsible for administering the CAP CPD Program and assuring the relevance of the CPD activities claimed. The CAP Steering Committee may ask, upon occasion, to review CPD activities that have been submitted by a CAP; therefore, you should retain documentation to support your submitted CPD activities.

CDP Program Requirements for CAP Certification Renewal by PDPs

- Obtain a total of at least **150 PDPs** during your three-year certification period
- Include activities in at least three of the six CPD categories
- Claim no more than the maximum PDPs allowed in each CPD category

CPD Categories

- Professional Practice
- Formal Automation-Related Activity
- Informal Automation-Related Activity
- Participation
- Presentations
- Contributions to the Automation Body of Knowledge

Professional Practice Category

Active professional practice in automation is a significant factor in maintaining and improving your knowledge and skills. You may be an actual automation practitioner or one that is "influencing" the practice of the automation. In this context, "influencing" means having some effect on how the automation profession is practiced without necessarily performing technical work (i.e., management, teaching).

Professional Practice is further defined as:
- The directing, designing, preparation of plans and/or specifications, constructing, inspecting, or the operations and maintenance of any automation related structure, work, or process. Examples of automation-related work or processes may include instrumentation, instruments and control, process control, process automation, control systems, automation and control, manufacturing control, manufacturing automation, on-line process data analysis, and system integration.
- Performing formal, technical instruction on automation-related subject matter

Refer to the Professional Development Points (PDPs) Summary table below for PDPs allowed for activities in this category.

Formal Automation-Related Activity Category

Formal Automation-related Activities should be included in your CPD program. Formal Automation-related Activities are typically educationally associated and may include an exam or other evaluation process. When no evaluation process is offered, credit may still be claimed in this category for activities that are over four hours in length. Non-evaluated activities of less than four hours should be categorized as Informal Automation-related Activities (see the next section, below).

Examples of Formal Automation-related Activities include:
- Professional development programs, courses, and seminars
- Additional certification/licensing in related areas (Certification must be recognized and administered by a professional organization similar to ISA. "Certifications" offered by vendors fall into other categories.)
- Courses offered by universities, continuing education vendors, technical institutes, colleges, suppliers, employers, or technical societies. Courses must be greater than four hours in length and/or include an evaluation process. Courses may be offered in traditional classroom settings, by correspondence, by video, or online

- Serving as an instructor for an automation-related training course or seminar that is over four hours in length

Refer to the Professional Development Points (PDPs) Summary table below for PDPs allowed for activities in this category.

Informal Automation-Related Activity Category

Unlike Formal Automation-related Activities, Informal Automation-related Activities are shorter in duration and do not involve any evaluation process.

Examples of Informal Automation-related Activities include:
- Documented, self-directed study
- Attendance at conferences and/or industry tradeshows
- Training seminars, technical presentations, talks, or workshops that are less than four hours in duration and do not include an evaluation mechanism
- Membership in technical, professional, or managerial associations or societies, including ISA
- Attendance at meetings of technical, professional, or managerial associations or societies
- Documented and structured discussions on technical or professional issues with your peers

Refer to the Professional Development Points (PDPs) Summary table below for PDPs allowed for activities in this category.

Participation Category

Participation activities are those that promote peer interaction and provide exposure to new ideas and technologies. These activities enhance the automation profession and serve the public interest.

Examples of Participation activities include:
- Service as a Mentor to a less-experienced automation professional or technologist or as an advisor to a school/school group, including *FIRST*® Robotics teams
- Service on public bodies that draw on professional expertise (e.g. planning boards, development appeal boards, investigative commissions, review panels, community building committees)
- Service on professional or technical committees of professional or managerial associations and societies
- Community Service: Any activities that contribute to the community which require professional and ethical behavior, but not necessarily the application of technical knowledge. This includes active service for charitable, community, or service organizations; or elected public service on a municipal, provincial, or federal level or on a school board

Refer to the Professional Development Points (PDPs) Summary table below for PDPs allowed for activities in this category.

Presentation Category

Eligible presentations are those of a technical or professional nature that are discretionary (outside of your normal job functions). Presentations must be developed by the CAP receiving the PDPs. Presentations developed by others will not qualify for PDPs.

Examples of Presentations include:
- Delivery of a paper, authored or co-authored by the CAP, to an audience at a scheduled meeting
- Technical presentations at a conference, meeting, course, workshop, or seminar
- Technical presentations within a company or at an event sponsored by a technical or professional organization

Refer to the Professional Development Points (PDPs) Summary table below for PDPs allowed for activities in this category.

Contributions to the Automation Body of Knowledge Category

Contributions to the Automation Body of Knowledge activities are those that expand or develop the technical knowledge base of the automation profession.

Examples of Contributions to the Automation Body of Knowledge activities include:
- Development of automation-related codes and standards
- Patents (credit can be claimed once per patent)
- Publication of papers in a peer-reviewed technical journal
- A thesis at the Master's or Ph.D. level (on a one time basis, upon successful defense and approval)
- Publication of a technical automation-related book
- Publication of technical papers/articles in non-reviewed journals or an internal company report
- Reviewing articles for publication
- Editing papers for publication
- Reviewing of papers/presentations for a technical conference
- Serving on program committee for a technical conference

Refer to the Professional Development Points (PDPs) Summary table below for PDPs allowed for activities in this category.

Part-time Employment, Unemployment, or Retired Status

If you do not work/practice full time, you might not be able to meet the requirements of the CAP CPD Program as readily as those who are practicing full time. If this describes your situation, you can submit a written request to the CAP Steering Committee for special consideration to have your CPD PDP requirements reduced. If the Committee grants a reduced requirement, you must submit an Annual Reduced-PDP Submittal Form.

Recognizing that circumstances such as unemployment, illness, etc. cannot be anticipated, the request should be accompanied by a report of current PDPs acquired and anticipated PDPs for the remainder of your certification term. Your individual circumstances will influence what your reduced CPD Program requirements will be. If granted reduced CPD PDP requirements, you will generally be expected to accumulate at least 30 PDPs per year. Upon return to full-time professional practice, you must comply with the full requirements of the CAP CPD Program.

Appeal Process

If you feel you were wrongly denied credit for a CPD activity, then you have the right to appeal. For information about the appeal process, please refer to the ISA CAP Program Handbook.

Professional Development Points (PDPs) Summary

You must earn 150 PDPs total across three of the categories below during your three-year certification period. You may not exceed the maximums allowed in each category.

Category	CPD Activities and PDP Values	Maximum Allowed per Category per Year	Maximum Allowed per Three-Year Certification Period
Professional Practice	**Professional Practice Hours**	**35 PDPs**	**105 PDPs**
	16 Hours = 1 PDP		
Formal Automation-Related Activity	**General Formal Automation-Related Activities**	**20 PDPs**	**60 PDPs**
	1 Hour = 1 PDP		
	0.1 CEU = 1 PDP		
	College Courses		
	1 Semester Hour = 15 PDPs		
	1 Quarter Hour = 10 PDPs		
	Instructor for an automation-related training course/seminar over four hours in length		
	2 PDPs x Number of Contact Hours with Students		
	Additional Certification/License in related areas		
	Each certification/license = 2 PDPs		
Informal Automation-Related Activity	**General Informal Automation-Related Activities**	**20 PDPs**	**60 PDPs**
	1 Hour = 0.5 PDPs		
	Membership / Participation in a Professional Society		
	Each Membership = 2 PDPs		
	Each National Society Meeting Attended = 2 PDPs		
	Each Local/Regional Society Meeting Attended = 1 PDP		
	Each National Appointed or Elected Position Served = 2 PDPs		
	Each Local/Regional Elected Position Served = 1 PDP		
	Each Local/Regional Appointed Position Served = 0.5 PDPs		
Participation Activity	**Participation Activities**	**15 PDPs**	**45 PDPs**
	1 Hour = 0.5 PDPs		
Presentation Activity	**Delivery of a Paper to an Audience at a Scheduled Meeting**	**15 PDPs**	**45 PDPs**
	10 PDPs x Number of Deliveries (for published papers)		
	Delivery of a Paper to an Audience at a Scheduled Meeting		
	5 PDPs x Number of Deliveries (for non-published papers)		
Contributions to the Automation Body of Knowledge	**Development of automation-related codes and standards**	**20 PDPs**	**60 PDPs**
	1 Hour = 0.25 PDPs		
	Patents (claim once per patent)		
	Each Patent = 10 PDPs		
	Publication of reviewed papers		
	Each Paper = 10 PDPs		
	PhD/Master's Thesis		
	Each Thesis = 20 PDPs		
	Book Publication		
	Each Book = 40 PDPs over two years		
	Publication of non-reviewed papers (limit 2/year)		
	Each Paper = 5 PDPs		
	Article Review (limit 10 per year)		
	1 Article = 1 PDP		
	Paper Editing (limit 5 /year)		
	Each Paper = 2 PDPs		
	Reviewing of Papers/Presentations for Technical Conference (limit 10/year)		
	Each Reviewed Paper/ Presentation = 1 PDP		
	Serving in Program Committee for Technical Conference (limit 2 terms/year)		
	Each Term of Active Service = 5 PDPs		