

Accept the Data Management Challenge:
Be a CDMP

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2006 DAMA International Professional Award Winner

DAMA NJ Chapter September 30, 2010

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Topics

- Some Definitions
- Some History
- CDMP Program Overview
- Reasons for Certifying
- What Can Your Chapter Do?
- Questions / Discussion

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Are We in a Profession?

- A profession is defined as an occupational calling (vocation) requiring specialized knowledge and skills, or the body of persons engaged in that vocation.
- Common features:
 - A **professional society** or guild for the communal support of professionals.
 - The publication of a recognized consensus **body of knowledge**.
 - A professional **degree** or emphasis available from an accredited higher education institution using a **curriculum** validated the professional society.
 - Registration of fitness to practice via **voluntary certification** or mandatory licensing.
 - Availability of **continuing education** and an expectation of continuing skills development for professionals.
 - The existence of a specific **code of ethics**, often with a formal oath of commitment to this code and including an obligation to society beyond occupational expectations.
 - Notable members of the profession** well known to the public, recognized for their professionalism.

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What is the ICCP?

- Institute for Certification of Computing Professionals
- Independent certification organization
- A Consortium of Professional Associations
- Offers vendor & product-neutral exams
- Handles DAMA International exam administration

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What does ICCP do?

- Establishes recognized professional standards within the information systems and information technology industry
- Tests knowledge of stringent industry fundamentals, not product-specific awareness

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ICCP the Consortium of Professional Societies (ACM, AITP, AWC, CIPS, CPCL, DAMA, ICCA)

Professional Degree – obtain from ICCP to add your glass?

1. Academic: Ph.D. Master's students and post graduate programs. Credentials providing automatic entry into Master's and Ph.D. programs (Medical Doctor, Accountant, Professional Engineer, ICCP Computing Professional: CCP, CDMP, CBIP, I.S.P. - Canadian Information Processing Society, RCS - British Computing Society, ACS - Australian Computing Society)

2. Undergraduate: B.S., B.A., BSCM, etc.

3. Vendor High Level: MCSP, CMA, PMP, PRINCE, ITIL, OSCP, OGC, CMC, CSM, Oracle, DBA, etc.

4. Vocational: Electrician, Plumber, Gas and Fitter, Welder, Mechanic, Licensed Practical Nurse, etc.

5. Vendor Entry level: MCP, MEL, MC, A+, HCLT, etc.

* Trademarks are owned by their registered holders.

ICCP Professional Certification

- Provides rigorous objective assessment criteria (formal standardized testing) – quality externally validated
- Provides a Detailed and Personalized Skills Gap Analysis – for Continuing Professional Education
- Certificate holder must be a Signatory to the ICCP Code of Ethics (Professional Credential can be removed by committee of peers if unethical behavior is reported and proven):
 - Signatory to Code of Conduct
 - Signatory to Code of Professional Practice
- Recertification and maintenance of currency of knowledge (removal of professional credential for failure to remain current) – not satisfy worth, if not current – for example same rigor as an engineer should not sign off on a bridge if he is not current or practicing engineer.

Sponsors and Supporters

Board of Directors: CIPS, DAMA, CPCL, AWC, ICCA, AITP, ACM, CCER, tdwi, IBM, etc.

Business Partners and Supporters: tdwi, IBM, etc.

11000 Riverchase Circle, Suite 1000, Houston, TX 77036, USA. © 2010 ICCP. Institute for Certification of Computing Professionals. All Rights Reserved. Director of Finance & Administration: Patricia Cupoli. Phone: 800-843-8377. Phone: 281-299-4217. Email: office@iccp.org. Website: www.iccp.org

ICCP Certification: A Definition

- A process for ensuring that an individual has the knowledge, skills and/or abilities needed to perform a job, job role, duty or responsibility at a standard level of performance

Source: IBM Training Presentation, used with permission



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ICCP Certification must be

- Measurable Validity
- Legally Defensible
- Job Related



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What ICCP Certification is *Not*

- An event
- A class
- An end-of-course exam
- Subjective



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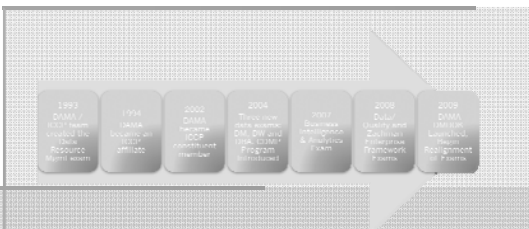
DAMA Certification History



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DAMA I Certification History



Timeline Graphic by Eva Smith



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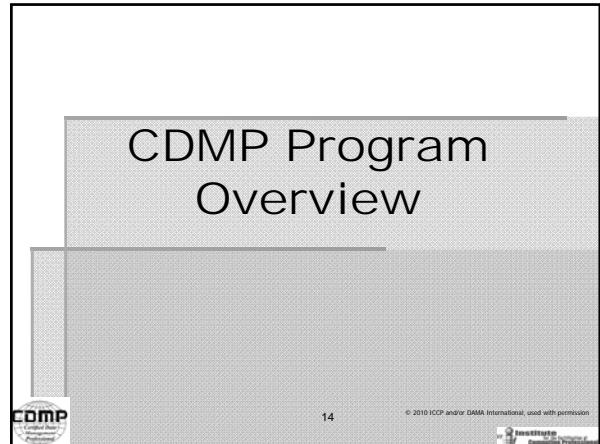
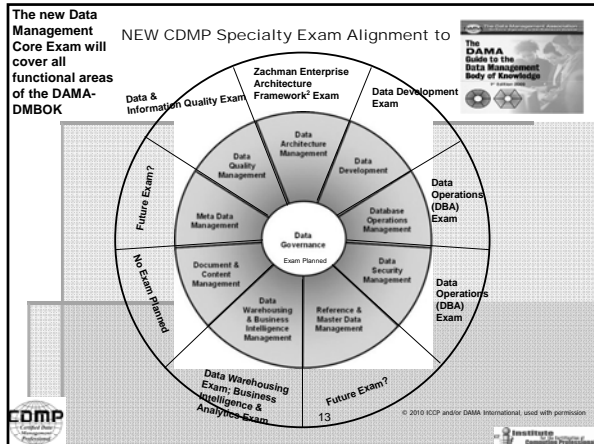
DAMA I CDMP Certification, Model Curriculum & DMBOK

- ICCP exams used by many colleges and universities to assess students' exiting competency
- ICCP data exams designed to test knowledge of IRM/DRM function
- Serves as validation for the proposed DAMA IRM/DRM curriculum
 - Exam topics covered in curriculum & DAMA-DMBoK



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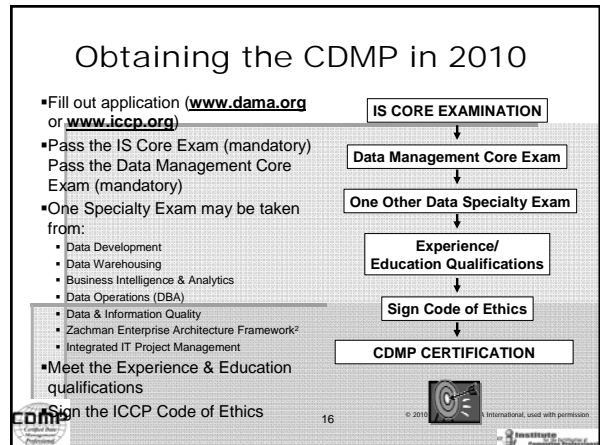
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What is the CDMP?

- Certified Data Management Professional
- Professional Designation Awarded by DAMA International & the ICCP

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Exam Details

- Three Examinations
- 90 minutes, 110 multiple choice questions each
- Exam content
 - 100 experience based randomized multiply choice questions (scored)
 - Plus 10 beta multiply choice randomized questions (not scored)

Pass Exams at 70% or better for Mastery Level

- 50%-69% for Practitioner Level

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CDMP Requirements

- Experience & Education
 - 48 months experience
 - 24 months for Practitioner level
 - Substitute up to 24 months of the experience requirement with appropriate undergraduate or graduate degree
- Three-year recertification cycle

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One Specialty Exam Substitution

Certified Insurance Data Manager (CIDM)	IBM Certified Database Administrator
IBM Certified Advanced DBA	IBM Certified Solutions Expert
Microsoft Certified Master-SQL Server 2008 (replaces Microsoft Certified Database Administrator)	Teradata Certified Professional
Oracle Certified Professional	Oracle Database Administrator

- These programs are pre-qualified to substitute for one specialty exam. Others may qualify.
- Substitute certificates are acceptable as long as the certificate is current, i.e. has not expired.



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Additional CDMP Certification Procedures

- ICCP will issue certificates and ICCP performance profiles to candidates
- Candidates may arrange through the ICCP to sit for the same examination or other exams



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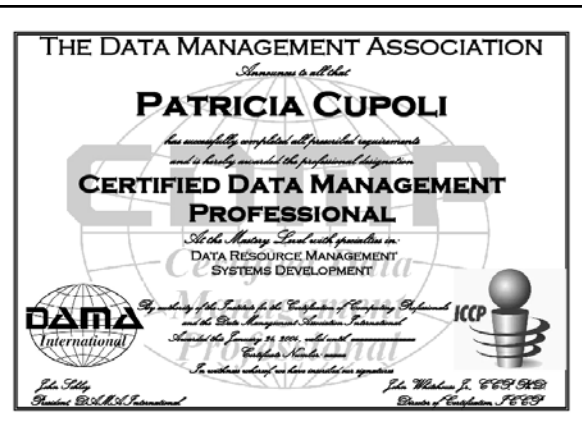
ICCP Performance Profile

		PERFORMANCE PROFILE						
Content	Number	Your	Status	Percent	2	5	7	
Description	Of Items	Score	title		1	5	0	5
Systems Development	100	77	Pass	85	*****			
1. Systems Analysis	39	33		94	*****			
1.1 General System Theory	4	3						
1.2 Preliminary Studies	10	9						
1.3 Problem Definitions	5	5						
1.4 Data Gathering/Analysis	10	8						
1.5 System Requirements	10	8						
2. Systems Design & Imp'n	52	38		80	*****			
2.1 Alternative Sys. Design	5	5						
2.2 Logical Design	10	9						
2.3 Detailed System Design	17	10						
2.4 Privacy/Secy/Controls	8	8						
2.5 System Implementation	7	1						
2.6 System Eval'n and Mtce.	5	5						
3. Systems Analyst as Prof	19	6		41	*****			
3.1 Organizational Roles	3	2						
3.2 Interpersonal Roles	2	2						
3.3 Communication Skills	2	0						
3.4 Ident. Key Individuals	2	2						



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Exam Prep & Study Materials

- ICCP offers Sponsored Review Courses through chapters or companies
- Study materials and exam review course available through ICCP office (office@iccp.org)
 - DAMA study materials are part of Data Management and Data Warehousing self-study packages sold by ICCP
 - DAMA Data Management Exam Study Guide
 - DAMA Data Warehousing Exam Study Guide
 - Sample exams are available at <http://www.iccp.org/iccpnew/sampletests.html>
 - Sample exam outlines are available at <http://www.iccp.org/iccpnew/outlines.html>
- DAMA-DMBOK



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How do I take exams?

- Contact ICCP to arrange for a proctor
- Attend an Exam Prep class (in-person or online)
 - <http://www.iccp.org/iccpnew/training.html>
- Find a proctor (a CDMP or CCP holder, educator, testing center) and have them make arrangements with ICCP
- Remote internet proctoring



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Recertification

- **Goals**
 - Maintain professional competence
 - Update existing knowledge and skills
 - Attain new or additional knowledge and skills
- **Guidelines**
 - 3 year cycle
 - Earn 120 approved contact hours of continuing education
 - Pay \$75 per year maintenance fee to ICCP
 - Receive Annual Transcript from ICCP

Ways to Earn Professional Development/Recertification Credits

Activity	Professional Development / Recertification
<ul style="list-style-type: none"> * Formal educational institutions 	<ul style="list-style-type: none"> * 1 Quarter Hour = 8 credits * 1 Semester Hour = 12 credits * 1 Continuing Education Unit (CEU) = 10
<ul style="list-style-type: none"> * Independent organized programs * Professional society meetings, seminars, conferences 	<ul style="list-style-type: none"> * Count time of education program content
<ul style="list-style-type: none"> * Teaching, lecturing, presenting * Self-study programs * Published article, book 	<ul style="list-style-type: none"> * For each activity category, credit limited to 60 recertification credits / 3 year period

Ways to Earn Professional Development/Recertification Credits

Activity	Professional Development / Recertification
<ul style="list-style-type: none"> * Sit for other ICCP examinations 	<ul style="list-style-type: none"> * Depends on exam score: <ul style="list-style-type: none"> - 70% or higher = 60 credits - 60 - 69% = 30 credits - 50 - 59% = 20 credits - Less than 50% = 0 credits
<ul style="list-style-type: none"> * Hold an executive or administrative role in a professional society * Serve on the ICCP Certification Council / committee * Serve a leadership role in a Business / Computing industry society 	<ul style="list-style-type: none"> * For each activity category, credit limited to 60 recertification credits / 3 year period

Reasons for Certifying

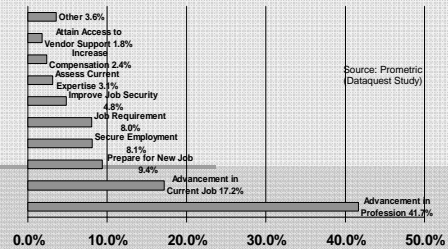
Professionalism

“Certification, in itself, is not a goal, but Professionalism is.”

Dr. Paul M. Pair, ICCP Fellow, 1982

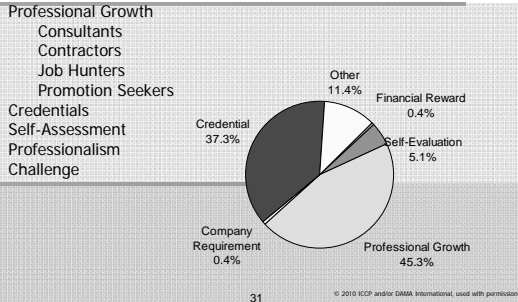


Reasons for Seeking Certification



Source: Prometric (Dataquest Study)

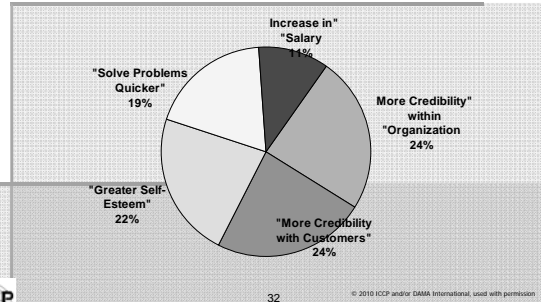
Why People Certify



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Primary Achievement Resulting from Certification



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Career Growth

- Many consulting firms pay bonuses averaging \$5,000 for those who achieve professional certifications
- Large corporations typically reimburse employees for review course, testing, etc. and many provide bonuses from \$100 to \$1,000+
- Government agencies pay for training, exams, provide bonuses, and some give permanent salary increases (up to 15%)
- Surveys consistently show that certified individuals
 - earn more than their counterparts and
 - hold more advanced positions



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American Council on Education (ACE)

ACE awards undergraduate college credits for achievement of the ICCP exams

- 9 credits for the Core Examination
- 3 credits for most of the expert specialty examinations (data exams not yet evaluated for ACE credit)
- 4 credits for Microcomputers and Networking
- 2 credits for Procedural Programming



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What Can Your Chapter Do?



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Sponsor Review Course

- Test takers who go through a review course for the ICCP examinations improve their performance by almost 30% on the final examinations.
- The CDMP Review ("exam prep") program is available for a customized delivery from ICCP
- Hold your own review courses
 - Order books and course materials from ICCP
 - Coordinate with AITP and other professional associations



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Schedule Exam Sessions

- Administer Exams
 - Requires an approved Proctor
 - <http://www.iccp.org/iccpnew/testing.html>
 - CCP or CDMP holder, Professor at local University,
 - HR Manager
 - Can give the exams at a discount to make money for your chapter
- Promote the exams
 - in conjunction with local AITP chapters
 - in conjunction with local colleges and universities



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Track Continuing Education Hours

- Attendance at DAMA meetings and events qualify for recertification hours
- Keep a sign in sheet for your events for people wishing to be credited with continuing education hours
- Periodically (quarterly/annually) have an officer submit recertification credits to ICCP & other recertification programs



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CDMP Fees

	<u>2010</u>
IS Core	\$285
Data Management Core	\$285
<u>Second Data Exam</u>	<u>\$285</u>
Total	USD \$855

Beta Exams are Free. You must fill out an application. If you pass the exam and want to apply it towards the DAMA Certified Data Management Professional (CDMP) designation, there will be a conversion charge of \$195.

All fees are non-refundable
Candidates may re-schedule within 48 hours of an exam date



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Conversion Fees

- Choose one certification to pursue (either CCP or CDMP or CBIP)
- If you qualify for another certificate (i.e. your exams and experience qualify for both programs), conversion fees are
 - CCP (US \$125)
 - CDMP (US \$125)
 - CBIP (US \$300)



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Fee for Substitute Exam

- If you are using an approved external exam as a substitute for one specialty exam (CCP or CDMP)
 - Fee is \$125
- Note: Substitute exams are not allowed for CBIP



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Questions?

•For CDMP Program Information:

- Patricia Cupoli, [ICCP Liaison@dama.org](mailto:ICCP.Liaison@dama.org) or
- Eva Smith, [ICCP Director@dama.org](mailto:ICCP.Director@dama.org)
- The DAMA website is www.dama.org

•For ICCP Exam Administration:

- ICCP office at: office@iccp.org
- The ICCP website is www.iccp.org

• CDMP Social Networking:

- Certify-Able Data Professional Blog
 - <http://cdmpcommunity.blogspot.com/>
- DAMA CDMP Group
 - <http://www.linkedin.com/e/gis/7744437>



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Exam Outlines



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IS Core Exam Topics

1.0 Information Technology Skills	45%
1.1. Software Development	
1.2. Web Development	
1.3. Database	
1.4. Systems Integration	
2.0 Organizational And Professional Skills	20%
2.1. Business Fundamentals	
2.2. Individual and Team Interpersonal Skills	
3.0 Strategic Organizational Systems Development	35%
3.1. Organizational Systems Development	
3.2. Project Management	



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Data Management Core Exam Topics

1.0 Data Management Process	(5%)
1.1 Concepts	
1.2 Data Roles	
2.0 Data Governance Function	(10%)
2.1. Data Management Planning	
2.2. Data Management Control	
3.0 Data Architecture Management Function	(12%)
3.1 Architecture Overview	
3.2 Enterprise Architecture Types & Techniques	
4.0 Data Development Function	(12%)
4.1 Analyzing Information Requirements	
4.2 Data Model Components	
5.0 Data Operations Management Function	(8%)
5.1 Database Support	
5.2 Data Technology Management	

(Cont'd)



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Data Management Core Exam Topics (cont'd)

6.0 Data Security Management Function	(8%)
6.1 Data Security Principles	
6.2 Data Security Implementation	
7.0 Reference and Master Data Management Function	(8%)
7.1. Reference Data	
7.2. Master Data Management	
8.0 Data Warehousing & BI Management Function	(12%)
8.1 Data Warehousing	
8.2 Business Intelligence	
9.0 Document and Content Management Function	(5%)
9.1 Document / Records Management	
9.2 Content Management	
10.0 Meta-data Management Function	(5%)
10.1 Meta-data Concepts	
10.2 Meta-data Management Implementation	
11.0 Data Quality Management Function	(15%)
11.1 Data & Information Quality Principles	
11.2 Data & Information Quality Profiling / Assessment / Audit	
11.3 Data & Information Quality Improvement	



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Data Development Exam Topics

1.0 Data Development Concepts and Technology Types	(17%)
1.1 Concepts	
1.2 Tools and Technology Types	
2.0 Data Analysis and Design	(60%)
2.1. Analyzing Information Requirements	
2.2. Data Model / Design Components	
3.0 Related Data Designs	(7%)
3.1 Information Product Designs	
3.2 Data Access and Data Integration Services Designs	
4.0 Data Model and Design Quality Management	(10%)
4.1 Data Model Design Standards, Versioning and Integration	
4.2 Data Model / Database Design Reviews	
5.0 Data Implementation	(6%)
5.1 Database Development and Testing	
5.2 Database Deployment	



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Data Operations (DBA) Exam Topics

- | | |
|--|-------|
| 1. Data Operations Management | (56%) |
| 1.1 Database Support | |
| 1.2 Database Standards | |
| 2. SQL Considerations | (14%) |
| 2.1 SQL Basics | |
| 2.2 DDL – Data Definition Language | |
| 2.3 DML – Data Manipulation Language | |
| 2.4 DCL – Data Control Language | |
| 2.5 Data Dictionary (Systables) | |
| 3. Data Technology Management | (15%) |
| 3.1 Planning, Evaluation and Selection | |
| 3.2 Implementing Data Technology | |
| 4. Data Security Management | (15%) |
| 4.1 Data Security Principles | |
| 4.2 Data Security Implementation | |



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Data & Information Quality Exam Topics

- | | |
|--|-------|
| 1.0 Data & Information Quality Concepts, Processes & Roles | (20%) |
| 1.1 Concepts and Business Drivers | |
| 1.2 Data & Information Quality Organizational Roles | |
| 2.0 Data & Information Quality Audit Process | (30%) |
| 2.1 Data & Information Quality Assessment | |
| 2.2 Data Profiling Analysis | |
| 3.0 Data & Information Quality Remediation | (30%) |
| 3.1 Cleanup Methods | |
| 3.2 Process Improvement | |
| 4.0 Ongoing Data & Information Quality Activities | (20%) |
| 4.1 Data Certification Process | |
| 4.2 Data Governance Framework | |



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Data Warehousing Exam Topics

- | | |
|---|-------|
| 1. Data Warehousing Management | (16%) |
| 1.1 Data Warehousing Project | |
| 1.2 Data Warehousing Programs | |
| 1.3 Roles and Responsibilities | |
| 2. Data Warehouse Infrastructure Architectures | (11%) |
| 2.1 Enterprise Architectures for Warehouse Planning | |
| 2.2 Data Warehouse Architectures | |
| 3. Tools and Technology Types | (13%) |
| 3.1 Data Warehousing | |
| 3.2 Business Intelligence | |
| 4. Data Warehousing Analysis | (13%) |
| 4.1 Requirements Analysis | |
| 4.2 Source Data Analysis | |

(Cont'd)



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Data Warehousing Exam Topics (cont'd)

- | | |
|--|-------|
| 5. Warehouse Data Modeling and Database Design | (18%) |
| 5.1 Model Types and Components | |
| 5.2 Data Modeling for the Data Warehouse | |
| 6. Data Integration | (13%) |
| 6.1 ETL System Functionality | |
| 6.2 ETL and Alternative Data Integration Development | |
| 7. Other Warehousing Development Activities | (6%) |
| 7.1 Warehouse Applications and Databases | |
| 7.2 Warehousing Training and Documentation | |
| 8. Implementation and Ongoing Activities | (13%) |
| 8.1 Deployment | |
| 8.2 Ongoing Support and Maintenance | |



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Business Intelligence & Analytics Exam Topics

- | | |
|---|-------|
| 1.0 Business Intelligence Concepts & Roles | (10%) |
| 1.1 Definitions and Business Drivers | |
| 1.2 Business Intelligence in Organizational Roles | |
| 2.0 Business Management Perspectives | (15%) |
| 2.1 Business concepts principles and guidelines | |
| 2.2 Performance Management | |
| 2.3 Ongoing monitoring and controlling execution | |
| 3.0 Analytics Techniques and Usage | (45%) |
| 3.1 Modeling | |
| 3.2 Business and Data Analysis | |
| 3.3 Data Visualization Techniques | |
| 3.4 Statistics | |
| 3.5 Assessments | |
| 3.6 Measurements and monitoring | |
| 3.7 Decision making | |
| 4.0 Business Intelligence / Decision Support Systems Lifecycle & Technologies | (30%) |
| 4.1 Business Intelligence lifecycle | |
| 4.2 Front end business intelligence technologies | |
| 4.3 Back end tools, applications and technologies | |



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Zachman Enterprise Architecture Framework² Exam Topics

- | | |
|--|-------|
| 1.0 Zachman Enterprise Architecture Framework Concepts & Roles | (15%) |
| 1.1 Zachman Framework Concepts | |
| 1.2 Zachman Framework Organizational Roles | |
| 2.0 Planning for Zachman Enterprise Architecture Framework | (18%) |
| 2.1 Initial Enterprise Architecture Effort | |
| 2.2 Ongoing Enterprise Architecture Programs / Initiatives | |
| 3.0 Zachman Framework Models Principles | (47%) |
| 3.1 Enterprise Architecture Fundamentals | |
| 3.2 Zachman Framework Models | |
| 3.3 Zachman Framework Perspectives | |
| 4.0 Zachman Framework Infrastructure Management | (20%) |
| 4.1 Standards and Rules | |
| 4.2 Model Management | |

The Zachman Enterprise Architecture Framework exam is based on the NEW version of the Framework². For further information on the graphic and standards regarding the new Framework², go to <http://www.zachmaninternational.com/>.



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Integrated IT Project Management Exam Topics

1.0 Integrated IT Project Management (IPM-IT) FRAMEWORK	9%
1.1 Business Management	
1.2 Project Management	
1.3 Information Technology (IT) Management	
2.0 Business Management Model	11%
2.1 Program Business Systems Architecture	
2.2 Project value Justification	
2.3 Project Funding Allocations	
2.4 Project Deliverables/Funding Approvals	
2.5 Program Steering and Working Committee	
2.6 Business Initiatives Support	
3.0 Project Management Model	28%
3.1 IT Project Delivery Life Cycle	
3.2 IT Project Management Delivery Processes	
3.3 IT Project Management Office (PMO) Processes	



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Integrated IT Project Management Exam Topics (cont'd)

4.0 Information Technology (IT) Management Model	24%
4.1 Cost Estimating	
4.2 Resource Allocations	
4.3 Data Architecture	
4.4 Applications Architecture	
4.5 Technology Architecture	
4.6 Applications Support Services	
5.0 Integrated IT Project Delivery Life Cycle Model	15%
5.1 Definition Phase	
5.2 Requirements Analysis Phase	
5.3 Architecture Phase	
5.4 Iterative Development Phases	
6.0 Aligning PMBOK Processes with RUP	13%
6.1 Inception Phase	
6.2 Elaboration Phase	
6.3 Construction Phase	
6.4 Transition Phase	



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