

The IFPUG Software Measurement Certification

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Presentation to the PSM Technical
Working Group

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Background - 1

- International Function Point Users Group (IFPUG)
 - Non-profit, member-governed organization
 - Certified Function Point Specialist (CFPS) certification since 1993
 - Counting Practices Manual
 - Exam

Background - 2

- IFPUG's Management Reporting Committee (MRC) is working on a software measurement certification for individuals
 - Two major pieces
 - Exam
 - Relevant experience
 - Accrue credits for different categories
- Certification does not rely on detailed knowledge of function points

Important Caveats

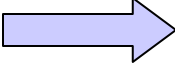
- Certification rules and procedures are still under development
 - e.g., still discussing name
 - Software Measurement
 - IT Measurement Practitioner
- Nothing said here is official
 - official information will be on IFPUG website



Three Certification Levels

- Entry
- Intermediate
- Advanced
- One-time written exam

Topics

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- Exam
 - Relevant Experience
 - Schedule

Exam

- Based on updated “Guidelines to Software Measurement”
 - IFPUG publication currently under revision
 - Serves as the Book of Knowledge for the exam



Guidelines to Software Measurement

- Topics Covered
 - Measurement Frameworks (PSM, GQM)
 - Measurement and Process Improvement
 - CMMI, SW-CMM
 - Planning, Implementing, Sustaining and Evaluating a measurement program
 - Measuring:
 - Size (FP, SLOC, other)
 - Schedule
 - Effort and cost
 - Quality
 - Customer satisfaction
 - Other Topics
 - Estimation
 - Benchmarking

Help Wanted!

- We are looking for volunteer authors and reviewers
 - Reviewers for all topics
 - Author(s) for
 - Sizing chapter

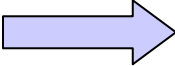


Exam

- First offering: September IFPUG conference
 - Week of September 19, 2004
 - San Diego



Topics

- Exam
-  • Relevant Experience
- Schedule

Relevant Experience

- In addition to passing the exam, candidates must submit a package outlining relevant experience
- Accrue points for different types of experience

Experience Categories

- Work Experience (40%)
- Education (both IFPUG and non-IFPUG) (25%)
- Professional Participation (both IFPUG and non-IFPUG) (15%)
- Publishing (10%)
- Teaching (10%)

Accruing Experience Credits

- For Entry-Level certification
 - Must earn credits from Work Experience, Education, and at least one other category
- For Advanced-Level certification
 - Must earn credits from all five categories

Category 1: Work Experience

	Plan	Design	Implement	Sustain	Administer	Evaluate	Analyze	Report	Mentor
Tools	20	20	20	20	20	20			1 pch
Process	20	20	20	20	20	20			1 pch
Software Measurements						20	80	40	1 pch

- Plan** - to meet with Executives and/or Sponsors to identify the steps and actions necessary to establish a software measurement program
 - also means defining a strategy for deploying a software measurement program such as pilots and incremental improvements
- Design** - to define software measurement architecture, database, access controls, data integration, and “drill down” capability as well as the tools, techniques, processes, and/or procedures based on software measurement plan
- Implement** - carry out and fulfill the software measurement plan
- Administer** - provide guidance for the program and its practitioners – a “help desk” like service for the software measurements
- Report** - not the act of generating reports – rather, to interface with users and middle and upper management

pch: per contact hour

Category 2: Education

	Attend	Complete	Obtain
Eligible IFPUG Presentation and Training	2 pch		
Eligible non-IFPUG Presentation and Training	1 pch		
Software Measurement Course		2 pch	
Industry Certification			50

- Attend** - Be present at a qualifying event
Complete - Finish, with evidence of completion, a qualifying event
Obtain - To be awarded (or re-awarded) an industry-recognized certification

Note: Function-point courses and certifications do not count
- this is separate from the function point certification

PSM TWG or Users Conference fits under “Eligible non-IFPUG Presentation and Training”

PSM course fits under “Software Measurement Course”

Example of Industry Certification is Project Management Professional (PMI)

pch: per contact hour

Category 3: Professional Participation

	Attend	Chair	Serve
<u>Software Measurement Related Group Meetings – IFPUG</u>	2 pch	2 pch	2 pch
Software Measurement Related Group Meetings – non-IFPUG	1 pch	1 pch	1 pch

Note: PSM fits under “non-IFPUG”

pch: per contact hour

Category 4: Publishing

(Software Measurement related)

	Author / co-author	Contributing Author	Expert review	Expert Edit	Translate
Book	80	40	30	20	80
Refereed Article	40		20	20	20
Non-refereed article	20				20
Software Measurement Exam	20	20	20	20	40

- Author** - The person who solely writes an original piece of work. The author's name appears alone on the work.
- Co-author** - The person who with another or others, writes an original piece of work. The authors' names appear (usually on the front) of the work.
- Expert review** - The person who is sought because of their knowledge and background in a topical area, to make technical suggestions, or in some cases to reject, to an original piece of work.
- Expert edit** - The person who is sought because of their knowledge and background in a topical area, to make technical changes to an original piece of work.
- Translate** - To transform the complete contents of one document into a different language.

Category 5: Teaching

	Author/ Co-Author	Teach	Present (at IFPUG)	Present (not at IFPUG)	Obtain Teaching Certification
Software Measurement Course	1 pch	2 pch			
Software Measurement Poster			10		
Software Measurement Presentation			2 pch	1 pch	
Software Measurement Program					80

Note: Obtaining PSM teaching certification earns 80 points

pch: per contact hour

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Issues Under Discussion

- Number of credits needed for each level of certification
- For any given activity, maximum number of per-contact-hour (pch) credits that can count toward certification
- Whether IFPUG membership will be required
- Cost of certification

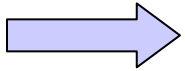


Committee Members

- Janet Russac, The David Consulting Group – Chair
- Joe Schofield, Sandia National Labs - Vice Chair
- Barbara Beech, AT&T
- Heidi Belkofer, Accenture
- Betsy Clark, Software Metrics, Inc.
- Dawn Coley, EDS
- Shiela Dennis, DFAS (retired)
- Bill Hufschmidt, Development Support Center, Inc.

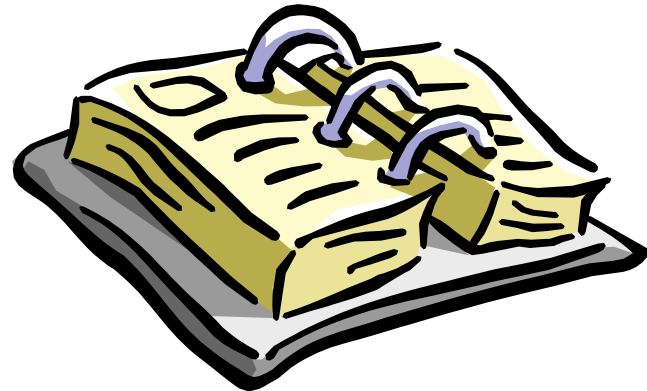
Topics

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Schedule

- April 2004 Workshops that can earn credits at IFPUG Orlando
 - April 18th to 21st
- June 2004 Publication of the updated “Guidelines to Software Measurement”
- Sept 2004 Workshops and presentations that can earn credits at IFPUG San Diego
- Sept 2004 First exam given at IFPUG San Diego
- Late 2004 Begin working with other industry organizations to include their classes and presentations for earning credits



Procedure for Obtaining Certification

- First – pass exam
- Second – submit package to IFPUG's Management Reporting Committee (MRC) demonstrating required credits
 - 90-day turn around in notifications
- Exam is taken one time
 - Even if you later apply for more advanced certification level

Major Objective: Encourage Participation from a wide community

- Detailed knowledge of function points not required
- Credit can be earned from presentations and training outside of IFPUG

Stay Tuned



www.ifpug.org

For More Information

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