



NATIONAL COMMISSION ON FORENSIC SCIENCE

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Views of the Commission Accreditation and Recognition of Forensic Science Certification Bodies

Subcommittee
Accreditation and Proficiency Testing
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Note: This document reflects the views of the National Commission on Forensic Science, and does not necessarily represent the views of the Department of Justice or the National Institute of Standards and Technology. This document does not formally recommend any action by a government entity, and thus no further action will be taken upon its approval by the Commission.

Overview

Obtaining certification in a forensic science specialty through an accredited certification body complements the accreditation of forensic science service providers, forensic units, part-time and private forensic science entities for the overall improvement of forensic science. This document provides Commission views for the accreditation of forensic science certification bodies and the accreditation of the certification body's program by a third party accreditation body.

Views of the Commission

It is the view of the Commission that certification bodies should:

- Seek compliance to ISO/IEC 17024 Conformity Assessment – General Requirements for Bodies Operating Certification of Persons. This process should be accomplished within ten years of implementation.
- Be accredited in accordance with the requirements of ISO/IEC 17024 by an accreditation body, operating in accordance with ISO/IEC 17011 – General Requirements for Accreditation bodies Accrediting Conformity Assessment bodies and signatory to the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA)..
- Collaborate with other certification bodies to develop uniform certification requirements.
- Ensure that certification examinations are continually reviewed to incorporate new technologies and remove obsolete information.

Background

Professional forensic certification programs with certification boards have existed for over three decades although programs do not exist for all forensic science categories of testing. In 2010, the Accreditation, Certification, and Proficiency Testing Inter-Agency Working Group (ACPTIWG) of the National Science and Technology Council's Subcommittee on Forensic Science collated information on existing certification programs (Appendix A) from representatives of the following organizations: American Board of Criminalistics (ABC), International Association for Computer Information Systems (IACIS), International Association for Identification (IAI), American Society for Testing and Materials (ASTM) International, Institute for Credentialing Excellence (ICE), Idaho State Police Forensic Services, American National Standards Institute (ANSI), American Society for Clinical Pathology Board of Certification (ASCP), American Society for Quality Certification (ASQ), Forensic Specialties Accreditation Board (FSAB).

There are specialties and subspecialty categories of testing that do not have certification bodies due to the very small number of practitioners (Appendix B). It is recognized in the certification community that it is difficult to create a certification program with less than fifty practitioners.¹ Comparison of three forensic certification bodies' requirements revealed vast differences in the certification examination process and essential elements for forensic disciplines which leads to fragmentation of the various certification programs (Appendix C).

Forensic science certification bodies are similar to the certification bodies in other industries in their ability to assess conformity to the knowledge, skills and abilities of an individual. The certification body should be ISO/IEC 17024 accredited and importantly, it is essential that the competency of a certification body be verified by an authoritative accreditation body. This means that the certifying body should be accredited by an accreditation body operating in accordance with ISO/IEC 17011 and signatory to the IAF MLA.

To date, accreditation of forensic science certification bodies does not exist. The Forensic Specialties Accreditation Board (FSAB) was created in 2000 as a voluntary program to assess, recognize and monitor forensic science certification bodies. The program reviews and evaluates the operating procedures and standards of applicant forensic science certification bodies to ensure that a minimum set of standards are being met. FSAB accreditation standards are modeled on ISO/IEC 17024; however, they are not recognized as meeting ISO/IEC 17011. American National Standards Institute (ANSI) is the only accrediting body located in the United States recognized through IAF MLA signatory status as meeting ISO/IEC 17011 that offers accreditation under ISO/IEC 17024. Accreditation under ISO/IEC 17024 ensures the validity, reliability and quality of the certification programs. A certification body accredited under ISO/IEC 17024 must demonstrate: a fair and equitable evaluation of all candidates; an organizational structure to support the mission; policy and procedures for complaints, appeals and confidentiality; and a certification and recertification scheme.

The Commission acknowledges that there will be challenges for requiring forensic science certifying bodies to attain ISO/IEC 17024 accreditation including the possibility they may need to

¹ Swift, Roy A. "Increasing the Credibility and Quality of Certification through Accreditation." Presentation to the Accreditation Certification IWG. May 5, 2011

change operating practices (Appendix D). Potentially they would have to develop new categories of testing and provide varying levels of certification; as a result, certification costs may increase. Developing new examinations in categories of testing with a small number of practitioners may not be practical for most certifying bodies. The FSSP's may be impacted in that the direct and indirect cost to the certifying bodies may be passed onto the individuals seeking certification or their parent organizations. In addition, the FSSPs will have to implement new policies and procedures if practitioners are not successful in obtaining certification. Many certification bodies rely on the use of unpaid volunteers, but requiring compliance with ISO/IEC 17024 may require these bodies to hire staff for administration and quality control of the certification process.

An accredited forensic science certification body consisting of paid staff assures the forensic science practitioner that the certification process meets international standards for application, examination, surveillance and re-certification.

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Appendix A: Forensic Certification Bodies

ILAC G19 Categories of Testing	Discipline / Sub-discipline	Certification Organization	Contact Info	Accrediting Organization	approx. # of diplomates or certified individuals	Application Fee	Examination Fee	Annual Recertification Fee or Dues
Controlled Substances	Drug Analysis	American Board of Criminalistics	www.criminalistics.com	FSAB	232	\$50	\$250	\$50
Hairs, Blood, Body Fluids and Tissues	Molecular Biology	American Board of Criminalistics	www.criminalistics.com	FSAB	364	\$50	\$250	\$50
Trace Evidence	Fire Debris	American Board of Criminalistics	www.criminalistics.com	FSAB	47	\$50	\$250	\$50
Trace Evidence	Hairs & Fibers	American Board of Criminalistics	www.criminalistics.com	FSAB	27	\$50	\$250	\$50
Trace Evidence	Paint and Polymers	American Board of Criminalistics	www.criminalistics.com	FSAB	22	\$50	\$250	\$50
Entomology	Forensic Entomology	American Board of Forensic Entomology	www.forensicentomologist.org		16	\$50	\$50	\$50
Handwriting and Document Examination	Forensic Document Examination	American Board of Forensic Document Examiners	www.abfde.org	FSAB	106	\$250	n/a	250 Annual Dues
Handwriting and Document Examination	Forensic Document Examination	Board of Forensic Document Examination	www.bfde.org	FSAB	14	\$100	\$500	\$50
Fingerprints	Latent Fingerprints	International Association for Identification	www.theiai.org		1041	\$200/ IAI Members; \$300/Non-Members	n/a	Recert every 5 yrs: \$200/IAI Members; \$300/Non-Members
Fingerprints	Ten print fingerprints	International Association for Identification	www.theiai.org		117	\$200/ IAI Members; \$300/Non-Members	n/a	Recert every 5 yrs: \$200/IAI Members; \$300/Non-Members

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Scene Investigation	Blood stain pattern	International Association for Identification	www.theiai.org		39	\$200/ IAI Members; \$300/Non- Members	n/a	Recert every 5 yrs: \$200/IAI Members; \$300/Non- Members
Scene Investigation	Crime scene-4 levels	International Association for Identification	www.theiai.org		1625: Outside F.S. Service Practitioners	\$200/ IAI Members; \$300/Non- Members	n/a	Recert every 5 yrs: \$200/IAI Members; \$300/Non- Members
Scene Investigation	Forensic Video	International Association for Identification	www.theiai.org		23	\$200/ IAI Members; \$300/Non- Members	n/a	Recert every 5 yrs: \$200/IAI Members; \$300/Non- Members
Scene Investigation	Forensic Artist	International Association for Identification	www.theiai.org		34	\$200/ IAI Members; \$300/Non- Members	n/a	Recert every 5 yrs: \$200/IAI Members; \$300/Non- Members
Scene Investigation	Forensic photography	International Association for Identification	www.theiai.org		57	\$200/ IAI Members; \$300/Non- Members	n/a	Recert every 5 yrs: \$200/IAI Members; \$300/Non- Members
Scene Investigation	Evidence	Evidence Photographers International Council	www.evidencephotog raphers.com		55	\$300	n/a	\$139
Marks and Impressions	Footwear	International Association of Identification	www.theiai.org		105	\$200/ IAI Members; \$300/Non- Members	\$300	\$200/IAI Members; \$300/Non- Members

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Audio, Video and Computer Analysis	Video	International Association of Identification	www.theiai.org		23	\$200/ IAI Members; \$300/Non- Members	\$300	\$200/IAI Members; \$300/Non- Members
Audio, Video and Computer Analysis	Forensic Artist	International Association of Identification	www.theiai.org		34: Outside F.S. Service Practitioners	\$200/ IAI Members; \$300/Non- Members	\$300	\$200/IAI Members; \$300/Non- Members
Marks and Impressions	Footwear/ Fingerprints	Canadian Identification society	www.cis-sci.ca		NA for U.S.A.	\$150	n/a	\$150
	Evidence Handling	International Association of Property and Evidence	www.IAPE.org		1400+; Outside F.S. Service Provider	\$150	n/a	\$100.00
Firearms and ballistics	Firearms	Association of Firearms & Toolmarks Examiners	www.afte.org		116	n/a	\$250	\$25
Marks and Impressions	Toolmarks	Association of Firearms & Toolmarks Examiners	www.afte.org		46	n/a	\$250	\$25
	Gunshot Residue	Association of Firearms & Toolmarks Examiners	www.afte.org		39	n/a	\$250	\$25
Audio, Video and Computer Analysis	Digital Evidence - Digital Forensics Certified Practitioner and DFCA	Digital Forensics Computer Board	www.dfcb.org		178	\$250.00	\$100	

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Audio, Video and Computer Analysis	Digital Evidence - Certified Computer Examiner (CCE)	International Society of Forensic Computer Examiners	www.isfce.org		805	\$395	n/a	\$75
Audio, Video and Computer Analysis	Digital Evidence - Certified Digital Forensic Examiner (CDFE), Certified Digital Media Collector (CDMC), Certified Computer Crime Investigator (CCCI)	DOD Cyber Crime Center	www.dc3.mil/dcita/d citaCertific ation.php		Training source			
Audio, Video and Computer Analysis	Digital Evidence - Certified Forensic Computer Examiner (CFCE)	International Association of Computer Investigation Specialists	www.iacis.com		1963	\$750	n/a	\$150
Audio, Video and Computer Analysis	Digital Evidence - Certified Electronic Evidence Collection Specialist Certification (CEECS)	International Association of Computer Investigation Specialists	www.iacis.com		26	\$750	n/a	\$100
Audio, Video and Computer Analysis	Digital Evidence - Certified Forensic Analyst, Certified Forensic Examiner, Reverse Engineering Malware, many others	Global Information Assurance Certification	www.giac.org	ANSI	GOAC # certified is not available, but 80,079 certifications granted	n/a	w/training (\$1,149) wo/training (\$659)	\$399
	Forensic Engineering	International Institute of Forensic Engineering Sciences	www.iifes.org	FSAB	16; Outside of F.S. Service Provider	\$300	n/a	\$50

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	Forensic Engineering	National Academy of Forensic Engineers (NAFE)	www.nafe.org	Council of Engineering and Scientific Specialty	Outside of F.S. Service Provider (313 Board Certified)	\$125	n/a	\$200 - \$300
	Civil Engineering	American Society of Civil Engineers (ASCE)	www.asce.org	ANSI	Outside of F.S. Service Provider			
Toxicology	Forensic Toxicology	American Board of Forensic Toxicology	www.abft.org	FSAB	410	\$150	n/a	\$100
Anthropology	Forensic Anthropology	American Board of Forensic Anthropology	www.theabfa.org	FSAB	79	\$250	\$300	\$100 Annual Dues only
	Forensic Psychology	American Board of Forensic Psychology	www.abfp.com		299: (Outside of F.S. Service Provider)	\$125	\$450	n/a
	Forensic Psychiatry	American College of Forensic Psychiatry	www.forensicpsycho nline.com		Outside F.S. Service Practitioners			
	Forensic Psychiatry	American Board of Psychiatry & Neurology	www.abpn.com	American Board of Medical Specialties	Outside F.S. Service Practitioners	\$700	\$2,300	\$150
	Forensic Nursing	International Association of Forensic Nurses	www.forensicnurses. org		1500+; (Outside of F.S. Service Provider)	\$275/IAFN Member; \$400/Non-Member	\$400/IAFN Member; \$525/Non-Member	\$116
Odontology	Odontology - Bite Mark	American Board of Forensic Odontology	www.abfo.org	FSAB	160	\$400	\$1,000	\$230

APPENDIX B: Forensic Discipline/Subdisciplines without Certification Bodies

Guide 19 Categories of Testing	Discipline/Sub- discipline
Audio, Video and Computer Analysis	Digital Evidence - Audio
Audio, Video and Computer Analysis	Digital Evidence - Video
Firearms and Toolmarks	Serial # Restoration
Firearms and Toolmarks	Trajectory Reconstruction
Marks and Impression	Impression - Tire tread
Scene Investigation	Photographer
Trace Evidence	Glass
Trace Evidence	Explosives
Trace Evidence	Soils
Trace Evidence	Botanical Material
Trace Evidence	Gun Shot Residue
Trace Evidence	Lubricants

APPENDIX C: Comparison of Certification Body Requirements

Requirement	CB#1	CB#2	CB#3
Degree		X	X
Experience	X	X	X
Written Exam (initial)	X	X	X
Practical Exam (initial)	X	X	X
Oral Demonstration (initial)	X*		X**
Continuing Education	X	X	X
Retesting	X		X

* transcript or moot court

**specific to practical exam

APPENDIX D: Additional Considerations For Implementation Include:

- Certifying bodies have varying fee schedules.
- Educational programs or preparatory courses should be developed to help practitioners prepare for certification examinations.
- Certification bodies will need to develop programs or policies to address practitioners with more than one certification (i.e., continuing education credit hours could be used towards multiple recertifications).
- There may be human resource challenges such as revising position descriptions, certifying existing employees, and modifying employment policies and procedures. Policies and procedures need to be in place if practitioners are unsuccessful in obtaining certification or do not meet the minimum certification requirements. Further, policies and procedures need to be developed to address those practitioners that can immediately achieve certification versus those that will have to wait for a certification program to be developed, particularly if incentives are being offered.
- Licensure is not a substitution for certification, primarily because it is only recognized at the state level.
- A state or local government or agency may attempt to substitute their own certification that is not accredited.

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