ASPRS CERTIFICATION AND RECERTIFICATION GUIDELINES

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Contact Information

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Applications will take approximately 8-10 weeks to be processed from start to finish.

History

The Articles of Incorporation of the American Society for Photogrammetry and Remote Sensing state that it will exert its influence towards the betterment of standards and ethics.

To this end, the Society's Professional Activities Committee, after several years of careful study, developed a program for certification of photogrammetrists. This program was approved by the American Society of Photogrammetry (ASP) Board of Direction at its meeting in Washington, D.C. on March 13, 1975. On March 28, 1991, the ASPRS Board of Directors approved a proposal made by the National Photogrammetrist Recognition Committee of the Professional Practice Division to modify the original program to include two new categories of certification: Mapping Scientist, Remote Sensing; and Mapping Scientist, GIS/LIS. The Board approved a recertification program that assures that certified persons keep up with the technology that is rapidly changing. On October 28, 1997, The Board approved a modification to the program adding a requirement of a written examination effective January 1, 1998.

In May 2006, the ASPRS Board of Directors approved the Provisional Certification Program recommended by the Evaluation for Certification Committee (ECC). Students preparing to graduate in geospatial science programs may apply for Certification and become "provisionally certified" until they complete the on-job experience requirement. Provisionally certified individuals will have a specified period of time to achieve the on-job experience at which time, they will become fully certified as outlined below. The ECC has re-designated provisional certification as the Geospatial Intern Program.

On January 1, 2013, the ASPRS professional and technologist certification programs each received accreditation from the Council of Engineering and Scientific Specialty Boards (CESB). CESB voted to approve accreditation for the professional Certified Photogrammetrist (CP), Certified Mapping Scientist/Remote Sensing (CMS/RS) and Certified Mapping Scientist/GIS-LIS (CMS/GISLIS) programs, along with three related technologist certification categories – Photogrammetric Technologist, Remote Sensing Technologist and GIS/LIS Technologist. During the review process leading to accreditation, CESB required ASPRS to make a few minor changes to the Programs, including: shifting the continuing education requirement from the previous proprietary points-based system to Professional Development Hours (PDH); increasing the PDH requirement from 75 hours to 100 hours for the

professionals and 50 hours to 60 hours for the technologists; re-designating the "provisional" certifications, designed to assist students during their transition to professional status, in order to avoid using the term "certified;" and isolating any training related to the Program.

There is a distinction between *certification* and *licensure*. Simply stated, ASPRS certification is official recognition by one's colleagues and peers that an individual has demonstrated professional integrity and competence in their field. As such, the ASPRS voluntary certification program is considered "specialty certification." It is not a substitute for licensure as, for example, a Land Surveyor. Licensing is a legal act on the part of states to protect the public health, safety and welfare. It is a procedure by which various state and local governments require the licensing of certain professions, practices, trades, etc. under formal statutes and ordinances to protect the well-being of its citizens. Licensure may be required by your local state, county, etc. whether or not you secure certification.

The ASPRS program, as approved, is entirely voluntary. It applies equally to persons associated with the several subdivisions of photogrammetry and the mapping sciences, which by Society definition includes aerial photography, photogrammetric photographic interpretation, geographic information systems, remote sensing systems, and land information systems. However, in accordance with the Society's Code of Ethics, persons certified should decline to undertake any work within, or related to the fields of photogrammetry and mapping sciences that is outside their range of competence.

Code of Ethics of the American Society for Photogrammetry & Remote Sensing

Honesty justice and courtesy form a moral philosophy which associated with mutual interest among people should be the principles on which ethics are founded.

Each person who is engaged in the use, development and improvement of the mapping sciences (Photogrammetry Remote Sensing, Geographic Information Systems and related disciplines) should accept those principles as a set of dynamic guides for conduct and a way of life rather than merely for passive observance. It is an inherent obligation to apply oneself to one's profession with all diligence and in so doing to be guided by this Code of Ethics.

Accordingly, each person in the mapping sciences profession shall have full regard for achieving excellence in the practice of the profession and the essentiality of maintaining the highest standards of ethical conduct in responsibilities and work for an employer, all clients, colleagues and associates and society at large and shall . . .

1. Be guided in all professional activities by the highest standards and be a faithful trustee or agent in all matters for each client or employer.
2. At all times function in such a manner as will bring credit and dignity to the mapping sciences profession.
3. Not compete unfairly with anyone who is engaged in the mapping sciences profession by:
    a. Advertising in a self-laudatory manner;
    b. Monetarily exploiting one's own or another's employment position;
    c. Publicly criticizing other persons working in or having an interest in the mapping sciences;

   d. Exercising undue influence or pressure or soliciting favors through offering monetary inducements.

4. Work to strengthen the profession of mapping sciences by:
   a. Personal effort directed toward improving personal skills and knowledge;
   b. Interchange of information and experience with other persons interested in and using a mapping science with other professions and with students and the public;
   c. Seeking to provide opportunities for professional development and advancement of persons working under his or her supervision;
   d. Promoting the principle of appropriate compensation for work done by all people in their employ.
5. Undertake only such assignments in the use of mapping sciences for which one is qualified by education, training, and experience and employ or advise the employment of experts and specialists when and whenever client's or employer's interests will be best served thereby.
6. Give appropriate credit to other persons and/or firms for their professional contributions.
7. Recognize the proprietary privacy legal and ethical interests and rights of others. This not only refers to the adoption of these principles in the general conduct of business and professional activities but also as they relate specifically to the appropriate and honest application of photogrammetry, remote sensing, geographic information systems, and related geospatial technologies. Subscribers to this code shall not condone, promote, advocate, or tolerate any organization's or individual's use of these technologies in a manner that knowingly contributes to:
   a. deception through data alteration;
   b. circumvention of the law;
   c. transgression of reasonable and legitimate expectation of privacy.

The ASPRS Certification Committee Program shall:

1. Not discriminate among applicants as to age, sex, race, religion, national origin, disability, or marital status;
2. Provide all applicants with complete information on the procedures governing application for and attainment of certification;
3. Have a formal policy for the periodic review of the application and evaluation procedures to assure that they are fair and equitable;
4. Provide competently proctored sites for any required testing that are readily accessible in all areas of the geographic area served by the certification program at least once annually. Such testing sites and examinations shall appropriately accommodate all disabled applicants who possess one or more of the disabilities defined by United States of America laws and regulations;
5. Promptly report evaluation results to applicants;
6. Provide applicants who fail an evaluation information on the general areas of deficiency;
7. Maintain the confidentiality of each person's application documents, evaluation results, recertification information, and

any other information on file unless authorized to release the information by the individual or if required by law;

8. Prescribe, maintain, and publish procedures that certification candidates can use to appeal actions and decisions of the Certifying Body pertaining to the candidate's application and certification; and
9. Not require any training offered by the Certifying Body as a prerequisite for certification.

Purpose and Objectives

A growing number of scientific and technical disciplines depend on photogrammetry and the mapping sciences for reliable measurements and information. It is in the interest of those who provide photogrammetric and mapping sciences services, as well as the user of these services, that such information and data be accurate and dependable. The ASPRS Certification Program has as its purpose the establishment and maintenance of high standards of ethical conduct and professional practice among photogrammetrists, mapping scientists, technologists, and interns.

The primary objectives of the programs are:

1. To identify and recognize those persons who, after careful appraisal by their peers, and after passing a written examination, are considered to have met the requirements established by the Society for certification.
2. To provide a basis for weighing the validity of allegations and complaints that involve practicing photogrammetrists and mapping scientists, and for taking appropriate action in connection therewith.

3. To encourage persons as yet not fully qualified to work towards certification as a goal of professional achievement.
4. To encourage certified persons, through the recertification process, to continue their professional achievements as rapid change in technology occurs.

The ASPRS Certification Program is voluntary and open to all qualified individuals, whether or not they are members of the American Society for Photogrammetry and Remote Sensing.

The program is applicable to persons associated with one or more functional areas of photogrammetry and the mapping sciences. Work at professional and technical levels in each of the areas is outlined herein

Evaluation for Certification Committee Information

Vision Statement

People are the most significant element in attaining the ASPRS vision. The Certification Program was established to promote personal development and ethical behavior within the Mapping Sciences profession. The Certification program will assure the public's personal service of integrity when seeking services from the Mapping Sciences profession.

Mission Statement

To provide qualified individuals with recognition after completing established requirements for certification.

Niche Statement

The Committee will fill the following niches:

- Evaluate applicants for certification and recertification
- Provide information on the program to potential clients
- Continuously monitor the existing program to assure it serves the need
- Work towards receiving recognition by states for registration of Mapping Sciences professionals.

The ECC organizes exam question review and new question writing on an annual basis.

ASPRS Mapping Scientist vs. Technologist...what should I apply for?

ASPRS offers multiple certifications at two different levels, Mapping Scientist and Technologist. These include specialty areas of Photogrammetry, Remote Sensing, GIS, Lidar, and UAS. The most common question asked to the ASPRS Certification committee is "what certification level is right for me, "Scientist" or "Technologist"?".

Scientist Certifications (includes Certified Photogrammetrist) are appropriate for applicants whose work involves the exercise of professional judgment frequently based on knowledge acquired through higher leaning, generally of a non-routine character. The term implies one who has a broad knowledge of the geospatial sciences to a degree which supports the review and analysis of work being done, as well as a thorough understanding of the underlying theories, principles and systems supporting the work being performed. Additionally, said individual has the knowledge and ability to both plan and perform and/or direct all such operations in the category; this person is responsible for work performed by those under him/her. The review committee looks for a broad industry exposure, external to the employment realm, that gives validation and credibility to the activity, skills, knowledge, and mastery of the specific certification category being pursued. This is usually categorized as a combination of higher education, outside teaching, publication, and/or independent industry engagement related to the specific specialty certification being pursued. This can include the performance of research and development, conference presentations, professional society activity (ASPRS or other societies) workshops and specialty courses or the publication of articles related to the specialty area being considered.

Following are basic requirements for:

Certified Photogrammetrist

A professional who uses photogrammetric technology to extract measurements and make maps and interpret data from images. The Photogrammetrist is responsible for all phases of mapping and other mensuration requirements, which include planning and supervising survey activities for control, specifying photography or other imagery requirements, managing projects for mapping or other mensuration requirements and interpretation.

1. Six years of experience in photogrammetry, three years of which were in a position of professional responsibility demonstrating professional knowledge and competence.
2. References from four persons who are holding, or who have held, responsible positions in photogrammetry and have first-hand knowledge of the applicant's professional and personal qualifications.
3. Declaration of compliance with the Code of Ethics of the ASPRS.
4. Successful completion of a written examination.

Certified Mapping Scientist, Remote Sensing

A professional who specializes in analysis of images acquired from aircraft, satellites or ground bases, or platforms using visual or computer-assisted technology; analysis is used by various specialized disciplines in the study of natural resources, temporal changes, and for land use planning; or as a professional who specializes in analytical

techniques and sensor systems.

1. Three years of experience in photogrammetric and/or cartographic applications, all of which have been in a position of responsibility that demonstrated knowledge and competence in planning and application.
2. Three additional years of specialized experience at a professional level in remote sensing and interpretation of data from various imaging systems and/or design of remote sensing systems.
3. References from four persons who are holding or who have held responsible positions in the mapping sciences and remote sensing and have first-hand knowledge of the applicant's professional and personal qualifications.
4. Declaration of compliance with the Code of Ethics of the ASPRS.
5. Successful completion of a written examination.

Certified Mapping Scientist, GIS/LIS

A professional involved in GIS/LIS systems design and/or systems application of data base management and computer programs that allow for the utilization of spatially referenced data bases for solving user analysis requirements. Such a professional is responsible for the integration of data needs and the development of correspondence between and the utilization of various spatial systems of often-different generic origins that are used to solve requirements.

1. Three years of experience in mapping sciences or photogrammetry in a position of responsibility demonstrating professional knowledge of and competence in mapping science and mapping procedures.
2. Three additional years of professional experience in the Geographic or Land Information Systems, during which professional knowledge and competence in those systems were demonstrated.
3. References from four persons who are holding, or who have held, responsible positions in the mapping sciences and in the Geographic or Land Information Systems area and have first-hand knowledge of the applicant's professional and personal qualifications.
4. Declaration of compliance with the Code of Ethics of the ASPRS.
5. Successful completion of a written examination.

Certified Mapping Scientist, Lidar

A professional involved in lidar systems design and/or systems application of data acquisition and computer programs that allow for the utilization of spatially referenced lidar point clouds for solving user needs and analysis requirements. They are responsible for the management and supervision leading to the integration of data needs and the development of correspondence between and the utilization of various spatial systems of often-different generic origins that are used to solve requirements.

1. Three years of experience in mapping sciences or photogrammetry in a position of responsibility demonstrating professional knowledge of and competence in mapping science and mapping procedures.
2. Three additional years of professional experience in Lidar, during which professional knowledge and competence in those systems were demonstrated.
3. References from four persons who are holding, or who have held, responsible positions in the mapping sciences and in lidar expertise and have first-hand knowledge of the applicant's professional and personal

qualifications.

4. Declaration of compliance with the Code of Ethics of the ASPRS.
5. Successful completion of a written examination.

Certified Mapping Scientist, UAS

A professional who specializes in either a) the design, operation, and management of survey, mapping, and remote sensing projects using Unmanned Autonomous/Aircraft Systems (UAS), including flight mission planning, adherence to regulatory constraints, system calibration, data acquisition specifications, ground control, operation procedures, data processing, product generation, and quality control/quality assurance; b) analytical techniques and methods for processing of UAS-acquired data; or c) UAS system design and research.

1. Three years of experience in mapping sciences or photogrammetry in a position of responsibility demonstrating professional knowledge of and competence in mapping science and mapping procedures.
2. Three additional years of professional experience in UAS, during which professional knowledge and competence in those systems were demonstrated.
3. References from four persons who are holding, or who have held, responsible positions in the mapping sciences and in UAS expertise and have first-hand knowledge of the applicant's professional and personal qualifications.
4. Declaration of compliance with the Code of Ethics of the ASPRS.
5. Successful completion of a written examination.

Educational Credits

When computing the number of years of experience under basic requirements, credit may be taken, in lieu of actual job experience, for degrees in engineering, or in the natural or physical sciences, on the following basis:

Type of Degree	**Years of Credit**			
Bachelor's	**½ year**	**Master's**	**½ year**	**Doctorate ½year**

Application Form: http://www.asprs.org/wp-content/uploads/2021/03/Certification-Application-3.1.21.pdf

Technologist Certifications

are appropriate for applicants whose work is primarily routine and of a technical nature yet demanding a high degree of skill. Such work is "*pre-professional*" when performed by a professional trainee who, having completed courses of specialized intellectual instruction and study, is seeking to attain professional status. Such work is "*professional*" when the applicant has advanced to a position of leadership in the performance of production related tasks, to include the supervision of others. The term implies that the applicant can perform all such operations in the category and this person may be responsible for work performed by those under him/her. *Note: Regarding those applicants who have already attained other credentials (e.g. state licensed Land Surveyors or Engineers) either certification is suitable to demonstrate skills required to perform tasks in the specialty area.*

Requirements:

These requirements apply for all Technologist categories:

1. A total of three years experience, of which two are in the specialty category.
2. Four references must be submitted from persons knowledgeable of the applicant's work experience and personal conduct.
3. Applicant must submit a non-refundable application fee. The Application includes a declaration of compliance with the Code of Ethics of the ASPRS.
4. The successful completion of a written examination following peer review and approval.

Educational Credits

When computing the number of years of experience under basic requirements, credit may be taken, in lieu of actual job experience, for degrees in engineering, or in the natural or physical sciences, on the following basis:

Type of Degree/ Years of Credit					
Bachelor's	**½ year**	**Master's**	**½ year**	**Doctorate**	**½ year**

Certified Photogrammetric Technologist (ASPRS)

A Technologist who performs or supervises technical photogrammetric tasks to extract spatial data from photographic or digital imagery and other remotely-sensed data.

Certified Remote Sensing Technologist (ASPRS)

A Technologist who performs or supervises tasks to interpret, manipulate, extract, process and convert remotely sensed data from photographic or digital imagery and other remotely-sensed data.

Certified GIS/LIS Technologist (ASPRS)

A Technologist who integrates a variety of spatial data sets into a GIS format designed for graphic output or analysis.

Certified Lidar Technologist (ASPRS)

A Technologist who performs routine Lidar collection support and first level data processing integrating established plans and procedures.

Certified UAS Technologist

A Technologist who performs or supervises routine tasks to collect, process, and interpret data acquired with UAS for use in surveying, mapping, and remote sensing applications.

Classification Chart for Photogrammetry and the Mapping Sciences

In the *Classification Chart for Photogrammetry and the Mapping Sciences*, several professional-level activities are listed such as geographer, geologist, forester, and archaeologist in which it is intended to connote that photogrammetry and/or mapping science is used in this particular activity in a professional manner by a professional person. (The occupations mentioned are examples only and the list is not to be considered as comprehensive). Practitioners in one of these disciplines may acquire professional competence in photogrammetry and the mapping sciences and only when they possess this competence is their use of photogrammetry and the mapping sciences to be construed as professional.

Classification chart for Photogrammetry

I. *Education in Photogrammetry*

1. Administration of instruction in Photogrammetry
2. Undergraduate teaching
3. Graduate teaching
4. Technical writing

Professional Level: Dean, department chair, professor, technical writer.

Technologist Level: Teaching assistant

II. *Research and Development*

1. *Materials*: Photographic emulsions and bases, chemicals, drawing and reproduction materials.
2. Instruments and equipment: Lenses, cameras, sensors, platforms, rectifiers, enlargers, printers, measuring and plotting instruments, automation hardware, and calibration devices.
3. *Systems:* Mapping systems, photographic and other image interpretation systems (development of an integrated series of functions and techniques to produce a given result using photogrammetric principles.)
4. *Investigations and research*: Operations, research, concept, determinations, cost-effectiveness studies, techniques studies and investigations.

Professional Level: Research chemist, research physicist, research engineer, technical writer, cartographer, mathematician, electro-optical systems design engineer.

Technologist Level: Laboratory or shop assistant, test Technologist.

III. *Manufacturing*

1. *Materials:* Photographic emulsions and bases, chemicals, and drawing and reproduction materials.
2. *Instruments and equipment*: Lenses, cameras, camera and other sensor platforms; rectifiers, enlargers, printer sensor systems; viewing, measuring, and plotting instruments; automation hardware; software and calibration devices.

Professional Level: Manufacturing engineer, quality control engineer, electro-optical systems engineer, physicist, chemical engineer.

Technologist Level: Shop Technologist, drafter.

IV. *Photography* (Includes aerial, terrestrial, underwater, space photography) and electronic imagery

1. *Technical planning*: Flight or exposure station parameters; photography specifications; camera calibration.
2. *Procurement and inspection*: Technical negotiations; technical administration of contracts; inspection and acceptance.
3. *Photographic mission*: Operation of camera-bearing vehicles; maintenance and operation of cameras; flight or course navigation.
4. *Photographic processing*: Development, inspection and re-flight requirements.

Professional Level: Planning engineer, aerospace engineer, photographic scientist, photographic engineer.
Technologist Level: Drafter, inspector, photographer, laboratory Technologist.

V. *Engineering Surveys for Location Design and Construction (Utilizing photogrammetric technology)*

1. *Location and design data surveys*: Control basic and supplemental (horizontal and vertical); culture and topography profile and cross sections measurement and digitization of topography and other vital details.
2. *Construction survey*; Location surveys and staking on the ground of the designed facilities and/or structure quantity and measurement surveys; "as built" surveys; utility surveys; surface mines.
3. *Surveys for plans and plats*: architectural (building sites); tax maps as constructed sites.

Professional Level: Engineer, survey engineer, geodetic surveyor.
Technologist Level: Stereoscopic instrument or plotter operator, operator of other photogrammetric equipment, computations Technologist, drafter, field survey assistant (instrument tape rod).

VI. *Topographic and Planimetric Mapping*

1. *Project planning*: Control basic and supplemental (horizontal and vertical): Analog procedures, analytical methods, instrumental methods; field measurement methods, global positioning systems
2. *Map compilation*: Orientation of plotting instruments, delineation of planimetry and contours; measurement of spot elevations, profile and cross sections and other terrain data; identification and annotation of principal topographic features and cultural details.

3. *Field edit and completion surveys*

Professional Level: Planning engineer, topographic engineer, geodetic engineer, production engineer, mathematician, cartographer.

Technologist Level: Stereoscopic instrument or plotter operator, operator of other photogrammetric equipment, laboratory Technologist, computations Technologist, drafter, field survey assistant, computer operator.

VII. *Space Surveys*

1. *Geodetic surveys*: Figure of the earth and control extension from satellite triangulation, from ballistic camera photography of earth satellites and from earth satellite-borne synoptic photography; documentation of results.
2. *Planetary surveys*: Surveying and mapping of planets using data derived from space photography and space probes; reporting and/or documenting data

Professional Level: Geodetic engineer, geodesist, space scientist, topographic engineer, mathematician and cartographer.
Technologist Level: Stereoscopic instrument or plotter operator or operator of other photogrammetric equipment, laboratory Technologist, computations Technologist

VIII. *Special Applications*

1. *Photographic maps*: photographic maps with contours, digital orthophotos, photographic mosaics.
2. *Operations and maintenance*: Surveillance, elimination of hazards, condition and inventory surveys, quantitative measurements and evaluation.
3. *Close-range photogrammetry*: Architecture; biomedical applications including conventional and x-ray stereo-photogrammetry, photogrammetric solution of biological problems, hydrography, structural engineering, oceanography, geography, police work including crime detection, traffic and accident surveys
4. *Lasers and holography*.

Professional Level: Cartographer, physicist, physician, dentist, archaeologist, geographer, oceanographer, architect, engineer, hydrographer.

Technologist Level: Stereoscopic instrument or plotter operator of other photogrammetric equipment, Technologist, drafter.

Classification chart for Mapping Scientists

I. Remote Sensing and Interpretation

1. *Instrumentation selection and operational planning*: Instrument-carrying vehicles; space platforms; radar and thermal infrared sensors, scintillometers radio-meters magnetometers, multi- and special- sensor combinations, viewing and scanning equipment, image enhancement and image data processing systems, operation and maintenance of sensor systems, preparation of imagery for end use.
2. *Interpretation for general purposes and mapping*: conventional mensuration and interpretation of photographic and other imagery pattern recognition, reporting and documenting results.
3. *Interpretation for specific purposes and disciplines*: geology, forestry, agriculture, land-use archaeology, water resources, meteorology, mineral and aggregate resources, urban planning industrialdevelopment, transportation facilities, volcanic and earthquake surveys and investigations, environmental and pollution surveys, reporting and documenting results
4. *Military intelligence*.

Professional Level: Cartographer, electro-optical systems engineer, geologist, forester, archaeologist, hydrologist, planner, engineer, agronomist, soil scientist, materials engineer, resources scientist and engineer, earth scientist, environmentalist analyst etc.

Technologist Level: Interpretation Technologist, laboratory Technologist, image analyst, drafter

II. GIS/LIS

System design: Designs basic GIS systems structures including mapping requirements and all operational software

System application: Designs and/or integrates various application software, packages to solve user requirements.

System maintenance: Consults with clients having existing systems and advises on update procedures and new system characteristics and specifications.

Professional Level: Manager of GIS, GIS department manager, systems analyst, computer Systems manager, graphics manager, programmer, analyst
Technologist Level: Data processor, data input Technologist, equipment operator, digitizer, drafter.

III. Lidar

1. *Instrumentation knowledge and operational planning*: airborne platforms, calibration, flight planning, training
2. *Date management*: preprocessing, postprocessing, archiving flight line mosaicking and tiling.
3. *Point cloud classification*: LAS Standard, filtering, automatic and manual editing.
4. *Metadata development*.

Professional Level: Project Management supervision, QA/QC responsibility, terrain analysis and point cloud filter development. Metadata reporting with accuracy statement.

Technologist Level: Instrument operator, raw data archiving, data processing, flight line mosaicking and tiling, filter application, manual editing, developing deliverables.

IV. *UAS*

1. *Instrumentation knowledge and operational planning*: airborne platforms, calibration, flight planning, training
2. *Date management*: preprocessing, postprocessing, archiving, flight line mosaicking and tiling.
3. *Point cloud classification*: standard filtering, automatic and manual editing.
4. *Metadata development*

Professional Level: Project Management, supervision, QA/QC responsibility, terrain analysis and point cloud filter development. Metadata reporting with accuracy statement.

Technologist Level: Instrument operator, raw data archiving, data processing, flight line mosaicking and tiling, filter application, manual editing, developing deliverables.

Certified Professionals Database

Access a searchable database of certified Geospatial professionals and Technologists.

Scientist Level Recertification Requirements

All ASPRS certified individuals are certified for a period of five years unless there is cause to remove the certification for malpractice or violation of the Code of Ethics of ASPRS. The Society has a Recertification Program to assure that a certified person has maintained or improved on the skill and knowledge that allowed for certification. The Society will maintain an ACTIVE CERTIFICATION LIST that requires recertification every five years. Certified persons will appear on the Active Certified list for as long as their certification is in force.

Recertification applicants are required to fill out the Recertification application to show the type of activity that they have practiced and their professional involvement in the mapping sciences. They must also have four references who have knowledge of the applicant's professional and personal involvement in the last five years. Each applicant must earn one-hundred (100) PDHs based on the following criteria that will be reviewed by the Evaluation for Certification Committee.

Scientist Level Recertification Guidelines

Recertification is based upon a "Continued Professional Development Qualification" rating system of PDH credit. Recertification applicants are required to fill out the Recertification Application to show the type and duration of activity that they have practiced and their professional involvement in the mapping sciences. They must also have four references who have knowledge of the applicant's professional and personal involvement in the *LAST FIVE (5) YEARS*. Each applicant must have completed and documented 100 PDHs or PDH Credits based on the following criteria which will be evaluated by the Evaluation for Certification Committee: (see below for Technologist requirements)

Click to download Recertification PDH Tracking Spreadsheet

Evaluation Activity for Recertification	**Criteria**	**Maximum Number of PDH Allowed Within Last 5 Years**	**Documentation Requirement**
Minimum Continuing Experience: Applicant has been active in providing services within their certified discipline or has been in the academic arena involved directly with those subjects.	3 years of the past 5 years actively providing services	50 PDH Credits	Document Position(s) Description(s) and dates

Applicant has contributed and participated in activities of service to the profession and community (see list below)	See items 1 – 10 listed below for PDH Credits	20 PDH Credits	Document Titles with Referencing
Published Papers and/or professional manuals (see list below)	See items 11-13 listed below for PDH credits	20 PDH Credits	Document time spent, titles with full referencing
Applicant has attended workshops/classes or instructed in directly related subjects	1 PDH per hour attended (0.1 CEU = 1 PDH)	50 PDH (or 5 CEU)	Document Course, Titles, and Date
Applicant has attended technical conferences and other professional meetings sponsored by ASPRS, ISPRS, SPIE, and other appropriate professional organizations.	1 PDH per hour of technical session attendance	40 PDH	Document Meeting Titles and Dates
Applicant has actively served on ASPRS Committees. Officer, Division Chair, Region Officer, Chapter Officer, or related support.	5 PDH Credits per Year. See list below for PDH Credits	25 PDH Credits	Document Activity and Dates

The following are the maximum allowable ASPRS PDH Credits for those activities that may be used for recertification (*PDH credits during the past 5 years)*		
(1)	Holding office [e.g., committee chair, vice chair, secretary, board trustee]	5
(2)	Committee Member	3
(3)	Meeting/Conference Chair or Vice Chair	10

(4)	Session Moderator at Technical Conference	5
(5)	Author or co-author of a conference technical paper, poster session paper or panel session	3
(6)	Adjunct teaching a formal class in an academic setting [when not applicant's primary occupation] (maximum of 5 PDH credits per year)	10
(7)	Workshop Instructor (2 PDH credits per course for a maximum of 4 credits per year)	12
(8)	Examination Committee Contributor (2 PDH credits per instance for a maximum of 5 per year)	10
(9)	ASPRS Certification exam proctor/panel (2 PDH credits per instance for a maximum of 4 per year	8
(10)	Community/Career extracurricular, i.e., *pro bono* involvement (geomatics-related), e.g., Public Agency (geospatial) Advisory Board, Citizens Advisory Group, (5 PDH credits per activity)	10

(11)	Author/editor of published geospatial-related book	15
(12)	Author (not prime) of one or more chapters of a published geospatial-related book	5
(13)	Author/Co-author of a peer-reviewed, published paper (5 PDH credits per paper)	20

The application must be specific with clear documentation (activity and date[s]) so the Evaluation for Certification Committee can properly evaluate applicant's activities. The application and the references are the only criteria needed for recertification. (Applicant may be asked by the Committee to submit additional information or phone interview).

Inactive/Retired Certified Professionals

Certified Professionals who do not become *recertified* are automatically placed in either Inactive or *Retired* status. Individuals in either category are not permitted to use their seal to sign plans or otherwise indicate in any way that they are active Certified Professionals. An online searchable list of all active Certified Professionals in each category is maintained.

NOTE: Individuals whose Certified status is Inactive or Retired for a period longer than one (1) year following Active status may apply for recertification provided that, in addition to the standard recertification criteria (outlined above), they take and pass the examination in their respective certification area.

Educational credits, Technologists

An Associate, or higher education degree can be counted as one-half year towards total time.

Technologist Recertification Requirements

To maintain active certification, all Certified Technologists must apply for recertification every three (3) years.

Technologist Recertification Criteria

Technologist Recertification is based upon the same PDH requirements as described in the Professional Recertification Guidelines, although the requirements are for the applicant's professional and personal involvement in the LAST THREE (3) YEARS, and each applicant must have completed and documented sixty (60) PDHs or PDH Credits. For continuous work experience in the certified field, applicants can claim 30 PDH credits (10 per year).

Recertification applicants are required to fill out the Recertification Application to show the type and duration of activity that they have practiced and their professional involvement in the mapping sciences. They must also have Four References who have knowledge of the applicant's professional and personal involvement in the LAST THREE (3) YEARS.

The application must be specific with clear documentation (activity and date[s]) so the Evaluation for Certification Committee can properly evaluate applicant's activities. The application and the references are the only criteria needed for recertification. (Applicant may be asked by the Committee to submit additional information or phone interview).

Geospatial Intern Program

An applicant seeking Geospatial Intern recognition must have educational training in the spatial sciences from an approved institution of higher education and must follow the Basic Requirements as previously outlined for Certified Photogrammetrist, Mapping Scientist, or Technologist; the exception being the required on-job experience. Applicants must submit the appropriate Application and Fee with one (1) reference (which the ASPRS office will request after application is submitted) from their academic advisor or relevant faculty member. An Official Copy of the applicant's transcript must accompany the application; the transcript must validate that the applicant has successfully completed a minimum of twelve (12) credits in the geospatial sciences. The application requires a declaration of compliance with the ASPRS Code of Ethics.

Applications, fees, and the reference will be submitted to ASPRS Headquarters for consideration by the appropriate peer review committee. Applicants will be notified following peer review, and individuals passing peer review will be given the opportunity to take the appropriate examination within six (6) months following their notification date. Examinations will be administered in a proctor-controlled environment.

Upon successful examination completion, the individual will receive Intern-level recognition

Costs

ASPRS Certification Application Fees (all fees in US dollars)

Type of Application	*ASPRS Members*	*Non-Members*
Initial Certification	$300	$450
Recertification, Professional	$200	$350
Initial Certification, Technologist	$200	$350
Recertification, Technologist	$125	$275
Geospatial Intern	$100	$150

*Note: Additional testing fees will be charged by the ASPRS computer-based testing provider Prometic.

(NOTE: The fees charged defray administrative costs of the Certification Program. Fees are not refundable in the event of non-certification.)

	Be prepared to furnish additional background information if requested by the Evaluation Committee.
	Upon notification of approval by the Evaluation Committee, you must take a written examination within six months of approval.

Preparing for the examination

Matrices illustrating the mix of examination questions, by specialty area, have been prepared for applicant review. Please note that workshops on preparation for certification are offered via webinar and during most ASPRS Conferences.

The purpose of the workshop is to prepare individuals who are planning to sit for the ASPRS Certification exams. The workshop begins by explaining the purpose and form of the exam. Key topical areas are identified which an applicant should be aware of prior to taking the exam. Basic concepts and sample questions are reviewed to show how these topics will be tested on the exam. Finally, the workshop identifies resources which examinees should be aware of to utilize in their preparation for the examination.

Workshop Topics:

- Purpose of the exam
- Photogrammetry
- Remote Sensing
- Geographic Information Systems
- Lidar, UAS
- Other topical areas of importance in preparation for the exam

Suggested Texts for Review:

- *The Manual of Photogrammetry, 6th edition, Chris McGlone, editor 2013*
- *Remote Sensing and Image Interpretation*, 5th edition, Lillesand and Kiefer, 2015
- *Elements of Photogrammetry: With Applications in GIS*, Wolf and Dewitt, 1999
- *The Manual of GIS*, Marguerite Madden, editor, 2009
- *Fundamentals of Remote Sensing and Airphoto Interpretation*, 5th edition, Avery & Berlin, 1992
- *Airborne Topographic Lidar Manual*, Michael S. Renslow, editor, 2012
- *Introduction to the Unmanned Aircraft Systems*, Barnhart, Hottman, Marshall, Shappee, editors, 2012
- *Introduction to UAV Systems (Aerospace Series)* 4th edition, Fahlstrom and Gleason, 2012
- *Glossary of the Mapping Sciences*, ASPRS and ASCE

Administrative Procedures

The structure for administering the ASPRS Certification Program consists of two major elements:

1. *The Evaluation for Certification Committee*, which reviews, then approves, or rejects all applications for Certification, Recertification, or Geospatial Intern

2. *The ASPRS Governance Committee*, which investigates allegations and complaints involving practicing photogrammetrists, mapping scientists, and technologists and recommends appropriate action to the Board of Directors.

The Society's **Professional Practice Division** monitors and develops policy guidelines for the program. *The Board of Directors is the final authority on matters involving certification and professional conduct.*

Examination Proctoring:

All ASPRS Certification exams are provided in a secure computer-based testing environment through Prometric. (https://www.prometric.com/)

This partnership:

1. Removes the need for candidates to coordinate proctors
2. Allows for examinations to be offered in a Covid-safe environment
3. Provides immediate test results to the candidate
4. Allows for "remote proctoring" for candidates who do not have a Prometric testing center near their locations, to include international candidates. If utilizing the remote proctoring option:
    - **Applicants must:**
        - Register in their full legal name (middle name not necessary) that matches government issued ID
        - Use a computer that is NOT work/government issued. Must use personal computer.
        - Arrange for a suitable examination site. A room of ample size, free of distractions.
    - **Proctors will:**
        - Obtain picture identification of the examinee before the exam
        - Check that Candidates have only one bound reference, a hand-held calculator, a writing device, scratch paper, and nothing else.
        - Ensure that the examination will last no longer than 2 hours for Certified Mapping Technologist exams and no longer than 4 hours for Certified Mapping Scientist (including Certified Photogrammetrist) exams. Please assure that this time period is honored with the exception for rest room breaks

*Note: Additional testing fees will be charged by the ASPRS computer-based testing provider Prometic.

Applications for certification and recertification will, upon receipt at ASPRS Headquarters, be reviewed for completeness. When the required references have submitted Confidential Reference Forms, they are combined with the application. Applications found to be in order are sent to the Chair of the Evaluation Committee, whose membership includes representation from each major functional area of photogrammetry and the mapping sciences. The Committee will meet as required to take action on all bona fide applications.

Applicants for certification, recertification, and geospatial intern will be notified of action by the Committee as soon as possible.

Award of certification, recertification and Geospatial Intern status

Successful applicants for certification will be awarded an embossed certificate. Those certified by the Society may display the certificate and use one (or more as appropriate) of the following designations on business stationary and cards:

- Certified Photogrammetrist (ASPRS)
- Certified Mapping Scientist, Remote Sensing (ASPRS)
- Certified Mapping Scientist, GIS/LIS (ASPRS)
- Certified Mapping Scientist, Lidar (ASPRS)
- Certified Mapping Scientist, UAS (ASPRS)
- Certified Photogrammetric Technologist (ASPRS)
- Certified Remote Sensing Technologist (ASPRS)
- Certified GIS/LIS Technologist (ASPRS)
- Certified Lidar Technologist (ASPRS)
- Certified UAS Technologist (ASPRS)
- Geospatial Intern (ASPRS)

Successful applicants for recertification will continue to be listed on the *Active Certified Roll* and will be awarded a certificate to show that the applicant has maintained skills in the technology.

Seals and stamps

A seal and/or rubber stamp, in standard or digital format, which contains the name, certification number and expiration date may be ordered from ASPRS by email or surface mail. There is a nominal fee for each.

Certification and recertification are for individuals only. The designation of “Certified" may not be used in such a manner as to indicate that a business firm or agency is certified as an entity.

The use of a seal or stamp is not authorized for those individuals holding the status of “Intern” or by those whose status has become “Inactive” or “Retired.”

Note: *ASPRS certification seals and stamps can only be authorized by ASPRS and manufactured by ASPRS-approved vendors. Unauthorized seal or stamp production is a violation of copyright law and the ASPRS Code of Ethics.*

Reservations

The Society reserves the right to change or amend the requirements for certification and recertification, the educational credits, or the administrative fee structure for review and evaluation if deemed appropriate by the Board of Directors.

The Society further reserves the right to revoke a certification or recertification if, in the opinion of the Board of Directors, the person concerned has violated or shown flagrant disregard for the Code of Ethics of the Society.

Since the program is entirely voluntary, the Society assumes no responsibility for any loss or disadvantage, real or imagined, which may be alleged to have resulted from a disapproval of an application for certification, recertification, or revocation of the certificate once given.

By submitting their application, the applicant acknowledges that the Society will apply the internal standards adopted by its Board of Directors in evaluating the applicant, and that it may reject any applicant who does not meet its minimum standards for certification or recertification. In consideration of ASPRS acceptance and processing of an application, the applicant agrees to waive all claims of liability or responsibility against ASPRS and to indemnify and hold harmless ASPRS, its directors, officers, committee members, employees, agents and representatives against any and all such injury, damages, or claims made by or on behalf of any person, partnership, association, or corporation. Applicant further acknowledges that ASPRS, its directors, officers, committee members, employees, agents or representatives are not liable to the applicant, or to any other person, partnership, association, or corporation, in any way for any injury, damages, or claims alleged to be based upon or arising out of the approval or disapproval or the issuance, withdrawal, or termination of any certification or recertification issued by ASPRS.

Certification Examination Matrices by Certification Discipline

*Approximate percentages, actual values may vary.

Focus Area	Certified Photogrammetrist	Certified Mapping Scientist GIS/LIS	Certified Mapping Scientist Remote Sensing	Certified Mapping Scientist Lidar	Certified Mapping Scientist UAS
Earth Science	8%	10%	8%	8%	8%
Mathematics	10%	10%	10%	10%	10%
Engineering/Surveying	8%	10%	8%	8%	8%
Physics	6%	6%	6%	6%	6%
Professional/Ethical	7%	7%	7%	7%	7%
Remote Sensing	5%	12%	18%	5%	5%
GIS	5%	25%	23%	5%	5%
Photogrammetry	41%	10%	10%	5%	5%
Lidar	5%	5%	5%	41%	5%
UAS	5%	5%	5%	5%	41%

Focus Area	Certified Mapping Technologist Photogrammetry	Certified Mapping Technologist GIS/LIS	Certified Mapping Technologist Remote Sensing	Certified Mapping Technologist Lidar	Certified Mapping Technologist UAS	Geospatial Intern
Mathematics	6%	6%	6%	6%	6%	10%
Earth Science	6%	6%	6%	6%	6%	10%
Engineering/ Surveying	6%	6%	6%	6%	6%	10%
Physics	6%	6%	6%	6%	6%	10%
Professional/Ethical	6%	6%	6%	6%	6%	10%
Remote Sensing	0%	20%	36%	0%	0%	10%
Photogrammetry	70%	0%	6%	0%	0%	10%
GIS/LIS	0%	50%	16%	0%	0%	10%
Lidar	0%	0%	6%	70%	0%	10%
UAS	0%	0%	6%	0%	70%	10%