

Mapping Sciences/Photogrammetry Exam Specification

Knowledge Domains/Sub-domains

I. Standards and Specifications

I.A. Statutes and Rules (8% of total exam)

	determine levels of precision and order of accuracy
	determine applicable laws, ordinances and standards

I.B. Standards – (what the standard says) (11% of total exam)

	select appropriate vertical and horizontal datum
	determine levels of precision and order of accuracy
	determine applicable laws, ordinances and standards

II. Professional Practices and Procedures -- Photogrammetry

II. A. Project Planning (13% of total exam)

	select appropriate vertical and horizontal datum
	determine levels of precision and order of accuracy
	consult with and advise clients and/or agents
	plan control, method of data acquisition, integration and documentation
	research and evaluate geodetic control
	research and evaluate maps, images and photography
	research and evaluate geographic information

II. B. Geodesy and Map Projections (7% of total exam)

	select appropriate vertical and horizontal datum
	research and evaluate geodetic control

II. C. Data Acquisition (16% of total exam)

	perform reconnaissance of physical features (eg. Monuments, topography etc.
	recover horizontal/vertical control
	establish network/framework for control (eg. Aerotriangulation, satellite obstruction, strength of figure)
	Adjust/calibrate instruments
	Measure using photogrammetric methods
	Measure using GPS (exposure station)
	Measure using LIDAR, digital laser scanning

II. D. Data Reduction and Analysis (16% of total exam)

	Adjust/calibrate instruments
	Reduce measurements
	Analyze and adjust measurements
	Compute areas and volumes
	Convert data to an appropriate datum

II. E. Documentation and Map Presentation (9% of total exam)

	select appropriate vertical and horizontal datum
	Convert data to an appropriate datum
	Prepare maps, plats and reports (hard copy/ digital)
	Develop and/or provide data for GIS

III. Business/ Professional Practices

III. A. Business Principles and Communication (10% of total exam)

	consult with and advise clients and/or agents
	determine staffing levels and capabilities
	prepare and negotiate proposals and/or contracts
	Facilitate, consult, coordinate, and manage projects with allied
	professionals and/or regulatory agencies

III. B. Quality Assurance – (how to apply standard to job) (10% of total exam)

	determine applicable laws, ordinances and standards
	determine levels of precision and order of accuracy
	perform visual inspection to verify mapped features
	Field verify map accuracy

There are a total of 100 questions. Examinee is to answer all questions. The length of the exam is 6 hours.