GISCI GEOSPATIAL CORE TECHNICAL KNOWLEDGE EXAM ® CANDIDATE MANUAL

Updated: January 2025

This document provides information about the GISCI Geospatial Core Technical Knowledge Exam®, now a requirement for GISCI GISP Certification. For information about the GISP Certification Program, consult the GISCI website at www.gisci.org.

This document is updated prior to each exam window.

Exam Date:	June 7 – 15, 2025 (Worldwide)

Application Period: North American locations: until May 23, 2025
International locations: until May 23, 2025

Future Exam Dates: The exam is held twice a year, in June and December.

Exam Procedure

Submit Application: Apply online at the GISCI website (www.gisci.org).

Pay Exam Fee: The exam fee should be paid at the time of application. GISCI accepts the following payment methods: MasterCard, Visa, American Express, and Discover. If paying by check, you will receive payment instructions. In

Checks should be mailed to:

**GIS CERTIFICATION INSTITUTE
503 E NIFONG BLVD #338
COLUMBIA, MO 65201-3717**

Exam fees are as follows:

US and Canada: $250
International: $300
Exam fees are non-refundable.

Schedule your specific exam date: After payment, you will receive an email authorization to schedule your exam from our exam delivery provider, Pearson VUE. Use the link provided in the email to create an account and schedule your exam date, time, and location. Exam availability may vary by testing center, so schedule early to secure your preferred time and location.

Scheduling Support:

If you need assistance scheduling, contact Pearson VUE at 1-888-270-7759 after receiving the scheduling email and creating your account. Do not call this number unless you have received your scheduling email.

Take the Exam: Attend the exam at the time and location scheduled with Pearson VUE.

Exam Results: Exam results will not be available immediately after the test. GISCI will review all results, **a process that may take up to four weeks**. You will receive your pass/fail result via email within four weeks. Candidates who fail will receive a detailed performance report.

Extensions to the Procedure

- **Rescheduling.** If you need to reschedule within the same exam window, contact Pearson VUE at least 48 hours before your scheduled exam. Rescheduling with less than 48 hours' notice must be directed to GISCI at info@gisci.org. Rescheduling is subject to availability.
- **Postponement to a later exam event.** Under extreme circumstances, you may request to roll over your exam fees to the next exam window with prior approval from the Executive Director. If approved, you must take the exam during the next window or forfeit the fee. Please note, cancelling with Pearson VUE does not guarantee approval for fee rollover.
- **Exam failure and retake.**
  - If you fail the exam, you may retake it in the next scheduled exam window. You must reapply and pay the exam fee to retake the test.
  - If you fail the exam twice in consecutive sessions, you must wait for one additional exam window before retaking the exam.
  - You cannot retake the exam in the same exam window.
- **Next exam.** The GISCI Geospatial Core Technical Knowledge Exam® is held approximately every six months, with exam windows in June and December. Please visit www.gisci.org for future exam dates.

Exam Location & Scheduling

- **Testing Centers**: The exam is offered worldwide through Pearson VUE testing centers.
- **North America**: Once authorized, contact Pearson VUE to schedule your exam.
- **International**: Before paying, verify with GISCI that a test center is available in your region.

Exam Description

- **Length:** The exam consists of 100 scored questions and up to 80 unscored pretest questions (though typically fewer).
- **Duration:** You will have 4 hours to complete the exam.
- **Format:** The exam consists of multiple-choice questions.
- **Medium:** The exam is computer-based at Pearson VUE testing centers. On-screen calculators will be provided as needed.
- **Environment:** The exam will be proctored at a Pearson VUE testing center.
- **Language:** The exam is administered in English.
- **Scoring:** Each question is scored as either correct or incorrect, with no penalty for incorrect

answers. A passing score requires 73% correct answers on the 100 scored questions.

<u>Exam Content</u>

Exam Foundation: The exam is based on a comprehensive job analysis of GIS professionals from diverse sectors, each with at least four years of experience. It is guided by the Geospatial Technology Competency Model, Tier 4, Core Geospatial Industry-Wide Technical Competencies, and the Geographic Information Science & Technology Body of Knowledge.

Core GIS Technical Knowledge: The exam assesses your understanding of fundamental geospatial technical knowledge. It does not focus on software-specific details, specialized knowledge, ethics, or management skills.

Exam Knowledge Areas

The exam covers 45 specific Knowledge Areas grouped into ten Knowledge Categories as shown in the tables below.

GISCI Geospatial Core Technical Knowledge Exam ® Knowledge Categories

Knowledge Category	Weight
1. Conceptual Foundations	10%
2. Geospatial Data Fundamentals	15%
3. Cartography & Visualization	10%
4. Data Acquisition	11%
5. Data Manipulation	11%
6. Analytical Methods	11%
7. Database Design & Management	10%
8. Application Development	7%
9. Systems Design & Management	7%
10. Professional Practice	8%
10. Total	100%

<u>Sample Questions</u>

The following sample questions supply examples of the question format. An answer key is provided at the end of the list of questions.

1) Which is an example of analog-to-digital conversion? a) Creating centroids from a polygon file b) Importing a DXF c) Scanning a map document to JPG format d) Transforming a GIF to a TIF

2) Which of the following is NOT a component of the OGC geometry object model? a) Chain b) Curve c) Point d) Surface

3) Which is the most effective method for maintaining data quality to ensure that no line features of a stream center line layer intersect the polygon feature of a land cover layer? a) Clip b) Intersect c) Overlay d)
Topology

4) According to National Map Accuracy Standards, what percentage of features must be within 1/30 of

an inch or less from their intended horizontal accuracy on maps with scales of 1:20,000 or larger? a) 5% b) 10% c) 90% d) 95%

5) Which are compression techniques for raster data? Select all that apply. a) Lattice b) Pyramids c) Quad trees d) Run length encoding

(ANSWER KEY: 1=c; 2=a; 3=d; 4=c; 5=c, d)

Exit Report

After completing the exam, you will receive an exit report outlining the next steps in the process. Please note that your exam results cannot be provided immediately, as they must undergo a thorough review by our Exam Review Committee and psychometrician. This review process typically takes up to 4 weeks.

Once the review is complete, you will receive your official pass/fail result directly via email from GISCI. Please be aware that only information communicated by GISCI is considered official and reliable.

Study Resources

Resources that hold information related to the exam content are readily available in many forms. The following are examples of the types of materials that supply information about exam topics:

- GIS, Cartography, Geography and Mathematics and statistics textbooks
- GIS compendiums and manuals (not software manuals)
- GIS, Cartography, Geography and Mathematics and statistics courses
- GIS periodicals
- GIS software supplier general GIS discussion (not software specific)
- General computer and programming texts
- General computer and programming courses

Any of the specific items in the above categories would supply relevant information. Therefore, GISCI does not supply specific titles and citations.

The exam assesses geospatial professional competence acquired over the course of an individual's geospatial education, career, and mastery of the material. It is expected that, for most candidates, study will involve refreshing their familiarity with some aspects of core geospatial knowledge that they may not have applied recently.

Exam Preparation Materials

An Official Practice Exam, an Official GISCI Exam Study Guide, and other materials are on the GISCI website:

Preparation Materials - https://www.gisci.org/Want-to-be-a-GISP/The-Exam/Exam-Preparation-Info

Practice Exam - https://www.gisci.org/Want-to-be-a-GISP/The-Exam/Practice-Exam

On the Day of the Exam

- Arrive at the testing center **30 minutes** in advance.
- Present a valid, government-recognized, unexpired, photo **ID** with your name as it appears on your exam authorization and scheduling. (Contact GISCI at least two weeks in advance if you need to make arrangements for another type of ID to be used and bring that pre-approved ID to the test center.)
- **No personal items** are to be brought into the testing area.
- **No electronic devices** of any kind are allowed in the testing area.
- You are **not allowed to leave the building or use your cell phone or other electronic devices** during the exam.
- There is to be **no conversation** or other form of communication among candidates once you enter the testing area.
- **Persons not scheduled to take the exam are not allowed** to wait in the testing center or surrounding public area.
- Test takers must always conduct themselves in a professional and courteous manner.
- You are **prohibited from reproducing, communicating, or transmitting any test content** in any form for any purpose. Any such actions are violations of Pearson VUE and GISCI security policy and may result in the disqualification of exam results and/or lead to legal action.

Pearson VUE Exam FAQs are available here: https://www.pearsonvue.com/us/en/test-takers/resources.html

Special Accommodations

All exam centers comply with the Americans with Disabilities Act (ADA) of 1990 and are equipped to provide necessary accommodations to candidates. If you require specific accommodations, please contact GISCI at least 30 days prior to your exam date to ensure appropriate arrangements can be made. For more details, visit Accommodations Information. Please visit https://www.gisci.org/Want-to-be-a-GISP/The-Exam/Accommodations for more information.

Non-Discrimination

GISCI is committed to providing an inclusive environment and does not discriminate on the basis of race, religion, sex, age, sexual orientation, national origin, or any other protected category under federal or applicable laws.