

# Certified Landscape Irrigation Auditor/ Golf Irrigation Auditor (CLIA or CGIA) Bulletin of Information, Application/Registration



Irrigation Association certification as a certified landscape irrigation auditor or golf irrigation auditor indicates the successful auditor has:

- Passed a written exam covering the principles and practices of auditing.
- Agreed to follow the IA Code of Ethics established by the IA Certification Board.
- Submitted an independently completed audit verified by an IA certified professional in good standing and approved by the Certification Board.

Auditors are involved in the quantification of landscape or golf irrigation water use. Auditors collect site data, make maintenance recommendations and minor repairs, and perform field measurements and observations. Through this data gathering, a basic irrigation schedule can be developed that will assist a site water manager, property owner or golf superintendent in managing his overall irrigation water usage.

## EPA WaterSense Approved

The EPA WaterSense<sup>SM</sup> program promotes water efficiency through products, professional programs and partners that meet WaterSense criteria. IA is proud to be the first WaterSense partner. The IA Certified Irrigation Contractor and Certified Irrigation Designer programs were the first professional certifications to earn the WaterSense label. The IA Certified Landscape and Golf Irrigation Auditor programs also carry the WaterSense label.



The WaterSense label will increase consumer awareness and demand for professionals who use water-efficient products and practices. Individuals certified in eligible programs may apply to WaterSense for the partner label at [www.epa.gov/watersense/partners](http://www.epa.gov/watersense/partners).

## Landscape/Golf Irrigation Auditor Responsibilities

Landscape and golf irrigation auditors follow auditing procedures and guidelines including system review. Auditors should observe system operations, locate irrigation zones, prepare site audit maps and visually identify broken or misaligned equipment.

Auditors also collect additional site information such as operating pressure, flow rates, soil and plant types. When required, auditors can perform a catch can test where they collect data to determine irrigation uniformity and precipitation rates. They may use this information to generate irrigation base schedules.

## Eligibility and Application

Certification as a CLIA or CGIA is a three-step process. All requirements must be submitted within one year of acceptance to the certification program.

### Step 1 Program Application and Exam Registration

- To apply to the IA Certified Landscape Irrigation Auditor or Certified Golf Irrigation Auditor program, you must meet the requirement of at least one year of verifiable irrigation-related work experience.
- To apply to the program and register for the exam, complete the certified landscape/golf irrigation auditor application and registration. Forms and payment must be received by the IA at least 30 days prior to the exam date.
- After your application has been received and verified, you will receive a letter informing you of your status in the program.
- If you have less than the required one year of experience, you will be notified of the date when you will be eligible to take the examination. You will not have to reapply.

### Step 2 Examination

- To become certified you must pass the CLIA or CGIA examination administered by the IA and agree to operate by the IA Code of Ethics.

### Step 3 Audit Submission

- Before certification will be awarded, you must submit an independently completed audit, verified by an IA certified professional in good standing, within one year of acceptance to the program.
- Without exception, your original audit **MUST** be submitted on IA-specified worksheets available on the IA web site.

## CLIA Exam Description

The CLIA exam will be a three-hour; closed-book exam with 125 equally weighted multiple choice questions. After successful completion of the exam, an independently-conducted field audit must be submitted for evaluation to achieve certification. Submission forms for field audits are available via the IA web site.

The content area with approximate percentages are:

- 23-27% Irrigation Audit Procedures
- 23-27% Soil-Plant-Water Relationships
- 28-32% Irrigation Scheduling
- 18-22% Equipment/Technology

## CGIA Exam Description

The CGIA exam will be a three-hour, closed-book exam with 125 equally weighted multiple choice questions. After successful completion of the exam, an independently-conducted field audit must be submitted for evaluation to achieve certification. Submission forms for field audits are available via the IA web site.

The content areas with approximate percentages are:

- 23-27% Irrigation Audit Procedures
- 23-27% Soil-Plant-Water Relationships
- 28-32% Irrigation Scheduling
- 18-22% Equipment/Technology

**\*A more detailed content outline for the CLIA and CGIA exams is available on the IA web site, [www.irrigation.org](http://www.irrigation.org).**

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## References and Exam Schedule

References for the CLIA and CGIA exams are available online (see certification and references) and include:

- CLIA**
  - *Landscape Irrigation Auditor*
  - *SMART Technologies for Irrigation Management*
  - CLIA Specifications (free online)
  - CLIA Equations (free online)
- CGIA**
  - *Golf Irrigation Auditor* (manual)
  - *SMART Technologies for Irrigation Management*
  - CGIA Specifications (free online)
  - CGIA Equations (free online)

The exam schedule is continually updated at the IA web site.

## Optional Courses

The CLIA/CGIA programs are self-study programs. The Irrigation Association offers optional one and a half day *Landscape Irrigation Auditor* and *Golf Irrigation Auditor* review courses that may be beneficial in preparing for the exam.

**Note:** The class is not always offered in conjunction with the exam. For class availability, please check the course schedule online.

**Important:** Education courses require separate registration and fees. The audits conducted as part of this course work will not be accepted to meet the requirement for an independently completed audit.

## Fees and Registration

Apply and register for the CLIA or CGIA program and exam directly through the IA. Exam registration and payment must be received by the IA at least 30 days in advance. On-site registration is not allowed.

### Application and Exam Fees (application fee is non-refundable)

• IA member	\$ 50 application	\$200 exam
• Nonmember	\$175 application	\$325 exam
• IA member retake		\$200
• Nonmember retake		\$325
• IA member cancellation/reschedule*		\$100
• Nonmember cancellation/reschedule*		\$150

\*Cancellation fees apply if cancelling, rescheduling within five business days of exam.

If a candidate fails to appear on day of exam, the candidate will forfeit all application and exam fees and will not be eligible for a refund. Company check, personal check, money order and credit cards (Visa, MasterCard, American Express) are accepted. Remit by check in U.S. dollars drawn on a U.S. bank, payable to the Irrigation Association.

## Audit Submission

Without exception, your original audit must be submitted on IA-specified worksheets available at [www.irrigation.org](http://www.irrigation.org).

Following are audit requirements:

**All:** Audit must be submitted on IA-specified worksheets available at [www.irrigation.org](http://www.irrigation.org). To request the worksheets, e-mail [certification@irrigation.org](mailto:certification@irrigation.org). If you do not have internet access, please call the IA office at 703.536.7080.

**Landscape:** Site must contain two areas: spray (minimum of eight sprinkler heads) and rotor (minimum of four sprinkler heads). If site does not contain sprays and rotors, a second site must be audited containing the missing area type.

**Golf:** Site must contain two areas: green and fairway. (A minimum of 60 audited yards of fairway and four sprinkler heads is required.)

If a candidate applies for one auditor certification, and intends to apply for another, two audit submissions must be submitted per the requirements for each certification.

For a list of the IA-specified worksheets and evaluation criteria, see "requirements" page in this bulletin.

Extensions can be granted if the candidate notifies IA, in writing, prior to the one year deadline.

### Audit Resubmission Fees

- IA member audit resubmission \$ 75
- Nonmember audit resubmission \$125

## Exam Retake/Reschedule/Cancel

No exam retake may be scheduled by anyone in the examination process until the candidate has been officially notified of the results of his/her previously taken exam. No candidate will be allowed to retake an examination until 90 days have passed.

A cancellation fee will be assessed to the candidate who fails to cancel a scheduled exam at least five business days before the exam date. Cancellations must be made in writing and sent to the attention of IA certification by U.S. mail, fax: 703.536.7019 or e-mail: [certification@irrigation.org](mailto:certification@irrigation.org). If a candidate fails to appear on day of exam, the candidate will forfeit all application and exam fees and will not be eligible for a refund.

A candidate may take an exam no more than three times. If unsuccessful on the third attempt, the candidate must wait one year from the date of the last examination to retake that examination. Fees applicable at that time must be paid.

If the candidate does not successfully complete the required exam and audit requirements within one year of acceptance to the program, the candidate must restart the certification process.

## Certification Renewal and CEUs

A CLIA or CGIA is required to obtain CEUs to maintain an active status and remit a nominal annual renewal fee.

# Certified Landscape Irrigation Auditor/ Golf Irrigation Auditor (CLIA or CGIA) Application

Please keep a copy for your records.



- IA must receive the exam application and registration at least 30 days prior to the exam date. On-site registration is not allowed.
- IA reserves the right to cancel, postpone or reschedule any or all exams as necessary.
- To apply to the CLIA or CGIA program and be eligible to take the exam, a candidate must have one year of verifiable irrigation-related experience.
- Before certification will be awarded, a candidate must successfully complete the required exam and submit an independently completed audit, verified by an Irrigation Association certified professional in good standing, within one year of acceptance to the program.
- Without exception, your audit must be submitted on IA-specified worksheets available at the IA web site or through the IA office.
- All requirements must be submitted within one year of acceptance to the certification program.

## Candidate Information (PRINT legibly in black ink)

Dr.  Mr.  Mrs.  Ms.

\_\_\_\_\_  
Last Name First Name Middle Initial

\_\_\_\_\_  
Home Address (No PO Box)

\_\_\_\_\_  
City State/Province Zip/Postal Code

\_\_\_\_\_  
Home Telephone Cell Telephone

\_\_\_\_\_  
E-mail (required)

What address would you like your references mailed to?  Home  Business (commercial)

What address would you like your exam results mailed to?  Home  Business (commercial)

## Experience REQUIRED

If you have less than one year of verifiable irrigation-related experience with your current employer, include former employer information.

Employment Information	Qualifying Irrigation-Related Experience
<p><b>Current</b> employer _____</p> <p>Position/title _____</p> <p>Employed from _____ / _____ to _____ / _____</p> <p>Years _____ Months _____ of experience</p> <p>Supervisor/contact _____</p> <p>Business Address (No PO Box) _____</p> <p>City _____ State _____ Zip _____</p> <p>Tel ( _____ ) _____</p> <p>Fax ( _____ ) _____</p> <p>E-mail _____</p>	<p>Describe qualifying irrigation-related experience for auditor certification.</p> <p>Resume attached: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p><b>Previous</b> employer _____</p> <p>Position/title _____</p> <p>Employed from _____ / _____ to _____ / _____</p> <p>Years _____ Months _____ of experience</p> <p>Supervisor/contact _____</p> <p>Business Address (No PO Box) _____</p> <p>City _____ State _____ Zip _____</p> <p>Tel ( _____ ) _____</p> <p>Fax ( _____ ) _____</p> <p>E-mail _____</p>	<p>Describe qualifying irrigation-related experience for auditor certification.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

# Certified Landscape Irrigation Auditor/ Golf Irrigation Auditor (CLIA or CGIA)

**Application/Registration** Please keep a copy for your records.



## Candidate Information (PRINT legibly in black ink)

Dr.  Mr.  Mrs.  Ms.

\_\_\_\_\_  
Last Name First Name Middle Initial

## Code of Ethics

I subscribe to the following code of ethics:

- Uphold the integrity of the irrigation industry.
- Protect public health and safety.
- Comply with all local, state, national laws and regulations.
- Adhere to the concepts of free enterprise.
- Follow fair and honest business practices including legitimate representation of my personal capabilities, experience, certifications and licenses.
- Apply ethical business practices to all contractual and warranty obligations.
- Use responsible procedures in the design, installation, maintenance and management of irrigation systems.
- Promote best management practices for water, soil, and energy through efficient and cost-effective irrigation systems design, installation, maintenance and management.
- Work to gain respect and recognition for the irrigation industry at the local, regional, national and international level.

## Declaration

- I understand and agree to all policies outlined in this document.
- I declare that the information contained in this application is true and accurate.
- I understand falsification is grounds for revocation of certification.
- I understand that failure to adhere to the IA Code of Ethics may result in disciplinary action up to and including revocation and/or exclusion from the certification program.
- I have read and agree to follow the IA Code of Ethics.

X \_\_\_\_\_  
Signature Date

## Exam

Landscape Auditor Exam  Golf Auditor Exam

Exam Date: \_\_\_\_\_

Exam Location: \_\_\_\_\_

Computer-based Testing

## Application and Exam Fees (Required)

The application fee is a non-refundable, one-time fee.

IA member  \$ 50 application  \$200 exam

Nonmember  \$175 application  \$325 exam

IA member exam retake  \$200

Nonmember exam retake  \$325

IA member cancellation/reschedule\*  \$100

Nonmember cancellation/reschedule\*  \$150

\*Cancellation/rescheduling fees apply if cancelling within five business days of exam date.

## Exam References and Shipping

Member Nonmember

\$50  \$70 *Landscape Irrigation Auditor*

\$45  \$60 *Golf Irrigation Auditor (manual)*

\$36  \$48 *SMART Technologies for Irrigation Management*

Free exam specification and equation sheets are sent with the confirmation letter or can be downloaded at [www.irrigation.org](http://www.irrigation.org).

\$10.00, ship one book, UPS ground U.S.

\$2.50 for each additional book, UPS ground U.S. (check to approve charges when ordering 2 or more books)

**Exam references and shipping fees are subject to change. International shipping is additional. Please contact IA for a quote.**

## Cancellation Policy

**Exam cancellations must be made in writing at least five business days prior to the exam date. Cancellations made after this date will be assessed a cancellation fee.**

**If a candidate fails to appear on day of exam, the candidate will forfeit all application and exam fees and will not be eligible for a refund.**

## Payment

\$ \_\_\_\_\_ **US Total enclosed or authorized**

Check here for receipt

**Check: #** \_\_\_\_\_

Remit in US \$ drawn on a U.S. bank, payable to the Irrigation Association.

**Charge:**  VISA  MasterCard  American Express

\_\_\_\_\_  
Card Number

\_\_\_\_\_  
Expiration (month/year)

\_\_\_\_\_  
Name on Card

X \_\_\_\_\_  
Signature

## Mail the application and registration forms with payment to:

Irrigation Association  
6540 Arlington Blvd.  
Falls Church, VA 22042-6638

## Or fax with credit payment to:

Attn: Certification: 703.536.7019

## Questions? Call or e-mail the IA ...

Tel: 703.536.7080 • E-mail: [certification@irrigation.org](mailto:certification@irrigation.org)

# Certified Landscape Irrigation Auditor/ Golf Irrigation Auditor (CLIA or CGIA) Requirements



## Audit Submission

**Landscape and Golf:** Audit **must** be submitted on IA-specified worksheets available at [www.irrigation.org](http://www.irrigation.org). To request the worksheets, e-mail [certification@irrigation.org](mailto:certification@irrigation.org). If you do not have internet access, please call the IA office at 703.536.7080.

**Landscape:** Site must contain two areas: spray (minimum of eight sprinkler heads) and rotor (minimum of four sprinkler heads). If site does not contain sprays and rotors, a second site must be audited containing the missing area type.

**Golf:** Site must contain two areas: green and fairway. (A minimum of 60 audited yards of fairway and four sprinkler heads is required.)

**Landscape and Golf:** If a candidate applies for one auditor certification and intends to apply for another, two audit submissions must be submitted per the requirements for each certification.

## Evaluation Criteria

**Landscape:** Points are awarded for completion of each worksheet. 240 total points are available.

Passing grade is 70% (168 points).

In addition, several key values:  $DU_{LQ}$ ; precipitation rate; and total run times must be calculated within the rounding margin of error for the audit to be approved.

**Golf:** Points are awarded for completion of each worksheet. 240 total points are available.

Passing grade is 70% (168 points).

In addition, several key values:  $DU_{LQ}$ ; precipitation rate; and base run times must be calculated within the margin of error for the audit to be approved.

### IA worksheets and evaluation criteria for all CGIA and CLIA candidates tested prior to Dec. 1, 2010

All forms will be evaluated based on accuracy  
and entirety of information.

Required IA Worksheet	Percent of Evaluation
<b>Worksheet #1 – Station Data</b>	4%
<b>Worksheet #2 – Controller and Point of Connection (POC) Information</b>	
Controller Information	4%
Point of Connection (POC) Information	8%
<b>Worksheet #3 – Test Area Data and Map</b>	21%
Catchments device placement and correct spacing for equipment in audit area	
<b>Worksheet #4 – <math>DU_{LQ}</math> and PR Calculation</b>	
Distribution Uniformity Lower Quarter ( $DU_{LQ}$ ) (Proper number of catchments used for LQ and correct formula calculation)	25%
Precipitation Rate Calculation (Correct data used and correct formula calculation)	17%
<b>Worksheet #5 – Schedule</b>	21%

### IA worksheets and evaluation criteria for all CGIA and CLIA candidates tested after to Dec. 1, 2010

All forms will be evaluated based on accuracy  
and entirety of information.

Required IA Worksheet	Percent of Evaluation
<b>Worksheet #1 – Site Conditions Review</b>	4%
<b>Worksheet #2 – Sprinkler System Review</b>	4%
<b>Worksheet #3 – Water Source and System Data</b>	4%
Point of Connection (POC) Information	
<b>Worksheet #4 – Controller Features</b>	4%
<b>Worksheet #5 – Controller Settings</b>	4%
<b>Worksheet #6 – Test Area Map</b>	17%
Catchments device placement and correct spacing for equipment in audit area	
<b>Worksheet #7 – Catch Can Test and Calculations</b>	42%
Distribution Uniformity Lower Quarter ( $DU_{LQ}$ ) (Proper number of catchments used for LQ and correct formula calculation)	
Precipitation Rate Calculation (Correct data used and correct formula calculation)	
<b>Worksheet #8 – Irrigation Schedules</b>	21%
Designated Watering Days Irrigation Schedule (Rotor)	
Soil Moisture Bucket Irrigation Schedule (Spray)	