

# SOLAR WATER HEATING



- 100% Online, Self-directed
- High demand for certified professionals
- Quizzes, Gamification, Real world case studies

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## OVERVIEW: Solar Water Heating

Examine how solar water heating (SWH) systems utilize sunlight for a sustainable, cost-efficient method of fulfilling hot water needs for residential and industrial use.





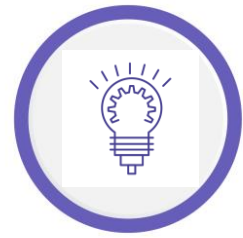
### HIGH DEMAND

Heating water accounts for 18% of home energy use, leading to a surge in demand for solar alternatives.



### HUGE SUPPLY GAP

A major shortage of trained technicians to install high-efficiency systems has left a massive market gap.



### BRIGHT FUTURE

The market is shifting from a niche to a mainstream solution, especially in cold climates requiring specialized indirect systems.

## BENEFITS OF THIS PROGRAM

- ✔ Massive Cost Savings: Replace conventional heaters to save 70–80% on electricity or fuel bills.
- ✔ Fast Return on Investment: SWH systems offer the fastest repayment of investment, typically within 2 to 4 years.
- ✔ Entrepreneurial Readiness: prepares you to build a small business in this growing sector.
- ✔ Longevity & Reliability: Properly maintained systems can last for more than 20 years.

## WHO IS THIS PROGRAM FOR?

- ✔ Aspiring Professionals: If you're seeking employment and looking to kickstart your career, this program provides the essential skills needed to succeed in Solar Water Heating and build a rewarding, future-proof, and meaningful career.
- ✔ Working Professionals: If you're already in Solar Water Heating, this course will enhance your knowledge, strengthen your skills, and boost your confidence.
- ✔ Career Switchers & Learners: Ideal for anyone seeking an online certification course to become a Solar Water Heating professional.

## HOW WILL YOU LEARN?



- ✔ Study at a time and speed that suits you best.
- ✔ Utilize a desktop, laptop, or mobile device to access online learning.
- ✔ If internet access is unavailable, utilize the iZen-LEAP® box for course access on your computer or mobile device.
- ✔ If you lack access to a computer or mobile device, connect the iZen-LEAP® box to a TV or monitor and start learning.

## PREREQUISITES & COMPLEMENTARY COURSES:

- ✔ No prerequisites are required for taking this course.

## WHAT WILL YOU LEARN?

### MODULE - 1: Introduction to SWH

- ✔ Fossil fuel conservation and cost-efficiency.

### MODULE - 2: Site Assessment

- ✔ Location evaluation and heating need calculation.

### MODULE - 3: Designing Your System

- ✔ V-shaped collector design and heat transfer principles.

### MODULE - 4: Monitoring and Testing

- ✔ Performance monitoring and system longevity.

### MODULE - 5: DIY Project

- ✔ Step-by-step V-Through system construction.

### MODULE - 6: Building a Small Business

- ✔ SWH market opportunities and business growth.

### MODULE - 7: Risk Management

- ✔ Safety risks in installation and maintenance.

### MODULE - 8: Legal & Compliance

- ✔ Regulatory requirements and legal operation.

### MODULE - 9: Future Trends

- ✔ New technologies and industry professional growth.



## WHO WILL YOU LEARN FROM?

### PROGRAM FACULTY



This course is taught by Erick Bandala, a research scientist and professor with deep expertise in sustainable environmental technologies. His research focuses on the use of solar-driven advanced oxidation processes for environmental restoration, as well as the development of advanced water and soil treatment solutions. Erick has authored over 100 international publications, including 74 peer-reviewed papers and five books. He holds a PhD in Engineering, an MS in Organic Chemistry, and a BS in Chemical Engineering, bringing a strong academic and applied research foundation to this course.

- Erick Bandala LinkedIn profile: <https://www.linkedin.com/in/erick-bandala-72336939/>

## WHAT IS THE DURATION OF THE PROGRAM?

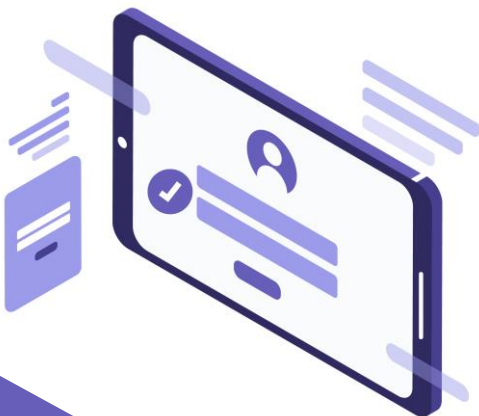
- ✓ Approx. 30–40 hours.
- ✓ Rolling enrolment allows you to start any time.
- ✓ The course duration can be aligned to your schedule and requirements.

## ABOUT iZen



iZen is a Talent Empowerment company, offering end-to-end solutions for skill development and employability, leveraging the power of AI and other digital technologies. The company was founded in Silicon Valley, California with a global vision to incubate innovation and to provide a platform that gives access to knowledge, skills, and advisory to empower the next generation workforce and students. iZen brings you internationally recognized standard programs, to set you apart and to future-proof your career.

Besides teaching technical skills, iZen also offers courses on “soft skills” that can help you succeed in the workplace. To learn more about how you can support the principles of diversity, equity, and inclusion wherever you work, we encourage you to check out **Introduction to Diversity, Equity & Inclusion**.



## HOW DO I ENROLL IN THE COURSE?

<https://leapcloud.iZen.ai>

Email: [info@iZen.ai](mailto:info@iZen.ai)

