

## Certified Treatment Designer Exam Blueprint

The Certified Treatment Designer (CTD) Exam consists of 150 multiple choice questions related to the tasks needed to correctly configure point-of-use and point-of-entry water treatment systems for residential applications or troubleshoot such existing systems.

The tasks reflect the following domains and knowledge areas:

<b>Treatment Application</b>	<b>17% of exam</b>
Gather the necessary information to guide treatment system configuration	
Recognize pitfalls and limitations of treatment technologies and equipment	
Determine the appropriate treatment technology solution and equipment size	

<b>Diagnosis of Existing Systems</b>	<b>17% of exam</b>
Collect the necessary information to determine the purpose of the treatment system and evaluate sizing and treatment selection concerns	
Recognize premature component failure	
Use knowledge of treatment equipment operations to determine diagnostic steps	

<b>Problem Resolution (Existing Systems)</b>	<b>13% of exam</b>
Determine the cause behind treatment failure and recommend appropriate resolution	

<b>Water Quality</b>	<b>13% of exam</b>
Apply the knowledge of contaminant behavior and water chemistry to determine appropriate treatment	
Apply the knowledge of water source characteristics to determine contaminants of concern	

<b>Product Operating Parameters (Treatment)</b>	<b>16% of exam</b>
Recognize potential problems at the installation site that may interfere with equipment operation	

<b>Regulatory Knowledge/Product Certification</b>	<b>7% of exam</b>
Recognize how local regulations such as discharge and installation permits may impact treatment selection and application	
Recognize how certified product requirements impact treatment selection	
Understand product certification standards and testing process	

<b>Market Knowledge</b>	<b>6% of exam</b>
Apply the knowledge of emerging and unregulated contaminants to treatment selection	
Apply the knowledge of available treatment technologies to determining treatment solutions	
Apply WQA Code of Ethics marketing guidelines	



Treatment Maintenance Procedures	6% of exam
Use the knowledge of required maintenance procedures that impact equipment operation	
Provide guidance on what maintenance is required for proper equipment operation	

Product Operations (Software)	5% of exam
Recognize and resolve potential problems with applying WiFi-enabled systems	

## Study Materials

The exam assumes a level of proficiency that draws on both field experience and basic knowledge of point-of-use/point-of-entry water treatment. Use of the recommended study materials or completion of WQA’s training courses does not guarantee success on the exam.

CTD candidates with less than 5 years of experience must complete, in full, the Water Treatment Design course described below before scheduling the exam and should refer to the [CTD Exam Registration form](#) for additional exam eligibility requirements.

1. WQA Online Knowledge Base

The articles found in the following WQA Online Knowledge Base categories are recommended.

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|---|---|
| <i>Glossary of Terms</i>                    | <i>Environmental Considerations</i>       |
| <i>Understanding Water</i>                  | <i>Installing Water Treatment Devices</i> |
| <i>Water Contaminants</i>                   | <i>Troubleshooting Water Treatment</i>    |
| <i>Treatment Methods &amp; Technologies</i> | <i>Understanding the Law</i>              |
| <i>Designing Treatment Systems</i>          | <i>Serving the Customer – Why Ethical</i> |
| <i>Sizing Water Treatment Devices</i>       | <i>Decisions are Hard</i>                 |

WQA members have complimentary access to the online Knowledge Base ([wqa.org/kb](http://wqa.org/kb)) and may use that resource as study material for the exam.

2. WQA Water Treatment Design course

The Water Treatment Design course is self-paced and delivered online through the MEP platform. The course addresses the Knowledge Base topics indicated in item 1 above in a stepwise, interactive manner. Additional information about the MEP platform is available at [wqa.org/mep](http://wqa.org/mep). Information on the course topics may be found [here](#).

CTD exam candidates with 5+ years of experience do not have to complete the course in full and may purchase a three-month access at a reduced fee for the purpose of review.

Use the [CTD Exam registration form](#) to order the course for review.

CTD exam candidates with less than 5 years of experience must complete this course in full before registering for the exam. The course may be ordered [here](#).

3. Personnel who have completed the Water Treatment Design course in full may request a one-time 90-day complimentary access to their learning path after registering for the exam. Access to the online Knowledge Base is included with the course. Please select *Complimentary Access* in the payment information section of the [CTD Exam registration form](#) to order.