

## **Training Goals, Features and Benefits**

The National Apartment Association Education Institute (NAAEI), the education arm of the National Apartment Association ("NAA"), has developed a new training curriculum to help maintenance professionals obtain the Certificate for Apartment Maintenance Technicians (CAMT) certificate.

Both state and local affiliates of the NAA will be able to purchase this new program and offer it to maintenance professionals who want to:

- Increase their technical, business, and personal development skills
- Improve their on-the-job performance
- Earn the CAMT certificate

This training has both classroom and online training components.

### **TARGET AUDIENCE**

- Apartment maintenance employees with a minimum of one year apartment maintenance experience.

### **COURSE GOALS**

- To create *one* training program that will give learners the skills and knowledge they'll need to become successful maintenance technicians, as well as to earn their CAMT certificate.
- To design a flexible and modular curriculum that will allow affiliates to offer individual CAMT courses throughout the year, and learners can either take all CAMT courses or only take the courses they need.
- To provide the right level of instruction for all CAMT skill standards, with the most important standards being covered in depth and the rest being treated as "survey" topics.
- To pave a career path for maintenance professionals and to professionalize the CAMT credential.
- To help "create" an employee whom companies will value more in terms of pay, benefits, and other forms of recognition and to reduce turnover in the job.

### **THE COURSES**

CAMT Training includes seven courses, totaling 90 hours: the five technical courses consist of hands-on classroom training followed by online practice scenarios; the two non-technical courses consist of online learning followed by online practice scenarios.

## ***Non-Technical Courses***

The two non-technical courses are taught entirely online, allowing learners to take each course at their own convenience and at their own pace. After learning the new content in each course, students will go through a set of scenarios in which they evaluate the performance of maintenance technicians in realistic situations, then rate them on a set of criteria related to the learning points in the course. These scenarios not only allow learners to reflect on what they have learned, so they are more likely to apply what they have learned on the job, but they also give learners concrete examples of what *not* to do, so they know what to avoid as well.

### **Inside the Apartment Business**

#### ***2 Hours of Online Content with ½ Hour of Online Practice Scenarios***

**Inside the Apartment Business** offers learners an overview of the apartment industry and the maintenance professional's role in contributing to a community's success. This course covers the technician's responsibilities; compliance with relevant laws, regulations, and guidelines; safety standards; and customer service.

### **People, Projects and Profits**

#### ***2 Hours of Online Content with ½ Hour of Online Practice Scenarios***

**People, Projects, and Profits** gives learners the professional skills they will need to take their performance on the job to the next level. This course covers business skills, such as finance and budgets, time management, and project management, as well as "softer" skills such as communicating with bosses, peers, and residents and being a good teammate.

## **Technical Courses**

The five technical courses take place in the classroom, with an instructor presenting core concepts and procedures, as well as leading course participants through reinforcing learning activities. These activities will range from discussions, to solving "what if" scenarios, to hands-on activities. Instructors will have written guides to help them deliver the class; participants will have guides to help them absorb the material.

After each course, learners will go online to go through practice scenarios for that course. These scenarios let learners play the role of a maintenance technician in realistic scenarios. They will make decisions to prioritize, diagnose, and repair problems, just as they would on the job. However, in these scenarios, learners will be able to practice new things in a safe environment, where they won't hurt themselves or residents or cause property damage. Additionally, learners will be able to ask questions and get feedback as they go along.

We highly recommend that you offer these technical CAMT modules in the following sequence. Each module builds on concepts learned in previous modules. The only exception is *Interior and Exterior Maintenance and Repair* which can be offered at any time during the course:

- \* ***Interior and Exterior Maintenance and Repair (may be offered at any time)***
  1. **Electrical Maintenance and Repair**
  2. **Plumbing Maintenance and Repair**
  3. **Heating, Ventilation, and Air Conditioning Maintenance and Repair**
  4. **Appliances Maintenance and Repair**

### **Electrical Maintenance and Repair**

***21 Hours of Classroom Training with ½ Hour of Online Practice Scenarios***

The **Electrical Maintenance and Repair** course provides the solid foundation in electrical work that learners must have to be successful on the job, especially when working with appliances and HVAC. Content includes understanding systems and circuits; switches, receptacles, and fixtures; using meters; making diagnoses and repairs; following regulations; and safety issues.

### **Plumbing Maintenance and Repair**

***14 Hours of Classroom Training with ½ Hour of Online Practice Scenarios***

The **Plumbing Maintenance and Repair** course teaches students how to maintain and repair plumbing systems and fixtures. Content includes an overview of the systems; key materials and equipment; pipes, fittings, and valves; and fixtures and appliances.

### **Heating, Ventilation, and Air Conditioning Maintenance and Repair**

#### **Heating**

***9 hours of Classroom Training with ½ Hour of Online Practice Scenarios***

#### **Air Conditioning**

***16 hours of classroom Training with one hour of Online Practice Scenarios***

***1 hour of online content, The Future of Air Conditioning in the Apartment Industry***

**Heating, Ventilation and Air Conditioning Maintenance and Repair** course is composed of Heating Maintenance and Repair, Air Conditioning Maintenance and Repair and *The Future of Air*

*Conditioning in the Apartment Industry.*

## **Appliances Maintenance and Repair**

***14 Hours of Classroom Training with ½ Hour of Online Practice Scenarios***

The **Appliances Maintenance and Repair** course teaches students how to install, diagnose and repair the key appliances that they will encounter on the job.

## **Interior and Exterior Maintenance and Repair**

***7 Hours of Classroom Training with ½ Hour of Online Practice Scenarios***

The **Interior and Exterior Maintenance** course gives learners what they need to know to keep the interior and exterior of the buildings on their property in excellent shape, both through repair and preventive maintenance. This course also teaches students how to perform "make-ready" activities, and gives them helpful checklists to use on the job.

## KEY BENEFITS

### ***Our Classroom Learning Approach...***

- Clarifies the **roles and responsibilities** of the maintenance technician (the "what") for each lesson or topic.
- Presents the lesson's key concepts and content with an **emphasis on motivation** (the "why" of doing something) **and on-the-job application** (the "how" of doing something).
- Has participants complete **focused and relevant learning activities**—such as a story problem or a directed small group discussion—not only to reinforce the concepts and content presented in the lesson, but also to show them **how to apply the lesson** back on the job.
- Has learners review and reflect at several points in the course to **increase the likelihood of training retention and transfer**.
- Directs learners to **post-training resources** they can use to reinforce what they've learned in the course.

### ***Our Online Learning Approach...***

- Lets learners take courses at their own pace, at their own convenience, and allows learners to return to the courses at any time.
- Presents non-technical information in the context of the job, so learners can see why the content is important and how they will use it on the job.
- Shows the consequences of mistakes and missed opportunities that a maintenance technician might make by not knowing and using the information provided.
- Gives real-world stories and examples so learners can see how what they are learning relates to their day-to-day work.

## Our Online Scenarios...

### For Technical Courses

- Give learners experience handling difficult situations, like those they will face on the job.
- Give learners a safe place to practice, where they can't hurt themselves or others or damage or destroy property.
- Improve transfer of what was learned in the course by situating the content in real world experiences.
- Increase learner understanding by offering answers to key questions and feedback.

### For Non-Technical Courses

- Increase comprehension by providing an opportunity for learners to reflect on what they have learned.
- Increase retention by asking learners to evaluate the performance of maintenance technicians on a set of criteria based on key learning points.
- Increase transfer by showing the content in the context of realistic situations, demonstrating both what to do and what *not* to do.
- Increase learner understanding by offering answers to key questions and feedback.

## CAMT ADMINISTRATION

- NAAEI Online Enrollment
  - [www.naahq.org/education/designationprograms/howtoenroll/Pages/default](http://www.naahq.org/education/designationprograms/howtoenroll/Pages/default)
- NAAEI Online Comprehensive Exam
  - [www.castleworldwide.com/naaei/login](http://www.castleworldwide.com/naaei/login)

## CAMT COMPONENTS

- **Inside the Apartment Business**
  - Inside the Apartment Business Online Module (2 hours)
  - Online Practice Scenarios (1/2 hour)
- **People, Projects and Profits**
  - People, Projects and Profits Online Module (2 hours)
  - Online Practice Scenarios (1/2 hour)
- **Interior and Exterior Maintenance and Repair**
  - Interior and Exterior Maintenance and Repair Resource Guide (7 hours)
  - Participant Online Practice Scenarios (1/2 hour)
  - Instructor Guide
  - Instructor Videos
    - *Change a Lock (2:00)*
    - *Rekey a Lock (3:51)*
    - *Make-Ready Inspection Tips (13:00)*

- **Electrical Maintenance and Repair**
  - Electrical Maintenance and Repair Resource Guide (21 hours)
  - Participant Online Practice Scenarios (1/2 hour)
  - Instructor Guide
  - Instructor Videos
    - *How to use a Multimeter (4:40)*
    - *Replace a Single-Pole Switch (2:23)*
    - *Replace an Incandescent Fixture (4:21)*
    - *Replace a Receptacle (4:42)*
    - *Replace a Ballast (7:00)*
  
- **Plumbing Maintenance and Repair**
  - Plumbing Maintenance and Repair Resource Guide (14 hours)
  - Participant Online Practice Scenarios (1/2 hour)
  - Instructor Guide
  - Instructor Videos
    - *Unclog a P-Trap Pipe (2:24)*
    - *Replace a Fill Valve (4:49)*
    - *Replace a Toilet Wax Ring (11:00)*
    - *Replace a Tub Spout (5:45)*
  
- **Heating, Ventilation and Air Conditioning Maintenance and Repair**
  - Heating Maintenance and Repair Resource Guide (9 hours)
  - Air Conditioning Maintenance and Repair Resource Guide (16 hours)
  - *The Future of Air Conditioning in the Apartment Industry* Online Program (1 hour)
  - *HVAC Servicing Procedure Manual* by Carrier
  - Heating Online Practice Scenarios (1/2 hour)
  - Air Conditioning Practice Scenarios (1 hour)
  - Instructor Heating Guide
  - Instructor Air Conditioning Guide
  - Instructor Videos
    - *Hydronic Heat Basics (9:32)*
    - *Manifold Gauges (4:57)*
    - *Superheat Method (2:53)*
    - *Subcooling Method (2:41)*
    - *Recovery Procedures (3:45)*
  
- **Appliances Maintenance and Repair**
  - Appliances Maintenance and Repair Participant Resource Guide (16 hours)
  - Participant Online Practice Scenarios (1/2 hour)
  - Instructor Guide
  - Instructor Videos
    - *Clogged Washer Pump (2:08)*
    - *Reset the Oven Temperature (0:48)*
    - *Dryer Airflow Troubleshooting (3:09)*
    - *Replace a Dishwasher Corner Seal (1:37)*
    - *Replace a Refrigerator Thermostat (6:37)*

## HOW TO ACCESS CAMT ONLINE PROGRAMS

- Affiliate Education Staff and CAMT Instructors may preview CAMT online modules and Practice Scenarios by going to: [www.kaleidolearning.com/NAAEI/CAMT/](http://www.kaleidolearning.com/NAAEI/CAMT/) Please use:  
**ID:** NAA  
**Password:** education  
CAMT candidates will use their unique NAA User ID and Password to access online programs.

## Q AND A

### How will the CAMT Participant Resource Guides be sold, in one book or by the module?

- NAAEI will sell these programs in both formats. The total cost of CAMT will be higher than \$255 per participant if you purchase materials by the module.

### I have CAMT candidates who have not completed modules of the Old CAMT or CAMT II, what should I do?

- Anyone who enrolls in CAMT starting September 2008, will enroll in the NEW CAMT program and will take a NEW CAMT exam that reflects the NEW CAMT content. Candidates who enrolled prior to September 2008 and have CAMT and CAMT II modules they still must complete will use the Old CAMT and CAMT II texts and exam. NAAEI will continue to sell Old CAMT and CAMT II modules until the end of 2008. The old CAMT All-In-One book is no longer available.

### What happens to designates who earned CAMT II?

- CAMT II is now equivalent to CAMT. NAAEI will survey CAMT II designates to learn how they'd like to handle their certificate moving forward.

### Do students need to take the NEW online CAMT modules at the beginning of the CAMT course?

- We suggest that CAMT candidates complete these modules as soon as possible because CAMT content will get increasingly more difficult as candidates move through the course and they may find it hard to work on the more difficult modules at the same time as the online modules. However, these online modules may be completed anytime before candidates sit for the NEW CAM exam. Candidates will be tested on the online content. NAAEI will receive reports on who has completed the online modules and will share that information with NAA affiliates.

### What equipment do I need to teach the NEW CAMT?

- CAMT instructors will use videos to demonstrate maintenance techniques throughout CAMT training. Instructors can use a DVD player and TV or play the DVD on a laptop computer and use a LCD projector with projection screen. You may want to purchase a few computers for CAMT candidates to use during this course. Remember, NAAEI has a discount with DELL computers. Go to [www.dell.com/naaei](http://www.dell.com/naaei)

### When will the NEW CAMT Final Exam be available?

- NAAEI will develop the NEW CAMT Final Exam over the next few months. It will be ready by January 2009.

**When will marketing materials for new CAMT be available?**

- NAAEI staff is updating CAMT marketing materials and will make them available as quickly as possible.

***Appliance Maintenance and Repair***

*Approximately 16 hours, typically delivered over two full-day sessions.*

<b>Day 1</b>	<b>Time Needed</b>	<b>Topic</b>
	30 minutes	Welcome and Introduction
	30 minutes	Appliances: You Are Here
	25 minutes	Diagnosing Appliance Problems
	20 minutes	Appliance Safety
	30 minutes	Key Appliance Repair and Maintenance Tools
	2 hours 30 minutes	Clothes Dryer Maintenance and Repair
	3 hours	Clothes Washer Maintenance and Repair
<b>Day 2</b>	<b>Time Needed</b>	<b>Topic</b>
	2 hours	Oven and Cooktop Maintenance and Repair
	1 hour 45 minutes	Dishwasher Maintenance and Repair
	3 hours 30 minutes	Refrigerator Maintenance and Repair
	30 minutes	Key Takeaways, Action Plan, and Wrap-Up

***Electrical Maintenance and Repair***

*Approximately 18 hours, typically delivered over three 6 hour sessions.*

<b>Day 1</b>	<b>Time Needed</b>	<b>Time Needed</b>
	30 minutes	Welcome and Introduction
	30 minutes	Electrical: You Are Here
	15 minutes	Comparing Electricity with Plumbing
	30 minutes	Key Electrical Terms
	60 minutes	Electrical Safety
	45 minutes	The Electrical System: From Power Plant to Apartment Community
	60 minutes	Electrical Circuits
	30 minutes	Key Tools for Electrical Repairs
	60 minutes	Multimeters
<b>Day 2</b>	90 minutes	Electrical Wires
	60 minutes	Main Service Panels, Fuses, and Circuit Breakers
	150 minutes (2 hours, 30 minutes)	Wall Switches
<b>Day 3</b>	90 minutes	Receptacles
	45 minutes	GFCI Receptacles
	75 minutes	Incandescent Light Fixtures
	90 minutes	Fluorescent Light Fixtures
	15 minutes	Smoke and Carbon Monoxide Detectors
	30 minutes	Key Takeaways, Action Plan, and Wrap-up

***Plumbing Maintenance and Repair***

*Approximately 16 hours, typically delivered over two full-day sessions.*

<b>Day 1</b>	<b>Time Needed</b>	<b>Topic</b>
	30 minutes	Welcome and Introduction
	30 minutes	Plumbing: You Are Here
	15 minutes	Plumbing Basics
	30 minutes	Plumbing Safety
	30 minutes	Key Plumbing Tools
	30 minutes	Shut-Off Valves
	2 hours	Pipes and Fittings
	2 hours, 30 minutes	Faucets and Sinks
	1 hour	Garbage Disposals
<b>Day 2</b>	<b>Time Needed</b>	<b>Topic</b>
	1 hour	Tubs and Showers
	3 hours	Toilets
	1 hour, 15 minutes	Drains
	2 hours	Water Heaters
	30 minutes	Key Takeaways, Action Plan, and Wrap-Up

***Air Conditioning Maintenance and Repair***

*Approximately 16 hours, typically delivered over three or four sessions.*

<b>Day 1</b>	<b>Time Needed</b>	<b>Topic</b>
	30 minutes	Welcome and Introduction
	30 minutes	Air Conditioning: You Are Here
	45 minutes	Air Conditioning Safety
	30 minutes	Key Air Conditioning Tools
	45 minutes	Refrigerants and Their Special Properties
	1 hour, 30 minutes	The Air Conditioning System
	45 minutes	Simple Fixes
<b>Day 2</b>	<b>Time Needed</b>	<b>Topic</b>
	4 hours, 30 minutes	Refrigeration Cycle Repairs
<b>Day 3</b>	<b>Time Needed</b>	<b>Topic</b>
	3 hours	Electrical System Repairs
	1 hours	Air Distribution System Repairs
	30 minutes	Unit Replacement
	30 minutes	SEER 13
	30 minutes	Problems and Solutions Grid
	30 minutes	Key Takeaways, Action Plan, and Wrap-Up

***Interior & Exterior Maintenance and Repair***

*Approximately 7<sup>1/2</sup> hours.* If teaching a full-day session, include two 15-minute breaks and a one-hour lunch. If teaching a half-day session, include at least one 15-minute break.

<b>Time Needed</b>	<b>Topic</b>
30 minutes	Welcome and Introduction
60 minutes	Make-Ready Maintenance
30 minutes	Caulking
150 minutes (2 <sup>1/2</sup> hours)	Ceilings and Walls
40 minutes	Locks
50 minutes	Tile
45 minutes	Open Discussion: Interior Maintenance and Repair
30 minutes	Curb Appeal and Building Inspections
15 minutes	Key Takeaways, Action Plan, and Wrap-Up

***Heating Systems Maintenance and Repair***

*Approximately nine hours, typically delivered in two half-day sessions.*

<b>Day 1</b>	<b>Time Needed</b>	<b>Topic</b>
	30 minutes	Welcome and Introduction
	30 minutes	Heating: You Are Here
	30 minutes	Heating Safety
	15 minutes	Key Heating Tools
	15 minutes	Heating Basics
	1 hour	Air Distribution
<b>Day 2</b>	<b>Time Needed</b>	<b>Topic</b>
	1 hour	Electric Furnaces
	45 minutes	Electric Baseboard Heating
	1 hour	Gas Furnace Heating
	1 hour 30 minutes	Hydronic Heating
	30 minutes	Key Takeaways, Action Plan, and Wrap-Up