

Computer-Based Training Packages & Pricing

TTP turns complex technical information into dynamic, visually engaging training materials for the industries that keep the world running. Our <u>off-the-shelf course catalog</u> features high-quality, 3D-animated computer-based training courses ready for immediate implementation and use. From illustrating the flowpaths of a gas turbine to breaking down the step-by-step procedure for disassembling a valve actuator, *we visualize things you never thought possible*.

TRAINING PACKAGES DESIGNED TO MEET YOUR NEEDS

Our robust selection of computer-based training (CBT) courses are offered via packages by industry, plant, and/or equipment. Built by our team of subject matter experts, packages are designed to meet the learning outcomes and objectives of plant and training managers whether they manage one site or an entire fleet.

TTP packages include multiple courses. Each course is comprised of one or more topic-based modules aligned with course learning objectives. Most of our CBT courses focus on system process and flows using detailed 3D animations. Courses also cover control screen navigation and familiarization and unit startup and operation.

All courses are self-paced with knowledge assessments after each module. Courses can be accessed via the TTP learning management system (LMS) or licensed for use in an existing LMS via AICC. Completion certificates and usage reports are available to supervisors for all users.

CBT PACKAGES OVERVIEW

We designed the majority of our CBT packages to be comprehensive operations and maintenance training programs that ensure your team is fully prepared to safely perform their job. Packages with 'Essentials' or 'Operations & Maintenance' include all TTP courses relevant to that type of power generation facility.

Combined/Simple Cycle Plant CBT Packages

Combined and Simple Cycle Plant packages range from general fundamentals to in-depth operations and maintenance of a variety of OEM gas turbines, steam turbines and HRSGs covering system processes and flows of the plant. Topics include critical valves, circulating water, condenser and condensate, electrical switchgear, electrical distribution, boiler feedwater, reverse osmosis, ZLD, ion exchange and so much more. CC Essentials includes all CC Fundamentals courses.

- Combined Cycle Plant Fundamentals
- Combined Cycle Plant Essentials
 - o + Single Set Combined Cycle OEM
 - + All Combined Cycle OEM
- Simple Cycle Plant Essentials
 - + Single Gas Turbine OEM
 - + All Gas Turbine OEM

Turbine OEM packages are designed for users who do not need full plant operations and maintenance training. These packages include only the OEM-specific gas or steam turbine courses.

- Stand-Alone OEM Turbine (Steam or Gas)
- Gas Turbines All OEM



Conventional Plant CBT Packages

While the transition to alternative forms of energy is in full swing, conventional/coal power plants remain the largest source of power generation around the globe. With our conventional power plant packages, you can choose essential fundamentals, specialized processes unique to conventional plants (air quality control and flue gas desulfurization) or indepth operations and maintenance of the entire plant. Topics include lube oil system, circulating water, condensate and feedwater, electrical switchgear, anhydrous ammonia, dry and wet electrostatic precipitators, CEMS distribution, reverse osmosis, ZLD, ion exchange and so much more. Conventional Plant Essentials includes all courses found in the other three conventional plant packages.

- Conventional Plant Fundamentals
- Conventional Plant Essentials

- Conventional Plant Flue Gas Desulfurization (FGD) Only
- Conventional Plant Full Air Quality Control

Renewable Power Generation CBT Packages

The growing renewables market presents unique challenges as new technologies require skills and technical knowledge not common in traditional power generation. TTP renewables packages are built on a foundation of fundamentals courses that expand into detailed operations and maintenance; ideal for reskilling/upskilling or training new technicians. Topics include inverters, SCADA, transformers, basic electrical, substation, PV, and much more. All Renewables O&M includes all TTP renewables courses.



- Battery Energy Storage Systems Operations & Maintenance
- Solar Operations & Maintenance

- Wind Operations & Maintenance
- All Renewables Operations & Maintenance

General CBT Packages

This selection of CBT packages gathers TTP courses applicable to general plant or chemical manufacturing operations and maintenance, as well as electrical and water treatment courses that are relevant to any industry.

- Chemical Manufacturing Operations & Maintenance
- Electrical Operations & Maintenance

- Plant Operation & Maintenance
- Water Treatment Operations

A detailed list of courses included in each package and cost per user is available later in this document.

AVAILABLE EQUIPMENT & OEMS IN TTP COURSES

Our CBT packages include courses that feature dozens of different major equipment types, manufacturers, and models including the most common original equipment manufacturers (OEMs) found in the industry. Our library includes:

- Gas Turbines: GE 7EA, GE 7FA.02/03/04, GE 7FA.05, 7HA, GE LM2500, GE LM6000, GE LMS100, Mitsubishi 501GAC, Siemens 501F, Siemens SGT-800, Siemens V84.2
- Reciprocating Engines: Wartsila 50SG
- HRSG: 2-Drum, 3-Drum
- Steam Turbines: GE A10, GE D11, Mitsubishi, Toshiba, Siemens SST6-5000
- Wind Turbines: MHI, Nordex, Vestas (planned)

Because many OEM-specific courses are applicable to other OEM models or types, our training may still meet your needs even if your equipment isn't listed. Our in-house subject-matter experts will help identify alternatives.



NEW CONTENT INCLUDED

We regularly add new courses to our library. Whenever a new course is added to a package, it will automatically be included in your subscription!

WORK WITH AN SME TO CREATE CUSTOM LEARNING PATHS FOR YOUR SITE(S)

The best way to customize your training experience with TTP is through creation of Custom Learning Paths (CLPs). CLPs are built from the course package(s) on your subscription and aligned with your equipment, functions, and/or roles. You work with one of our SMEs to select the best package(s) to meet your needs and from the courses within those packages, our SME will build one or more CLPs for individual sites or roles specific to your company.

For example, Company A has 20 operators at three combined cycle sites. Each site has a different gas turbine, steam turbine, and HRSG OEM combination, as well as slight differences in processes, such as one site has a water-cooled condenser while another has an air-cooled condenser. Company A would purchase the Combined Cycle Essentials + All Combined Cycle OEM package and at least 3 CLPs (one for each site).

Users are assigned the CLP that has the exact courses from the package that match their site specifications and learning requirements. While Users will still have access to all content purchased, dedicated CLPs ensure operators and technicians have a clear path for learning the content relevant to their site or qualification requirements.

CLPs can be created for new hires vs. annual learning or specific roles to ensure efficient and targeted training.

INVEST IN TTP FOR HIGH-QUALITY 3D ANIMATED TRAINING

We do our best to provide competitive pricing while maintaining our white-glove approach to CBT. Our packages-based pricing structure expedites activation of training, by reducing LMS programming and optimizing SME time.

Annual Subscription Rate & Implementation Fee

All packages are priced on a per user basis as an annual subscription. Package details can be found in CBT Package Course Listing beginning on the next page.

- Single Package Subscription Rate: \$350-\$750 per user based on package selected
- Multiple Package Subscription Rate: Additional \$100 per user per package added; max \$1,200 per user

All multi-user subscriptions require a one-time, mandatory implementation fee to cover LMS user account creation and setup, custom reporting setup, and client onboarding. We also offer AICC, however most customers use the TTP LMS.

- One-Time Implementation Fee TTP LMS: \$1,000-\$2,500 based on number of users
- One-Time Implementation Fee AICC: \$1,500-\$5,000 based on complexity and needs, varies by project

Custom Learning Path

The best way to customize your CBT training program with TTP is through creation of Custom Learning Paths (CLPs). CLPs are built from the course package(s) on your subscription and aligned with your equipment, functions, and/or roles. You work with one of our SMEs to select the best package(s) to meet your needs and then build one more CLPs for individual sites or roles. CLPs can be added at any time during your subscription.

• Custom Learning Path: One-time fee of \$1,200 for up to 3 CLPs; more than 3 quoted separately

Special Pricing

Multi-year subscriptions receive a minimum 10% discount on Year 2 and a minimum 15% discount on Year 3. Reduced per-user rates, discounted implementation fees, and/or special pricing for add-ons may be considered for multi-year and/or multi-user (10+ users) subscriptions. The one-time implementation fee is waived for single-user subscriptions.

Get Started Today!



CBT PACKAGES Combined/Simple Cycle Plants

Our robust combined and simple cycle CBT packages range from general fundamentals to in-depth operations and maintenance for multiple OEM gas turbines, steam turbines and HRSGs.

COMBINED CYCLE

Combined Cycle Plant Fundamentals

Price Per User: \$350

- 1. Combined Cycle Overview
- 2. Gas Turbine Fundamentals
- 3. Heat Recovery Steam Generator (HRSG) Fundamentals
- 4. Steam Turbine Fundamentals (Combined Cycle)
- 5. Generator Fundamentals
- 6. Combined Cycle Operation Fundamentals
- 7. Basic Electrical Fundamentals



Combined Cycle Plant Essentials

Price Per User: \$425

The Combined Cycle Plant Essentials package includes all seven (7) courses in the Combined Cycle Plant Fundamentals package, as well as the following 28 additional courses.

- Cold Start-up
- 2. Steam System Critical Valves
- 3. <u>Circulating Water System (CC)</u>
- 4. Condenser & Condensate (CC)
- 5. Condenser & Condensate (CC with ACC #1)
- 6. Condenser & Condensate (CC with ACC #2)
- 7. Sample Panel
- 8. Electrical Switchgear
- 9. Electrical Distribution
- 10. Substation Fundamentals
- 11. Substation Safety
- 12. Medium Voltage Transformer Fundamentals
- 13. Continuous Emissions Monitoring System (CC)
- 14. Logic Diagrams

- 15. Heat Exchangers
- 16. Bearings
- 17. Limitorque Actuator
- 18. Laser Alignment
- 19. Boiler Feedwater Pump
- 20. Boiler Feedwater Pump with Hydraulic Coupling
- 21. Hydraulic Coupling for Boiler Feedwater Pump
- 22. Auxiliary Boiler
- 23. Cleaver Brooks Auxiliary Boiler
- 24. Gas Compressor
- 25. Reverse Osmosis Fundamentals
- 26. Ion Exchange System Fundamentals
- 27. Zero Liquid Discharge (ZLD)
- 28. Recycled Water Facility

The package can be purchased on its own or to include gas turbine, steam turbine and HRSG OEM specific courses as Single Set OEM or All OEM. Both options below include all 35 courses from Combined Cycle Plant Essentials.

CC Plant Essentials + Single Set CC OEM

Price Per User: \$500*

Adds courses for one gas turbine, one HRSG, and one steam turbine of your choice for total of up to 40 courses.

CC Plant Essentials + All CC OEM

Price Per User: \$750

Adds all OEM-specific gas turbine, HRSG, and steam turbine courses in our library for a total of 72 courses.

- *Gas Turbines:* GE 7EA, GE 7FA, GE 7FA.05, GE 7HA, GE LM2500, GE LM6000, GE LMS100, MHI 501GAC, Siemens 501F, Siemens SGT800, Siemens V84.2
- Steam Turbines: GE A10, GE D11, MHI, MHI TC1F, Siemens SST6-5000, Toshiba, Toshiba TCDF-40
- HRSGs: NEM 3-Drum, Nooter-Eriksen 3-Drum, Nooter-Eriksen 3-Pressure, Vogt 2-Drum, Vogt 3-Drum

^{*}Additional OEMs can be added for \$50 per user per OEM.

SIMPLE CYCLE

Simple Cycle Plant Essentials

Price Per User: \$375

The Simple Cycle Plant Package includes the following 15 courses.

- 1. Gas Turbine Fundamentals
- 2. Generator Fundamentals
- 3. Basic Electrical Fundamentals
- 4. Electrical Switchgear
- 5. Electrical Distribution
- 6. Substation Fundamentals
- 7. Substation Safety
- 8. Medium Voltage Transformer Fundamentals

- 9. Continuous Emissions Monitoring System-CEMS (CC)
- 10. Logic Diagrams
- 11. Heat Exchangers
- 12. Bearings
- 13. Laser Alignment
- 14. Reverse Osmosis Fundamentals
- 15. Ion Exchange System Fundamentals

The package can be purchased on its own or to include gas turbine specific courses as Single GT OEM or All GT OEM. Both options below include all 15 courses from Simple Cycle Plant Essentials.

SC Plant Essentials + Single GT OEM

Price Per User: \$425*

Adds OEM-specific courses for one gas turbine of your choice for total of up to 19 courses.

SC Plant Essentials + All GT OEM

Price Per User: \$600

Adds all OEM-specific gas turbine courses in our library for a total of 34 courses.

The TTP course library includes the following gas turbines: GE 7EA, GE 7FA, GE 7FA.05, GE 7HA, GE LM2500, GE LM6000, GE LMS100, MHI 501GAC, Siemens 501F, Siemens SGT800, Siemens V84.2.

*Additional OEMs can be added for \$50 per user per OEM.

OEM ONLY PACKAGES

Stand-Alone OEM Turbine

Price Per User: \$350

Any of the following OEM gas or steam turbines in our library have more than one related course and can be purchased as a stand-alone package. Additional OEMs can be added for \$50 per user per OEM.

- Gas Turbines: GE 7EA, GE 7FA, GE 7FA Maintenance and Inspections, GE 7FA.05, GE LM6000, GE LMS100
- Steam Turbines: GE D11, Siemens SST6-5000, Toshiba TCDF-40

Gas Turbines All OEM

Price Per User: \$500

Package includes all <u>OEM-specific gas turbine courses</u> available in our library covering the following major equipment GE 7EA, GE 7FA, GE 7FA.05, GE 7HA, GE LM2500, GE LM6000, GE LMS100, MHI 501GAC, Siemens 501F, Siemens SGT800, Siemens V84.2.



Get Started Today!



CBT PACKAGES Conventional Plants

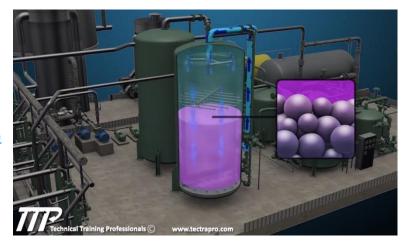
While the transition to alternative forms of energy is in full swing, conventional/coal power plants remain the largest source of power generation around the globe. Our conventional power plant training packages cover fundamentals to in-depth operations and maintenance of the entire plant. Recognizing the unique needs of a coal-fired plant, we also offer specialized stand-alone packages for Flue Gas Desulfurization (FGD) and comprehensive Full Air Quality Control.

Conventional Plant Fundamentals

Price Per User: \$350

Training on the fundamental systems and processes of a coal or natural gas-fired power plant.

- 1. Conventional Boiler Fundamentals Overview
- 2. Boiler Fundamentals
- 3. Flue Gas Fundamentals
- 4. Steam Turbine Fundamentals (Conventional Boiler)
- 5. Generator Fundamentals (Conventional Boiler)
- 6. Conventional Boiler Plant Operation Fundamentals
- 7. Basic Electrical Fundamentals
- 8. <u>Coal Pulverizer</u>



Conventional Plant Essentials

Price Per User: \$425

Conventional Plant Essentials *includes all the courses listed in Fundamentals* and the following in-depth operations, maintenance, and OEM-specific courses detailing the steam turbine, steam turbine generator, and boiler equipment. This package is designed for natural-gas-fired conventional plants and includes 32 courses.

- 1. Lube Oil System (CP)
- 2. <u>Condensate & Feedwater</u> Systems (CP)
- 3. Circulating Water System (CP)
- 4. Electrical Switchgear
- 5. Rotary Screw Air Compressor
- 6. Logic Diagrams
- 7. Heat Exchangers
- 8. Bearings
- 9. Limitorque Actuator

- 10. Rexa Actuators
- 11. Laser Alignment
- 12. <u>Reverse Osmosis</u> Fundamentals
- 13. <u>Ion Exchange System</u> Fundamentals
- 14. Zero Liquid Discharge (ZLD)
- 15. Recycled Water Facility
- 16. Boiler (Subcritical)
- 17. Furnace (Supercritical)

- 18. <u>GE Conventional Plant Steam</u> Turbine Generator
- 19. <u>GE Generator for Tandem-Compound Steam Turbine</u>
- 20. GE Steam Turbine Expansion
- 21. <u>GE Tandem-Compound Reheat</u> <u>Steam Turbine</u>
- 22. Westinghouse Generator Seal Oil
- 23. Auxiliary Boiler
- 24. Cleaver Brooks Auxiliary Boiler

Conventional Plant Essentials for Coal-Fired Plants

Price Per User: \$500

Conventional Plant Essentials for Coal-Fired Plants *includes all* courses in Fundamentals and Essentials listed above, as well as all courses in Flue Gas Desulfurization and Air Quality Control (see next page). These 49 courses cover comprehensive operations and maintenance of the entire coal-fired conventional boiler plant, including the removal of sulphur and other unwanted constituents from the flue gas.

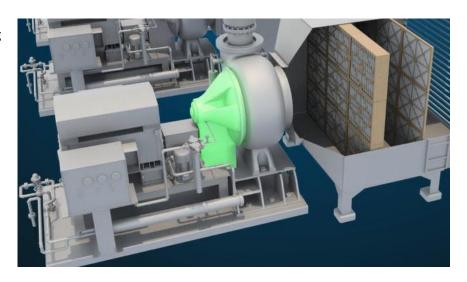


Conventional Plant Flue Gas Desulfurization (FGD) Only

Price Per User: \$350

Training on the removal of Sulphur from the flue gas of a coal-fired power plant featuring a detailed description of the design and operation of an absorber.

- 1. Hydrated Lime
- 2. Wet Flue Gas Desulfurization
- 3. FGD Absorber
- 4. FGD Absorber Startup
- 5. FGD Lime Slurry Production
- 6. <u>FGD Lime and Absorber Control Screen</u> Familiarization
- FGD Lime Slaking System Startup and Operation
- 8. Induced Draft (ID) Fans

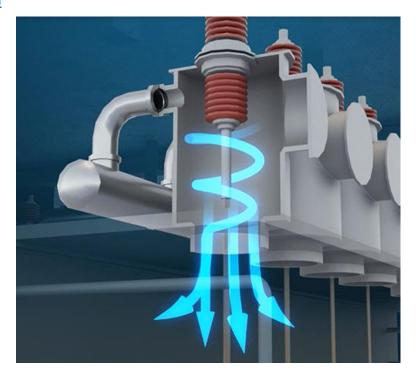


Conventional Plant Full Air Quality Control

Price Per User: \$400

Training on the removal of unwanted constituents from the flue gas of a coal-fired power plant. *Includes all courses in FGD Only package,* as well as nine additional courses featuring electrostatic precipitators, mercury removal, baghouse, and CEMS for a total of 17 courses.

- 1. Air Quality Control System Overview
- 2. Anhydrous Ammonia System
- 3. Dry Electrostatic Precipitators
- 4. Wet Electrostatic Precipitators
- 5. Flue Gas Mercury Removal
- 6. Baghouse System
- 7. <u>Baghouse Control Screen Familiarization</u>
- 8. Baghouse Startup
- Continuous Emissions Monitoring System (CEMS) (CP)



Get Started Today!



CBT PACKAGES

Renewable Power Generation

The growing renewables market presents unique challenges as new technologies require skills and technical knowledge not common in traditional power generation. TTP renewables packages are built on a foundation of fundamentals courses that expand into detailed operations and maintenance; ideal for reskilling/upskilling or training new technicians.

CORE RENEWABLES COURSES

All renewable power generation packages include the following courses essential to operating any renewable site.

- 1. Basic Electrical Fundamentals
- 2. Fault Protection Relays
- 3. Maintenance Testing (In Development)
- 4. Medium Voltage Transformer Fundamentals
- 5. Renewable Interconnect/Substation Facility
- 6. Substation Fundamentals
- 7. Substation Safety
- 8. SCADA Fundamentals



RENEWABLES CBT PACKAGES

Battery Energy Storage System (BESS) O&M

Price Per User: \$600

Includes all 8 core courses, plus:

- Battery Energy Storage System Fundamentals
- 2. Inverter Fundamentals

Solar O&M

Price Per User: \$650

Includes all 8 core courses, plus:

- 1. <u>Inverter Fundamentals</u>
- 2. <u>Photovoltaic Fundamentals</u>
- 3. Solar Generation Facility

Wind O&M

Price Per User: \$600

Includes all 8 core courses, plus:

- 1. MHI 1.0MW Wind Turbine
- 2. Nordex Wind Turbine (In Development)

All Renewables Operations & Maintenance

Price Per User: \$750

Includes all renewables courses available in the TTP library.

- 1. Basic Electrical Fundamentals
- 2. Battery Energy Storage System Fundamentals
- 3. <u>Inverter Fundamentals</u>
- 4. Fault Protection Relays
- 5. Maintenance Testing (In Development)
- 6. Medium Voltage Transformer Fundamentals
- 7. Nordex Wind Turbine (In Development)
- 8. <u>Photovoltaic Fundamentals</u>
- 9. Renewable Interconnect/Substation Facility
- 10. SCADA Fundamentals
- 11. Solar Generation Facility
- 12. Substation Fundamentals
- 13. Substation Safety
- 14. Wind Turbine Generator



Get Started Today!



CBT PACKAGES General O&M

Our general operations and maintenance packages group TTP courses applicable to general power plant or chemical manufacturing operations and maintenance, as well as electrical and water treatment courses relevant to any industry.

Power Plant Operations & Maintenance

Price Per User: \$350

Training on a variety of foundational power plant operations and maintenance.

- 1. Heat Exchangers
- 2. REXA Actuators
- 3. Bearings
- 4. Laser Alignment
- 5. Logic Diagrams
- 6. Boiler Feedwater Pump
- 7. Limitorque Actuator
- 8. Boiler Feedwater Pump with Hydraulic Coupling
- 9. Hydraulic Coupling for Boiler Feedwater Pump
- 10. Electrical Switchgear



Electrical Operations & Maintenance

Price Per User: \$500

Training on electrical operations and maintenance applicable to any type of power generation plant.

- 1. Basic Electrical Fundamentals
- 2. <u>Electrical Distribution</u>
- 3. <u>Electrical Switchgear</u>
- 4. Substation Fundamentals
- 5. Medium Voltage Transformer Fundamentals
- 6. Maintenance Testing (In Development)
- 7. MagneBlast 4160V Breaker
- 8. Renewable Interconnect/Substation Facility
- 9. <u>Inverter Fundamentals</u>
- 10. Battery Energy Storage System Fundamentals
- 11. Fault Protection Relays
- 12. SCADA Fundamentals
- 13. Generator Fundamentals (CC/SC)
- 14. Generator Fundamentals (Conventional)







Water Treatment Operations

Price Per User: \$350

Covers courses associated with plant water treatment systems. This includes reverse osmosis, ion exchange, electronic deionization (EDI) system, zero liquid discharge, and recycled water facility.

- 1. Reverse Osmosis Fundamentals
- 2. Ion Exchange System Fundamentals
- 3. Water Treatment Plant (Reverse Osmosis w/EDI Modules)
- 4. Zero Liquid Discharge (ZLD)
- 5. Recycled Water Facility

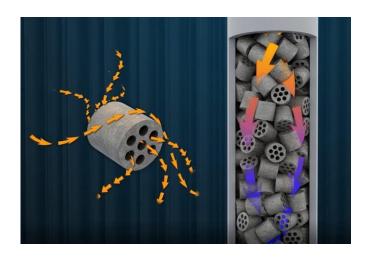


Chemical Manufacturing Operations & Maintenance

Price Per User: \$500

Covers courses associated with systems associated with a chemical plant. This includes ammonia plant, basic electrical fundamentals, reverse osmosis, ion exchange, electronic deionization (EDI) system, zero liquid discharge, recycled water facility, electrical switchgear, heat exchangers, bearings, laser alignment, and Limitorque actuators.

- 1. Ammonia Plant
- 2. Basic Electrical Fundamentals
- 3. Reverse Osmosis Fundamentals
- 4. Ion Exchange System Fundamentals
- 5. Water Treatment Plant (Reverse Osmosis w/EDI Modules)
- 6. Zero Liquid Discharge (ZLD)
- 7. Recycled Water Facility
- 8. Maintenance Electrical Switchgear
- 9. Heat Exchangers
- 10. Bearings
- 11. Laser Alignment
- 12. Limitorque Actuator
- 13. Auxiliary Boiler



Get Started Today!

