ONLINE COURSES

INDUSTRY: **HIGHER EDUCATION**

ARMSTRONG UNIVERSITY

Knowledge Not Shared is Energy Wasted.®

Welcome to Armstrong University Online for Higher Education. We offer a variety of online courses to address the many issues you face each day.

A university campus is like a small city, with dozens of buildings and miles of steam lines to be managed, even as you're working to improve the quality of education and maintain a comfortable learning environment. This is especially challenging when you're faced with diminishing budgets, aging infrastructure, and increasing demands for energy conservation that make your job more difficult than ever before. As your strategic, thermal utility partner, Armstrong is here to solve your problems and make things easier for you. We're global leaders in energy management, conservation, and sustainability and our intelligent system solutions in steam, air and hot water consistently save time, money and energy for some of North America's top universities, even during campus expansion.

Our experts are highly specialized in steam system solutions, humidification and hot water generation and control, and we apply a uniquely holistic approach to uncover the root cause of any problems before determining the most intelligent solution. Armstrong provides comprehensive expertise in utility system engineering as well as on-site solutions, turnkey installations, quality manufacturing, hardworking products, and innovative services. We also offer groundbreaking technological tools, such as wireless monitoring and web-based and reporting applications that allow you to continuously audit the health status and condition of your steam system.

Armstrong can help you achieve your performance goals as an American College and University Presidents' Climate Commitment (ACUPCC) signatory, and as a member of the Association of Physical Plant Administrators (APPA). Armstrong's steam system efficiency methodology has been approved by the United Nations Framework Convention on Climate Change (UNFCCC), and ours is the first efficiency methodology to be approved for international trading of resultant carbon dioxide (CO_2) emissions under the Kyoto Protocol.

With more than a century of sage knowledge and in-depth expertise, Armstrong can serve you in ways no one else can. Through Armstrong University, you have convenient access to this wealth of insight and information. Courses range from free introductory courses to more advanced, paid courses that provide deeper material. Many qualify for Continuing Education Units. To learn more about what Armstrong International can do for you, or to speak with an Armstrong expert from your region of the world, please contact us. When you turn to Armstrong, you can consider it done.

Visit **armstronginternational.com/courses-education** today.

Armstrong provides intelligent system solutions that improve utility performance, lower energy consumption, and reduce environmental emissions while providing an "enjoyable experience."

Recommended courses for Higher Education - armstronginternational.com/courses-education
For a complete listing of courses, click here: Course Handbook

COMMON ISSUE: INCREASE STUDENT SAFETY AND COMFORT		
Subject	**College**	**Course**
Hot water generation	College of Hot water	INSTITUTIONAL HOT WATER SYSTEMS - INTRODUCTION
	College of Hot water	INSTITUTIONAL HOT WATER SYSTEMS - ADVANCED
Water temperature control	College of Hot water	INSTITUTIONAL WATER TEMPERATURE CONTROLS & WASHDOWN
Proper humidification	College of HVAC	FUNDAMENTALS OF HUMIDIFICATION

COMMON ISSUE: COMMITMENT TO CARBON NEUTRALITY		
Subject	**College**	**Course**
Effective pressure/temp control	College of Steam Distribution	PRESSURE AND TEMPERATURE CONTROL ESSENTIALS
Effective trapping	College of Steam Users	STEAM TRAPS
Recognition of system inefficiencies	College of Steam Users	O&M BEST PRACTICES FOR STEAM USERS
	College of Hot Water	TYPICAL ENERGY SAVINGS IN HOT WATER SYSTEMS
Condensate management	College of Condensate Return	O&M BEST PRACTICES FOR CONDENSATE RETURN SYSTEMS
Optimization Services	College of Steam Users	O&M BEST PRACTICES FOR STEAM USERS

COMMON ISSUE: ACCURACY IN METERING AND SUBMETERING		
Subject	**College**	**Course**
Effective flow measurement	College of Flow Measurement	FUNDAMENTALS OF FLOW MEASUREMENT
	College of Flow Measurement	FUNDAMENTALS OF FLOW MEASUREMENT - ADVANCED

OTHER COURSES YOU MAY FIND HELPFUL		
	College	**Course**
	College of HVAC	COMPONENTS OF AN HVAC SYSTEM
	College of Steam Principles	TYPICAL STEAM AND CONDENSATE SYSTEM COMPONENTS
	College of Steam Principles	STEAM BASICS