

ATMAE 2017 Conference Schedule-Blocks



Thursday November 2nd

Session (each session is 22 ½ minutes and scheduled in 45 minute blocks)	Track
8:45:00 AM – 8:45 AM	
Meeting the Future Educational Needs of Manufacturing Today	Administration
Practice What You Teach	Administration
Success factors for engineering technology transfers	Administration
Enabling a 100% Online Certificate Program in Quality: Benefits and Challenges	Administration
Information-Seeking Behaviors of Construction Professionals	Construction
The Effect of Swine-Waste Biochar on the Early-Age Setting and Compressive Strength of Cement Pastes	Construction
Smart Home: Privacy and Cyber Protection	Electricity, Electronics, Computer Technology & Energy Issues
Increasing the Efficiency of a Wind Turbine	Electricity, Electronics, Computer Technology & Energy Issues
Customize the robotic end effector by CAD modeling and simulation	Electricity, Electronics, Computer Technology & Energy Issues
Using Cognex Vision for Part ID and Analysis: Tutorials, Labs, and YouTube	Electricity, Electronics, Computer Technology & Energy Issues
Introduction to the Johnson & Johnson Operating System	Management
Re-evaluating traditional paths to market for industrial products	Management
Electric Guitar: Concept to Product	Teaching Innovations (TI)
Teaching Manufacturing and Sustainability in a Manufacturing Class with the U.S. Life Cycle Inventory Database	Teaching Innovations (TI)
Stacking credentials with industry partnerships and support	Teaching Innovations (TI)
Lean Gamification between Industry and University	Teaching Innovations (TI)
9:00 AM – 9:45 AM	
Comparing enrollment trends in ATMAE accredited programs to projected workforce demand	Administration
Curriculum and Instruction Basics for the Engineering Technology Educator	Administration
Developing a Successful Outcomes-Based Assessment Process	Administration
Enterprise Risk Management: A Credible Approach for Integrating Risk Management into a Department of Technology	Administration
Thermal Imaging and Infrared Applications in the Construction Industry	Construction
On Building Automation System (BAS) and High-Performance Green Buildings	Construction
Building Affordable Laboratory Equipment to Conduct Energy Experiments for Alternative Energy Classes	Electricity, Electronics, Computer Technology & Energy Issues
Designing and Testing Sensors to Assist in Coral Restoration	Electricity, Electronics, Computer Technology & Energy Issues
Building a Solar Charged Electric Go-Kart	Electricity, Electronics, Computer Technology & Energy Issues
Performance Analysis of Stand-Alone Hybrid Energy Systems in Rowan County KY	Electricity, Electronics, Computer Technology & Energy Issues

9:00 AM – 9:45 AM (Thursday November 2)	
Absolutely the best platform skills workshop ever: How to use your people presence and PowerPoint to reach Millennials and Homelander	Management
Assessing Complexity as a Critical Factor in Managing Technology Projects	Management
Using Critical Thinking Question Matrices as a way to improve Affective Learning and Develop Critical Thinking Skills	Teaching Innovations (TI)
Universal Instructional Design and Delivery	Teaching Innovations (TI)
Virtual Scenario for Maintenance Training	Teaching Innovations (TI)
Analysis of Students' Perspectives on Success Factors in Engineering Technology Majors	Teaching Innovations (TI)
10:15 AM – 11:00 AM	
LSS Applied to the Academic Department	Administration
Four Pillars and Proposed B.S. Manufacturing Engineering Technology Program at SUNY/Buffalo State	Administration
Stepping through degrees: a stackable credential model	Administration
A Description Review of AACSB and ATMAE Accreditation Standards and their impact on faculty compensation	Administration
Scheduling Requirements for Civil versus Commercial Projects for CM Graduates	Construction
Thirsty For a Solution: Using Waste Plastic Bottles as an Additive to Enhance Asphalt Characteristics in Roadway Design	Construction
Multi-Layer Behavioral Motion for Complex Robotic Control with >10 DoF	Electricity, Electronics, Computer Technology & Energy Issues
Objective Evaluation of Mobile Robot Trajectories using Multiple View Geometry	Electricity, Electronics, Computer Technology & Energy Issues
The Feasibility Study of Photovoltaics in Eastern Kentucky: The implementation of Microprocessor Powered Adaptive Photovoltaic Tracking Systems with MATLAB	Electricity, Electronics, Computer Technology & Energy Issues
Enacting Active Compliant Visual Robotic Control: Setup, Configuration, and Applications	Electricity, Electronics, Computer Technology & Energy Issues
Improvement of Supply Chain Transactions by Applying Lean	Management
Analysis of Efficiency Ratios and Profitability of US Food Processing Industry: An Empirical Study	Management
Using Escape Rooms to Teach Problem Solving in a Technology Management Classroom	Teaching Innovations (TI)
IoTNet: Enhancing Cyber Security Education	Teaching Innovations (TI)
A Virtual Environment for Learning Radiation Emergency Response	Teaching Innovations (TI)
Development of an Interdisciplinary Cyber security Laboratory for Information Technology and Automation & Controls Engineering Technology Programs	Teaching Innovations (TI)
11:15 AM – 12:00 PM	
Providing real world experiences for students through collaborations with local non-profit organizations	Administration
learning: Models and Policies for Adoption and Integration	Administration
Use of the fuzzy Delphi Method for a qualification-based contractor selection in the construction of bulk processing facilities	Construction
Using Explain Everything App for Creating Instructional Support Videos for Statics and Strengths of Materials Courses	Construction
Synchronous and Asynchronous content delivery in online and hybrid courses.	Distance Learning
A Quantitative Evaluation of Students' Learning Outcomes in "Principles of Injury Prevention" Online Course	Distance Learning

11:15 AM – 12:00 PM (Thursday, November 2)	
Cyber Security Testing Framework of Internet of Things Devices	Electricity, Electronics, Computer Technology & Energy Issues
Biomass Stove Design Project: Automated Fuel Feeder System	Electricity, Electronics, Computer Technology & Energy Issues
Factors Affect Students' Adoption of Digital Technology in Learning Process	Electricity, Electronics, Computer Technology & Energy Issues
Gardens & interactive elements in Hospital Pediatric Units: Parental Affective Perceptions	Electricity, Electronics, Computer Technology & Energy Issues
User acceptance of new technology in mandatory adoption scenario: Understanding the effect of users' internal traits and technology characteristics.	Management
Implementation of KaiNexus tool for lean healthcare in Mary Greeley Medical Center: Employee perspective	Management
Implementation of Advanced Technology Training for the Manufacturing Workforce	Manufacturing
Emergency Preparedness Games	Teaching Innovations (TI)
Toward ABET Accreditation of Information Assurance and Cyber Defense Program: Process and Challenges ... A case Study at Eastern Michigan University	Teaching Innovations (TI)
From Handshakes to You're Hired: Incorporating Professionalism into the Curriculum	Teaching Innovations (TI)
1:15 PM – 2:00 PM	
The Accidental Leader: Transitioning from Technology Faculty to Administration	Administration
TEACHING PROJECT LEAD THE WAY: TEACHERS' EXPERIENCE AND OPINIONS	Administration
Utilization of Lean and Quality Management Systems in Civil Engineering and Construction Management	Construction
Effectiveness of Responsive Facade Systems in Improving Lighting Performance of Building	Construction
Enabling a 100% Online Certificate Program in Quality: Preparation of Distance Instructors	Distance Learning
Developing electronics curricula: Shifting from a traditional approach to project based distance approach	Distance Learning
Machine Ethics: Challenges and Importance for Educators	Electricity, Electronics, Computer Technology & Energy Issues
Evaluating the Factors in Fenestration Systems that Impact the Energy Consumption in Commercial High Rise Buildings in Saudi Arabia	Electricity, Electronics, Computer Technology & Energy Issues
Experimental Projects to Demonstrate Reliability and Viability of Potential Renewable Energy Sources	Electricity, Electronics, Computer Technology & Energy Issues
Smart Home Technologies Enabled by Smart Grid	Electricity, Electronics, Computer Technology & Energy Issues
Data Analysis Using Statistical Process Control: A Case for a Cold Rolled Coil	Management
Digitization and automation of global supply chains for risk mitigation.	Management
Teaching Process Simulations in Manufacturing and Technology Programs	Manufacturing
Trends in Materials Topics and Pedagogy	Manufacturing
Teaching Critical Reading and Responsiveness for the Mobile Age	Teaching Innovations (TI)
Teaching 101: Foundations of Successful Instruction	Teaching Innovations (TI)
2:15 PM – 3:00 PM	
Breaking Up Is Hard to Do: Leading through Unit Dissolution	Administration
A comparative analysis of faculty compensation between ATMAE, ABET, and AACSB accredited programs.	Administration
Predicting Concrete Mechanical Properties via Computational Technique Approach	Construction
Implementing a Student-Driven Solar Awareness Project	Construction
Using Mobile Devices in Online Education	Distance Learning

2:15 PM – 3:00 PM (Thursday, November 2)	
A Study to Determine the Pros and Cons of Effective Use of Respondus Lockdown Monitor	Distance Learning
Virtual commissioning for Industrial Automation	Electricity, Electronics, Computer Technology & Energy Issues
Design of a Hybrid Solar Photovoltaic and Thermal Unit to Analyze Weather Effects on Solar Cell Power Output	Electricity, Electronics, Computer Technology & Energy Issues
Performance Analysis for Time-of-Flight Ranging Sensor	Electricity, Electronics, Computer Technology & Energy Issues
Characterization of AuBe Ohmic Contact with the p-GaAs Base Used for Heterojunction Bipolar Transistors	Electricity, Electronics, Computer Technology & Energy Issues
Application of Statistical Process Control to a University Website	Management
A decision analysis of a six monthly distribution program for food grains in Punjab	Management
The Future of Human/Machine Interaction: Collaborative Robotics	Manufacturing
What manufacturing and service businesses can learn from the airline industry!	Manufacturing
Digitally Augmenting Curriculum Delivery	Teaching Innovations (TI)
Using strengths-based leadership in a senior capstone course	Teaching Innovations (TI)
3:30 PM – 4:15 PM	
In Case of Emergency: How Technology Programs Can Help Develop the Next Generation of Emergency Management Professionals	Administration
Does offering certifications assist in the recruitment of undergraduate majors?	Administration
Building Performance and Human Health: A Study On Breathable Building Envelope and Intelligent Air Distribution Systems	Construction
The Effect of Swine-Waste Biochar on the Flow and Water Absorption Characteristics of Cement Pastes	Construction
100% Online versus The Classroom: The Optimal Pedagogical Strategy as Demonstrated through Higher Statistically-Significant Grade Performance by Undergraduate and Graduate Students Studying University-Level Quality Systems Engineering	Distance Learning
Increasing Student Satisfaction in Online Courses	Distance Learning
Data Hiding Method in Digital Image Steganography	Electricity, Electronics, Computer Technology & Energy Issues
Optimization of a Solar Power Plant Using an Automated Control System	Electricity, Electronics, Computer Technology & Energy Issues
In-situ Integration of MEMS Switches to Realize Reconfigurable Multifunctional Antennas	Electricity, Electronics, Computer Technology & Energy Issues
A Microsoft Kinect-based Gesture System to Enhance 3D Visual Communication in Virtual Collaboration	Graphics
Discrete Event Simulation Curriculum Effectiveness	Manufacturing
Learn Lean Manufacturing and Six Sigma through Industry Supported Projects/Practical Curriculum	Manufacturing
Applying Traction/Friction to Prevent Injuries via Slips, Trips, and Falls: Practical and Sustainable Solutions	Safety
Developing and Testing an Authentic Safety Assessment	Safety
Successful USGBC LEED® Lab™ Implementation	Teaching Innovations (TI)
Developing Effective Visual Representation Schemes to Improve and Measure Student Skills in Circuit Analysis Education	Teaching Innovations (TI)
4:30 PM – 5:15 PM	
Funding and Finance Strategies for ATMAE Student Chapters	Administration
Putting Military Skills to Good Use: Veterans in STEM	Administration
Challenges and Lessons Learned for Smart City Development: A Guide to Success	Construction

4:30 PM – 5:15 PM (Thursday, November 2)	
Knowledge Management in Construction Industry: A path Towards Complete Integration	Construction
Recruiting Strategies for Online Programs	Distance Learning
Stakeholder reactions to using e-learning as an alternative to snow days	Distance Learning
Can application of a split protocol design improve Unsolicited Message transactions in the Distributed Network Protocol 3.0?	Electricity, Electronics, Computer Technology & Energy Issues
Teaching Finite State Machines (FSMs) as Part of a Programmable Logic Control (PLC) Course	Electricity, Electronics, Computer Technology & Energy Issues
Strategies to Convert a Face-to-Face Color Management Course to an Online Format based on Perceptions of Students	Graphics
Modeling and Improvement of Transmission	Graphics
Computer-aided Design and Drafting (CADD), Computer-aided Engineering (CAE) and Engineering – a perspective on the proper mix	Manufacturing
Best Practices in Sustainable Supply Chain Management	Manufacturing
Firefighter Fall Notification System: Design and Development	Safety
Pragmatic use of technology for tracking kidnapped victims in Nigeria	Safety
First-Year Mechatronic Experiences: Towards Predicting Student Motivation	Teaching Innovations (TI)
Constructing the Future of Tomorrow: The Effect of Communication Style on Team Performance	Teaching Innovations (TI)

Friday November 3rd:

Session (Each session is 22 ½ minutes and scheduled in 45 minute blocks)	Track
8:00 AM – 8:45 AM	
Curricula of ATMAE Accredited University Programs: Building a Composite	Administration
Building Our Workforce for Tomorrow: The application of reverse curricular mapping to align employment expectations to education and training in the manufacturing sector	Administration
Perception of Women Working in the Construction Industry	Construction
BIM and Wearable Technologies: The Future of Construction Safety Management	Construction
Online Program Recruiting Strategy Success in the Midwest	Distance Learning
Virtualization: Implementation and Growth, Policies and Management	Distance Learning
Building a 20/20 view of the network: Open-source tools for mapping the system and traffic flow	Electricity, Electronics, Computer Technology & Energy Issues
Harvesting Electromagnetic Radiation for Renewable Energy Use	Electricity, Electronics, Computer Technology & Energy Issues
Employers' Expectations of Graduates Technical & Managerial Competencies in the Digital Graphics & Print Media Industry: A Study of New England States Region	Graphics
Exploring the Benefits of Collaborative Design using Onshape: A Full-Cloud, 3D CAD That Runs on a Web Browser.	Graphics
Implementing 3D Printer to Produce Parts for Medical Applications	Manufacturing
Sustainability Issues in Additive Manufacturing	Manufacturing
Critical thinking and decision making integration into fluid power laboratory safety training	Safety
Industrial Safety Management: Hazard Identification and Risk Control	Safety
Automatic Identification Data Capture towards Robust Material Handling, a Key Learning Pedagogy for Warehousing Class	Teaching Innovations (TI)
A study to develop a four-week instructional workshop in Organizational Dynamics and a model for assessing and forecasting potential enrichment opportunities in technology leadership	Teaching Innovations (TI)
9:00 AM – 9:45 AM	
Project Managing Your Accreditation Process Successfully and Smoothly	Administration
Community College and 4-Year School Partnerships	Administration
Faculty Lead Student Competition: Designing and Building a Concrete Canoe	Construction
Maturing of MOOCs providing Technological Literacy in higher education	Distance Learning
Distance Learning Technologies and the Virtual Classroom	Distance Learning
A Low Cost Control System Laboratory for Engineering Management and Technology (ETM) Students	Electricity, Electronics, Computer Technology & Energy Issues
Using Device Level Ring Topology to Increase Network Reliability in Mission Critical Industrial Control Systems	Electricity, Electronics, Computer Technology & Energy Issues
Gamification: Increase student engagement by gamifying your classroom	Graphics
Augmented Reality in the Classroom: Development of a stationary bicycle with virtual environment for new learners	Graphics

9:00 AM – 9:45 AM (Friday, November 3)	
STUDY OF ALUMINUM OXIDE PARTICLES ON MILD STEEL BY HEAT TREATMENT PROCESS FOR ANTI CORROSION	Manufacturing
Learning Requirements for Manufacturing Organizations	Manufacturing
Predicting Elastic, Bulk, and Shear Modulus for Cement Clinkers under Varying Pressure Conditions.	Micro/Nanotechnology
Assessment of the Condition of Power-Take-Off Guarding Systems on Farm Machinery	Safety
Understanding human performance modes in occupational safety	Safety
Measurement and use of critical thinking in a fluid power course	Teaching Innovations (TI)
Integrated STEM Assessment Design: Challenges and Opportunities	Teaching Innovations (TI)
10:15 AM – 11:00 AM	
A comparative study of 2-year technology programs accredited by ATMAE and ETAC of ABET	Administration
Stronger together: How developing a joint ATMAE accreditation report is streamlining individual program operations	Administration
Preparing Educators for the Online Platform	Distance Learning
Three-dimensional RGB-D Camera Sensor Usage for Industrial Robotics Applications	Electricity, Electronics, Computer Technology & Energy Issues
Satellite Tracking Control Implemented in Matlab®	Electricity, Electronics, Computer Technology & Energy Issues
UX Design: A Sample Lesson Plan for the Graphics Curriculum	Graphics
Color Image Quality Comparison of Electro-Photographic vs. Inkjet Printing processes in a Color Managed Digital Printing Workflow (CMDPW)	Graphics
Sustainable Machining of Titanium alloys	Manufacturing
Future Workforce Development: Transitioning from 3D Printing [3DP] to Additive Manufacturing [AM]	Manufacturing
RepRap 2.0: Moving from Filament to Resin	Micro/Nanotechnology
Analysis of Blood Flow in an Aorta when cholesterol or fat content is present on the inside walls	Micro/Nanotechnology
The Prediction and Classification of Occupational Incidents Severity Using Workers' Compensation Data	Safety
Air Quality and Noise Assessment in Confinement Livestock Facilities	Safety
The Preceptorial: Rigorous Small Group Educational Experiences Using Industry Partners	Teaching Innovations (TI)
Addressing the Needs of Non-Math Majors in Math Intensive Courses	Teaching Innovations (TI)
11:15 AM – 12:00 PM	
Academic Outreach and Student Recruitment Programs to Attract Youth to STEM Programs through Mobile Renewable Energy Education	Administration
A Marketing/Recruiting Strategy for your STEM Program	Administration
Accelerating Tomorrow's Robotic Applications through visualization: Experiential learning using Visionary Render	Electricity, Electronics, Computer Technology & Energy Issues
Etcher Z-Axis Adjustment	Electricity, Electronics, Computer Technology & Energy Issues
Introduce Sustainability from Theory to Application through Project and Practicum Based Learning	Manufacturing
Nano-Scale Level Simulation Model for Quasi-Static Laboratory Compression Test	Micro/Nanotechnology

11:15 AM – 12:00 PM (Friday, November 3)	
Bulk Mechanically Alloyed Oxide Dispersed Copper for Solid-State Foaming	Micro/Nanotechnology
Potential Health Impact of Radiofrequency Radiation on Humans	Safety
Constructing the Open Road: Teaching with IoT and Ambient Internet Technologies	Teaching Innovations (TI)
Trends for getting Technology Teachers in the K-12 classrooms	Teaching Innovations (TI)