MONDAY, SEPTEMBER 13

SCHEDULE-AT-A-GLANCE

TECHNOLOGY	8:00 AM – 9:30 AM	10:30 AM – 12:00 PM	1:00 PM – 2:30 PM	3:30 PM – 5:00 PM
3D/ADDITIVE MANUFACTURING	**F10:** Fundamentals of AM (7 Processes, Hybrid, AM Enabled) Room S405B	**NEW! F11:** The Hidden Challenges: Is Additive Manufacturing for You? Room S405B	**NEW! F12:** Managing the AM Supply Chain Room S405B	**NEW! F13:** Ask the Panel of Additive Manufacturing Experts (BONUS SESSION) Room S405B
AUTOMATION/ ROBOTICS	**NEW! F20:** Automation Adoption: What You Need to Know & Why Room S405A	**NEW! F21:** Five Steps to Creating Operational Excellence in Robotic Joining Room S405A	**WS3:** Getting Started with Robotics: A Journey to the World of Robotics & Autonomous Systems Workshop (1:00 PM - 4:00 PM) Room S405A	
CUTTING			**NEW! F32:** The Most Versatile Machine Tool & 7 Habits of Highly-Effective Nesting Software Room S401D	**F33:** Comparative Cutting Room S401D
FINISHING			**C12:** I Want to Ecoat, Now What? Room E353A	
			C22: Powder Coating Basics - A Fundamental Understanding of a Powder Coating System Room E353B	
FORMING & FABRICATING	**F40:** Press Brake for Engineers Room S403B	**F41:** Tube Bending: Best Practices Room S403B	**F42:** Coil Processing: Blanking, Leveling, and Deburring Room S403B	**F43:** Roll Forming Basics Room S403B
JOB SHOP	**NEW! WS7:** Business Owners Guide to Protect, Value and Plan for the Future Workshop (8:00 AM - 12:15 PM) Room S403A		**NEW! F72:** Industrial Ventilation & Air Filtration: Understanding Options in System Design Room S403A	**F73:** Estimating Software to Manage the Job Shop Room S403A
LASER		**NEW! F31:** How Much Laser Power Is Right for Your Business? Room S401D		
LEAN	**NEW! F50:** Lean Principle: Blue-Collar Kaizen: Leading Lean & Lean Teams Room S402A	**F51:** Lean Principle: Getting Started with Your Lean Journey Room S402A		**NEW! F53:** Lean Tools: Production Floor Communication to Strengthen Employee Engagement & Standard Work Room S402A
MANAGEMENT	**F60:** Breaking Boundaries for Operational Excellence Room S404BC	**F61:** Business Builders: Make Business Development a Competitive Advantage Room S404BC	**NEW! F62:** Creating and Sustaining Cultures of Innovation in Manufacturing Room S404BC	**F63:** Strategies for Leading & Managing a Change Initiative Room S404BC
MARKETING & SALES	**NEW! WS8:** Market and Build Your Fabrication Story Workshop (8:00 AM - 12:00 PM) Room S402B		**NEW! F82:** From Funnel to Flywheel: How to Maximize Your Marketing for Sales Room S402B	**NEW! F83:** Learn How to Optimize Your Sales Team's Funnel & Obtain Visibility into Your Sales Forecast Room S402B
SMART MANUFACTURING	**NEW! F90:** Meeting Changing Buyer Expectations Through Digital Transformation Room S404D	**NEW! F91:** IIoT to Improve Manufacturing Process Room S404D	**NEW! F92:** Digital Tools & Technology to Mitigate Project Risk Room S404D	**F93:** Leveraging A.I. In Industrial Manufacturing Room S404D
STAMPING		**S11:** Understanding Servo Metal Stamping Presses, Proper Usage, Troubleshooting and Maintenance Room S404A	**NEW! S12:** Heat Treating Fundamentals, Vacuum Heat Treating and Applications Room S404A	**NEW! S13:** 5 Steps to Creating Operational Excellence in the Press Shop Room S401BC
WORKFORCE DEVELOPMENT	**NEW! F110:** Winning the Workplace Challenge: Getting Along and Getting Things Done Room S401BC	**NEW! F111:** Tutorial on How to Develop or Enhance Virtual Presentation & Internships Room S401BC	**NEW! F112:** Three Key Areas that are Essential to Become a Better Leader Room S401BC	**F113:** Read (Hidden) Emotions - Know What Others are Thinking and Feeling Room S401BC

WELDING	**W1:** How to Create and Write a Quality Manual for the ATF Program - Room N230AB		1:00 PM - 5:00 PM
	W2: Overview of Welding Inspection - Room N231		1:00 PM - 5:00 PM

Schedule subject to change. Detailed Conference Program session descriptions, speakers, pricing, room locations and more can be found at **fabtechexpo.com/conference**.

■ Basic   ■ Intermediate   ■ Advanced

TUESDAY, SEPTEMBER 14

SCHEDULE-AT-A-GLANCE

TECHNOLOGY	8:00 AM – 9:30 AM	10:30 AM – 12:00 PM	1:00 PM – 2:30 PM	3:30 PM – 5:00 PM
3D/ADDITIVE MANUFACTURING	**NEW!** ■ **WS1:** Navigating Technology and Design Considerations in Additive Manufacturing Workshop (8:00 AM - 12:00 PM) **Room S405B**			
AUTOMATION/ ROBOTICS	**NEW!** ■ **F24:** Position Your Business for Future Growth & Speed Up the Workforce with Automation Process **Room S405A**	**NEW!** ■ **F25:** Do You Know How Much Money You Are Losing Due to Equipment Downtime? **Room S405A**	**NEW!** ■ **WS4:** An Introduction to the World of AGVs: Identifying the Considerations for a Successful Application Workshop (1:00 PM - 5:00 PM) **Room S405A**	
CUTTING		**NEW!** ■ **F35:** Advancements in Cutting Automation **Room S401D**		
FINISHING	**NEW!** ■ **C14:** Automation - Controlling the Process **Room E353A**	**NEW!** ■ **C15:** Busting the Myths: What Really Matters in Metal Cleaning **Room E353A**	**NEW!** ■ **C16:** Improving System Performance **Room E353A**	
	■ **C24:** I Want to Powder Coat, Now What? **Room E353B**	■ **C25:** Optimizing Your Powder Coating Operations **Room E353B**	**NEW!** ■ **C26:** Operating Liquid Systems Efficiently **Room E353B**	
	NEW! ■ **C34:** Pretreatment - Get The Latest and Greatest! **Room E353C**	■ **C35:** See It, Touch It, Fix It - Identifying and Solving Finishing Defects **Room E353C**	**NEW!** ■ **C36:** Solutions for Metal Cleaning Issues **Room E353C**	
FORMING & FABRICATING	■ **F44:** Roll Forming: In-line Punching, Cutoff Dies, and Press Tonnage **Room S403B**	■ **F45:** Machine Safeguarding **Room S403B**	■ **F46:** Roll Forming: Justification and Welding Profiles **Room S403B**	**NEW!** ■ **F47:** Addressing Modern Day Metals in the Roll Forming Process **Room S403B**
JOB SHOP	**NEW!** ■ **F74:** Improving Production Outcomes Through Cross-Crew Synthesis **Room S403A**	**NEW!** ■ **F75:** Made to Order Tooling & Production Scheduling **Room S403A**	■ **F76:** Are Scheduling Problems Really Symptoms: "A Quick Fix for Job Shops" **Room S403A**	**NEW!** ■ **F77:** Transforming a Tired Manufacturing Company Back to an Industry Leader **Room S403A**
LASER	■ **F34:** Laser Ecosystems for Fiber Laser Cutting & Surface Cleaning **Room S401D**		**NEW!** ■ **F36:** Advantages of Laser Welding Applications **Room S401D**	**NEW!** ■ **F37:** Industrial Laser and Cutting Applications & Solutions **Room S401D**
LEAN	**NEW!** ■ **WS6:** Lean Overview – Principles & Practices Hands-On Learning Workshop (8:00 AM - 12:00 PM) **Room S402A**		■ **F56:** Lean Principle: Value Stream Mapping: Understanding the Whole from Sales to Shop to Customer **Room S402A**	■ **F57:** Lean Principle: A3 Thinking; Developing People & Solving Problems **Room S402A**
MANAGEMENT	**NEW!** ■ **F64:** Gen Z Is Coming - What You Need to Know for Your Business **Room S404BC**	**NEW!** ■ **F65:** That Was Fun! Where Are We in 2021? **Room S404BC**		**NEW!** ■ **F67:** Strategies To Create a Workplace Culture That Works! **Room S404BC**
MARKETING & SALES	**NEW!** ■ **F84:** Winning With Social Media & Website Connections **Room S402B**	**NEW!** ■ **F85:** Ensuring A Successful Product Launch **Room S402B**	**NEW!** ■ **F86:** Building an Inside (Outbound) Sales Team **Room S402B**	**NEW!** ■ **F87:** Client Engagement: Compete on Awesome **Room S402B**
SMART MANUFACTURING	**NEW!** ■ **F94:** Key Steps to Jump Start Your Smart Manufacturing Journey **Room S404D**	**NEW!** ■ **F95:** The Manufacturers Data-Driven Playbook **Room S404D**	**NEW!** ■ **WS10:** Digital Transformation Models for Industry 4.0 Workshop (1:00 PM - 4:00 PM) **Room S404D**	
STAMPING		■ **S15:** Processing Parts for Progressive Dies - Evaluating Strip Layouts **Room S404A**	■ **S16:** Processing Parts for Progressive Dies - Engineering Principles and Design Guidelines **Room S404A**	■ **S17:** Automatic In-Die Part Quality Monitoring & Tool Adjustments **Room S404A**
WORKFORCE DEVELOPMENT	**NEW!** ■ **F114:** Blue-Collar Leadership® & Culture: The 5 Components for Building High-Performance Teams **Room S401BC**	**NEW!** ■ **F115:** The Art of Assertive Communication **Room S401BC**	■ **F116:** How to Attract and Keep the Right Talent **Room S401BC**	**NEW!** ■ **F117:** Give Your Employees C.R.A.P...The Success Formula for Building Employee Loyalty **Room S401BC**

WELDING		
	W3: AWS/Weld-Ed Conference - Project Based Welding Curriculum - **Room N228**	8:00 AM - 4:00 PM
	W5: Advanced NDT Methods and Your Future as a CWI - **Room N230AB**	8:00 AM - 11:00 AM
	W6: Metallurgy (Intermediate) - **Room N230AB**	1:00 PM - 5:00 PM

Schedule subject to change. Detailed Conference Program session descriptions, speakers, pricing, room locations and more can be found at **fabtechexpo.com/conference**.

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WEDNESDAY, SEPTEMBER 15 — SCHEDULE-AT-A-GLANCE

CONFERENCE PROGRAM INFORMATION

TECHNOLOGY	8:00 AM – 9:30 AM	10:30 AM – 12:00 PM	1:00 PM – 2:30 PM	3:30 PM – 5:00 PM
3D/ADDITIVE MANUFACTURING	NEW! ■ WS2: Pre and Post Processing of Additive Parts Workshop (8:00 AM - 12:00 PM) Room S405B		■ F101: Continuous Improvement for Additive Manufacturing Initiatives Room S405B	NEW! ■ F102: Materials and Joining for Plastic & Metal AM Technology Room S405B
AUTOMATION/ ROBOTICS	NEW! ■ F28: Understanding & Automating Your Data to Stay Competitive Room S405A	NEW! ■ F29: Automating Press Brake & Bending Systems Room S405A	■ F201: What You Need to Understand Before Thinking About Running Your Shop Lights-Out Room S405A	NEW! ■ F202: Automation for Metal & Finishing Processes Room S405A
CUTTING	NEW! ■ F38: Advancements in 3D Plasma and Waterjet Cutting Room S401D	■ F39: Getting the Most Out of Your Waterjet Room S401D		
FINISHING	NEW! ■ C18: Robotic Finishing for General Industry Room E353A	NEW! ■ C19: Finishing's Future Through Automation Room E353A		
	NEW! ■ C28: Finishing Systems - Design and Project Management Room E353B	■ C29: Automating Your Powder Coating Line Room E353B	NEW! ■ C201: Mastering Surface Preparation Room E353B	
	NEW! ■ C38: Advancements in Powder Coating Materials Room E353C	NEW! ■ C39: Technology Update - Heat Sensitive Substrates Room E353C	■ C301: Preventative Maintenance and Troubleshooting Your Powder Coating Operations Room E353C	
FORMING & FABRICATING	■ F48: Tube Bending and Hydroforming Room S403B	■ F49: Roll Forming: Advanced Techniques and Design Room S403B	■ F401: Coil Processing: Slitting Thin Materials, Leveling, & Deburring Room S403B	
JOB SHOP	■ F78: Your Family Business: Everything You Need to Know Room S403A	NEW! ■ F79: Revolutionizing the Manufacturing Industry with XR Technology Room S403A	■ F701: Innovative Manufacturers: To Patent or Not to Patent? Room S403A	
LASER			NEW! ■ WS5: Laser Fabrication: Welding, Cutting & Additive Workshop (1:00 PM - 5:00 PM) Room S401D	
LEAN	■ F58: Lean Tools: Go to Gemba Room S402A	NEW! ■ F59: Lean Tools: Hoshin Kanri Room S402A	NEW! ■ F501: Lean Tools: Mastering Mixed Model Flow for a High-Performance Operation Room S402A	NEW! ■ F502: Lean Principle: Long-Term & Four System View of Lean for Manufacturing Success Room S402A
MANAGEMENT	NEW! ■ F68: How to Build a Better Supply Chain for your Business Room S404BC	NEW! ■ F69: Thriving Under Pressure: Revenue Growth In a New Business Paradigm Room S404BC	NEW! ■ F601: Markets & Energy Incentives for Manufacturing Room S404BC	■ F602: Brainstorming & Problem Solving Tools for Leaders Room S404BC
MARKETING & SALES	NEW! ■ F88: Creating an Inbound Marketing Action Plan for Manufacturers Who Are Prioritizing Online Lead Generation Room S402B	NEW! ■ F89: How Industrial and Manufacturing Companies Create Predictable Revenue Growth Room S402B	NEW! ■ WS9: Essential Sales Strategies for Manufacturers in 2021 and Beyond – Workshop (1:00 PM - 5:00 PM) Room S402B	
SMART MANUFACTURING	NEW! ■ WS11: Smart Manufacturing Bootcamp (8:00 AM - 5:00 PM) Room S404D			
STAMPING	■ S18: Deep Drawing Cylindrical Shells: Tooling Principles and Design Guidelines Room S404A	■ S19: Deep Drawing Rectangular Box Shells: Tooling Principles and Design Guidelines Room S404A	NEW! ■ S101: Reducing Cost and Risk to Timing Associated with Tool Buy-Off Room S404A	■ S102: Evaluating Your Lubricants for Performance and Safety Room S404A
WORKFORCE DEVELOPMENT	NEW! ■ WS12: Leadership Skills & Development Workshop (8:00 AM - 12:30 PM) Room S401BC		NEW! ■ F210: Diversity, Equity, and Inclusion: Future-Proofing Your Workforce Room S401BC	■ F211: Why You Can't Get Your People Motivated & What To Do About It Room S401BC

WELDING	W7: Additive/ASME - Room N230AB	8:00 AM - 11:00 AM
	W8: Metallurgy (Advance) - Room N230AB	1:00 PM - 5:00 PM

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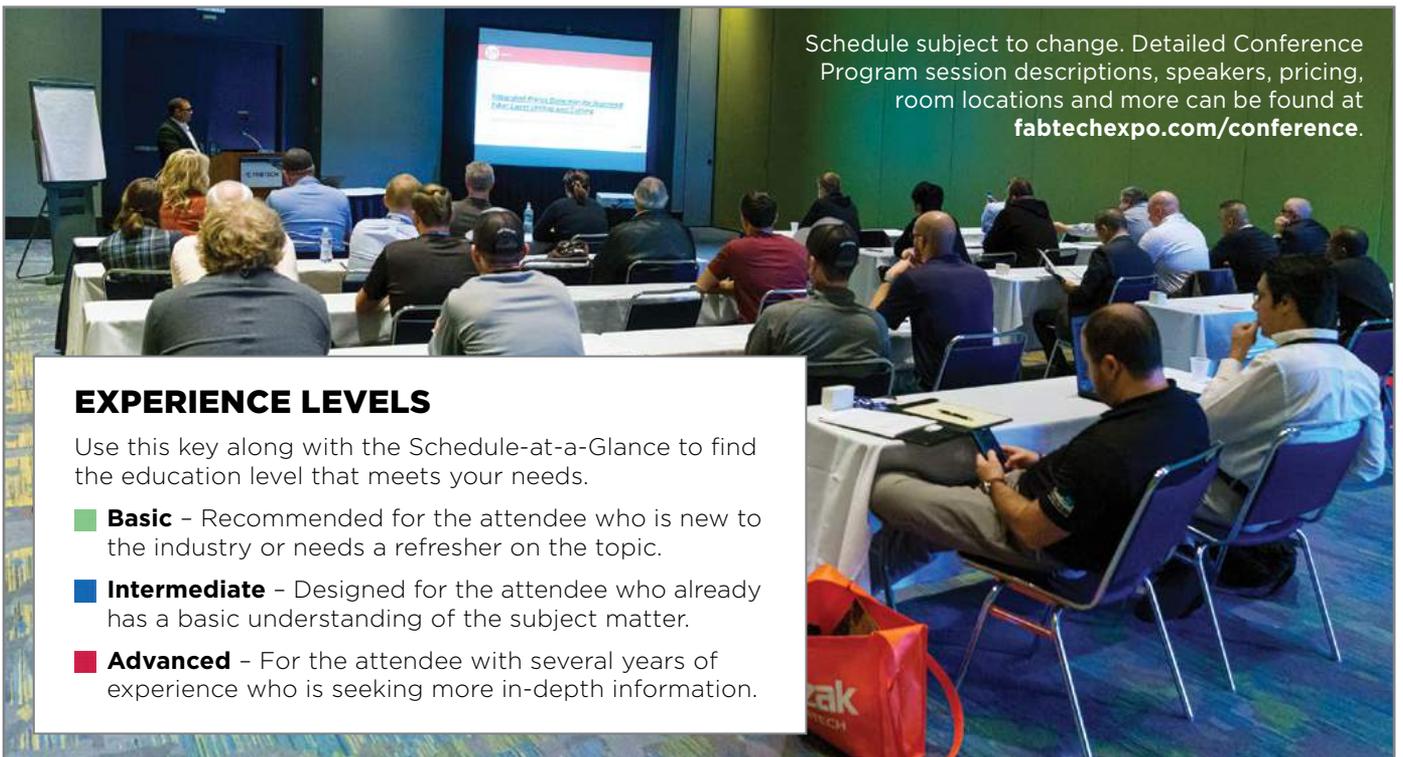
■ = Basic ■ = Intermediate ■ = Advanced

THURSDAY, SEPTEMBER 16 SCHEDULE-AT-A-GLANCE

TECHNOLOGY	8:00 AM – 9:30 AM	10:30 AM – 12:00 PM	1:00 PM – 2:30 PM	3:30 PM – 5:00 PM
AUTOMATION/ ROBOTICS	**NEW!** ■ **F203:** Optimize Your Automation Joining Process **Room S405A**			
FINISHING				
FORMING & FABRICATING				
SMART MANUFACTURING	**NEW!** ■ **F903:** The Promise of Industry 4.0 & Lean Management **Room S404D**	**NEW!** ■ **F904:** Driving Change with Your Data & Implementing an Industry 4.0 Strategy **Room S404D**		

WELDING SESSIONS	**W9:** Weld Cracking - **Room N230AB**			8:00 AM - 11:00 AM
	W10: ASME Codes and Standards Update - **Room N231**			8:00 AM - 11:00 AM

Schedule subject to change. Detailed Conference Program session descriptions, speakers, pricing, room locations and more can be found at **fabtechexpo.com/conference**.
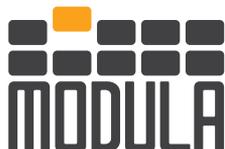
EXPERIENCE LEVELS

Use this key along with the Schedule-at-a-Glance to find the education level that meets your needs.

■ **Basic** – Recommended for the attendee who is new to the industry or needs a refresher on the topic.

■ **Intermediate** – Designed for the attendee who already has a basic understanding of the subject matter.

■ **Advanced** – For the attendee with several years of experience who is seeking more in-depth information.

CONFERENCE TRACK SPONSORS:

AUTOMATION/ROBOTICS

MODULA

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It's all about the PART

SMART MANUFACTURING

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