

# Manufacturing Accelerator Program (MAP) Curriculum

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## Overall Program Learning Objectives

- Equip manufacturing SMBs with the knowledge and tools to...
  - o Develop and implement a growth-oriented business strategy
  - o Enhance operational efficiency and technology integration
  - o Strengthen leadership and organizational capabilities
  - o Secure capital for expansion

## Module 1: Strategic Growth and Market Positioning

### Module Learning Objectives

- Understand key frameworks to evaluate growth strategies as a manufacturing SMB
- Identify strengths, weaknesses, opportunities, and threats in your business to improve decision-making

### Class #1: Welcome and Orientation

- Format: Interactive lecture
- Topics:
  - o Manufacturing growth strategies and how to evaluate growth options
  - o Key frameworks that manufacturing SMBs can use to analyze an existing business and determine key drivers of cash flow, value, and impact
  - o Key issues facing manufacturing SMBs as they identify opportunities and threats to their current strategic position and strengths and weaknesses in their ability to execute their strategy
  - o Emerging industries and their impact on the manufacturing space
- Peer working group breakout session

### Class #2: Strategy Fundamentals

- Format: Facilitated discussion
- Facilitated discussion with David Yanez, Founder and CEO of Andonix and Co-Founder of PTI QCS, focusing on his entrepreneurial journey and the strategies he implemented to grow his companies and stay at the industry's cutting edge.
- Peer working group breakout session

## Module 2: Operational Excellence and Technology

### Module Learning Objectives

- Learn how to apply lean manufacturing principles to improve efficiency
- Identify key trends in supply chain management and sustainability
- Evaluate emerging technologies and their impact on operational efficiency

### Class #3: Operational Excellence and Technology

- Format: Interactive lecture
- Topics:
  - o Fundamentals of Operational Excellence and Technology
  - o Lean manufacturing principles and techniques
  - o Quality control and risk management

### Class #4: AI in Manufacturing

- Format: Interactive lecture and Panel

- Learn how to use AI in manufacturing and its specific use cases, including:
  - o Technology (and artificial intelligence) on the factory floor
  - o Emerging manufacturing systems (e.g. automation, AI, 3D printing, etc.)
  - o Cybersecurity

## Module 3: Financing Growth

### Module Learning Objectives

- Learn how to analyze your financials and develop strong, scalable financial processes
- Understand what lenders and investors look for and how to position your business for financing

### Class #5: Financing Fundamentals

- Format: Interactive lecture
- Topics:
  - o How to conduct a financial analysis of the business and its growth opportunities
  - o How to develop strong, sustainable, and scalable financial processes and procedures (income statements, cash flow statements, budgeting, etc.)
  - o Financial forecasting tools and how to manage uncertainties in assumptions and develop risk management procedures
  - o Financing options

### Class #6: Capital Access

- Format: Interactive Lecture and Panel
- Session featuring an interactive lecture and a panel with lenders and capital providers focused on how a manufacturing company can effectively position itself for capital and evaluate what type(s) of capital are optimal for their needs.

## Module 4: Aligning Strategy, Sales, and Leadership

### Module Learning Objectives

- Discover methods for identifying high-value customers and expanding into new markets
- Learn how to structure your organization to effectively execute your business strategy

### Class #7: Identifying and Selling to Customers

- Format: Interactive lecture
- Topics:
  - o Key frameworks that manufacturing SMBs can use to analyze their current markets and identify high value customers in each market
  - o How to effectively assess current market potential
  - o How to identify high value customers as you prepare to enter new markets or deliver new product offerings
  - o Tools that manufacturing SMBs can leverage for strategic decision-making (e.g. databases like Dun & Bradstreet)
- Peer working group breakout session #3

### Class #8: Fundamentals of Leadership and Organization Design

- Format: Lecture
- Topics:

- o Key strategies manufacturing SMBs can implement to ensure their organizational structure is optimized to execute strategy and deliver value
  - o How to evaluate a leadership team and the role each person plays in driving the business' strategy
- Peer working group breakout session #4

### Class #9: Leveraging Resources and Certifications

- Format: Interactive lecture
- Topics:
  - o Diversity certifications and how to leverage them for growth
  - o Technical and product certifications relevant to manufacturing SMBs
  - o Local and national resources that manufacturing SMBs can leverage
  - o The importance of building Environmental, Social, and Governance (ESG) considerations into your business' strategy and operations, including holding suppliers accountable
- Peer working group breakout session #6

## Module 5: Scaling Your Business

### Module Learning Objectives

- Understand key considerations for scaling and expanding the business effectively
- Learn about strategies to leverage certifications and strategic partnerships for growth

### Class #10: Nuts and Bolts of Building a Scalable Business

- Format: Interactive Lecture
- A nuts-and-bolts presentation with manufacturing leaders focused on the building blocks of a scalable business, including:
  - o Location choice: How to evaluate locations holistically as you expand, considering factors such as real estate and workforce availability
  - o Technology/AI: Leveraging technology and AI tools to optimize operations
  - o Other systems needed to secure and maintain growth (e.g. accounting, HR, etc.)
- Peer working group breakout session #5

### Class #11: Workforce Development and HR Strategies

- Format: Interactive lecture and Panel
- Topics:
  - o Best practices and strategies to effectively hire and recruit staff, especially in tight labor markets
  - o Employee training (including how to integrate AI/technology in training as appropriate)
  - o Engagement strategies (Recruit, Retain, Reward)

### Class #12: Creating Partnership Ecosystems

- Format: Keynote Presentation and Facilitated Discussion
- Facilitated discussion with Keynote Speaker.