

Empowering Canada's Workforce for Sustainable **Manufacturing**

The Advanced Manufacturing Engineers Upskilling Program (AME-UP) is an eight-week intensive career accelerator designed to equip participants with the cutting-edge skills needed to thrive in the cleantech industry.

Whether a newcomer or a seasoned engineer looking to transition into this high-demand field, **AME-UP is the gateway to success.**



Specifics

→ **Cohort Size:**
60+ participants

→ **Delivery:**
Virtual, once per week for eight weeks

→ **Session Length:**
Each class is 90 mins

→ **Participant Requirements:**

- ✓ Participants have at least 3 years of experience in Mechanical Engineering, Additive Engineering, Chemical Engineering, and Software Development.
- ✓ Participant must be legally eligible to work in Canada, **and** work permit holders should have at least one year on the permit by the start of the program.

What's Included

→ **Eight-Week Comprehensive Program:**
Intensive technical training combined with real-world experience in cleantech.

→ **Career Support & Job Placement:**
The program's goal is to help 80% of participants secure jobs within six months of completion.

→ **Work-Integrated Learning (WIL):**
Engage with top employers in project-based learning to solve real industry challenges.

→ **Networking Opportunities:**
Build connections with key industry players, mentors, and peers who are driving the future of cleantech.

Learning Outcomes

1 **Develop** an understanding of how to create a technology development roadmap and formulate an intellectual property (IP) strategy.

2 **Describe** key steps for technology commercialization.

3 **Identify** essential resources for development.

4 **Enhance** sales communication skills.

5 **Gain** confidence in career development and job search.

Program Format

Meet Once per Week Virtually:

- 20–30 minute live presentation from a subject-matter expert
- In-depth discussion with fellow participants and session moderators
- Introduction of upcoming materials and exercise examples

Online Training:

- eLearning readings and videos
- Based on the material, participants have one or two optional exercises
- Participants will meet weekly with Executives in Residence (EIRs) to discuss progress and receive feedback on exercises
- Exercises are submitted online and reviewed by either the cohort or EIRs

Program Format

EIR Involvement

- Weekly Feedback Sessions: EIRs will join meetings to provide tailored feedback to participants.
- Program Feedback: EIRs will communicate with course moderators on participant engagement, work quality, and areas needing additional instruction.
- Optional Office Hours: EIRs and External Guests will provide additional time for Q&A and specialized workshops to help participants with job placements

Graduation Criteria

Participation Requirements:

- ✓ Completion of the 8 weeks of the online program and WIL projects is mandatory to qualify for getting paid the \$3000 stipend and graduate.
- ✓ Employer endorsement is required for participation in the program's WIL component
- ✓ Moderators must also endorse participation in order to graduate and receive the stipend amount.
- ✓ Attend all sessions during the eight weeks of the program.
- ✓ Submit a final report to Foresight and employers outlining their involvement in WIL projects.

Technical Workshops

During the program, industry experts will conduct workshops covering various topics. These workshops provide:

- **In-Depth Learning:** Focused instruction on key industry challenges and solutions.
- **Networking Opportunities:** Direct interaction with industry experts, allowing participants to expand their professional connections.

AME-UP Curriculum Content Overview

	Live Webinar (Thursday)	Online eLearning (On-Demand)	Exercises (Self-Paced)	Host
Week 1	<ul style="list-style-type: none"> • Program Introductions • Tech dev intro • TRL Levels • Group Discussion (Breakout rooms) 	<ul style="list-style-type: none"> • Program and Course Expectations • Intro to Tech Dev Roadmaps 	Review Course Outlines	Foresight + EIRs
Week 2	<ul style="list-style-type: none"> • Management Transitions: Understanding the Engineering Manager, Product Development Manager, and Manager of Projects roles • Group Discussion (Breakout rooms) 	<ul style="list-style-type: none"> • CTO Role • TRL Levels 	TRL Level Analysis	Foresight + Exergy
Week 3	<ul style="list-style-type: none"> • Product Development Methodologies • Discussion on Customer Experience 	<ul style="list-style-type: none"> • Product Development Methodologies • Core Planning • Customer Experience 	Road Map	Foresight + EIRs
Week 4	<ul style="list-style-type: none"> • Intro to IP • Path to commercialization 	<ul style="list-style-type: none"> • IP • Third-Party Vendors 	Intellectual Property	Foresight + Innovation Asset Collective
Week 5	<ul style="list-style-type: none"> • Intro to Resourcing and Budgeting 	<ul style="list-style-type: none"> • Scale-Up • Design Creep • Detailed Road Map 	Road Map Details	Foresight + EIRs
Week 6	<ul style="list-style-type: none"> • Tracing the Evolution • Modern Landscape Overview • Navigating the Ecosystem 	<ul style="list-style-type: none"> • Budgeting • Team Building • Contracts 	Resources Budgeting	Foresight + RXN Hub
Week 7	<ul style="list-style-type: none"> • Sales & Marketing Essentials • Understanding Your Employer & Customers 	<ul style="list-style-type: none"> • Value Proposition For Your Employer 	Technical Sales Presentation	Foresight + EIRs
Week 8	<ul style="list-style-type: none"> • Persuasive Communication Techniques 	<ul style="list-style-type: none"> • Working with Employers 	Final WIL Deliverables	Foresight + Rhum

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