



ICTC's Industrial AI & Innovation Bootcamps

Program Overview for Employers

ICTC's AI Bootcamps are an eight-week program where employers and their post-secondary student hire(s) work together to develop industry-relevant AI skills that address real business needs and opportunities. Powered by ICTC's evidence-driven Labour Market Intelligence (LMI) and designed for Canada's priority economic sectors — including **aerospace & defence, manufacturing, and natural resources (including critical minerals)** — the bootcamps emphasize real industrial deployment and successful implementation. A **General stream** is also available for employers that do not fall under a specific sector.



Employers can register for the Bootcamps [here](#).

Employers can also apply for up to \$5,000 in wage subsidy support for their student hires [here](#).

Bootcamp Structure: Weeks 1-4

WEEK 1 Learn

Build shared AI fluency and receive emerging findings of how AI is transforming your sector internationally.

SHARED SESSIONS

- **Program Kickoff + AI Foundations:** Refresher on how AI works, framing business problems relevant for AI solutions, applying human-in-the-loop judgment
- **Sector Foundations & Case Studies:** Sector overview, real transformations, seeded opportunity areas

STUDENT TRACK

- **Async:** Tool exploration sandbox for applying various AI tools to real workplace tasks
- **Async:** Prompt engineering primer

EMPLOYER TRACK

- **Live:** How to lead transformational AI initiatives
- **Async:** Risk and AI governance primer

TEAM TAKEAWAY

Review your organization's strategic direction, research transformation impacting your sector and world-leader success stories. Select areas with the highest transformation potential and clearest fit for your organization.

WEEK 2 Explore

Explore opportunity areas, surface specific initiatives, assess ROI, and prioritize a shortlist for your project.

SHARED SESSIONS

- **Where AI Creates Value:** From productivity to growth, with sector examples of enabling growth
- **Evaluating Cost & ROI:** Estimating value, impact, build/partner/buy approaches, and prioritizing initiatives

STUDENT TRACK

- **Async:** How to become an AI champion
- **Async:** Review templates for discovery interviews

EMPLOYER TRACK

- **Async:** Surface AI vendors and partners in your sector for build/partner/buy decisions

TEAM TAKEAWAY

Conduct discovery interviews with colleagues to identify specific initiatives for your project pilot and prioritize by ROI, feasibility, and strategic alignment.

WEEK 3 Scope

Pick the single best-fit initiative and scope it into a buildable project.

SHARED SESSIONS

- **Project Scoping Framework:** Define success criteria, right-size based on what you have, and match technology to your problem
- **Data Foundations:** How to inventory, assess, and prepare your data
- **Vendor Evaluation, Data Security & Privacy:** When to build, partner, or buy

STUDENT TRACK

- **Async:** Review structured template for validation interviews
- **Async:** Review template for scoping your project

EMPLOYER TRACK

- **Async:** How to ensure data privacy, security, and regulatory compliance for your sector

TEAM TAKEAWAY

Validate your chosen project with internal experts and then inventory and assess the data needed.

WEEK 4 Build

Start building with continuous validation and responsible-use practices.

SHARED SESSIONS

- **Hands-On Building Session:** Applying incremental development, judging AI outputs, keeping human-in-the-loop
- **Optional:** Common build patterns across your sector with concrete case examples & lessons learned

STUDENT TRACK

- **Async:** Review quickstart approaches for new AI tools
- **Async:** Advanced prompt engineering patterns

EMPLOYER TRACK

- **Async:** Internal stakeholder communication templates

TEAM TAKEAWAY

Build the first prototype together with students leading technical implementation and employers leading workflow integration and internal conversations.

Bootcamp Structure: Weeks 5-8

WEEK 5 Validate

Validate early builds with peers and internal stakeholders, then iterate.

SHARED SESSIONS

- **Mid-Sprint Peer Show & Tell:** Share work-in-progress demos with your peers
- **Change Management for AI Implementation:** Preparing internal colleagues and building buy-in

STUDENT TRACK

- **Async:** Iteration patterns and build-cycle frameworks
- **Async:** How to structure your internal project demo

EMPLOYER TRACK

- **Async:** How to navigate internal resistance and skeptical stakeholders

TEAM TAKEAWAY

Convene an internal audience for a first demo, capture feedback and iterate toward v2.

WEEK 6 Refine

Reach a working MVP with documentation built for handoff.

SHARED SESSIONS

- **From Prototype to Core Business Asset:** How to document, ensure maintainability, and prototype-to-pilot planning

STUDENT TRACK

- **Async:** Build documentation templates

EMPLOYER TRACK

- **Async:** Internal champion frameworks

TEAM TAKEAWAY

Continue building and refining while preparing initial documentation, discussing project integration, sustainability, and scaling, including potential business unit owners.

WEEK 7 Land

Package the build, draft the roadmap beyond the prototype, and make the case to leadership.

SHARED SESSIONS

- **Communicating AI to Non-Technical Audiences:** How to use plain-language framing, handle objections, and provide a business-value narrative

STUDENT TRACK

- **Async:** Documenting learnings and the project within their portfolios

EMPLOYER TRACK

- **Async:** Internal announcement and leadership briefing guide

TEAM TAKEAWAY

Almost there! Think about the project sustainability and transformation roadmap, including ownership, maintenance, handoff, and next steps. Teams are strongly encouraged to present the build to their own organization.

WEEK 8 Scale

Reflect on learnings and build a 90-day plan with organizational buy-in.

SHARED SESSIONS

- **Retrospective Workshop:** What worked, ongoing fluency, and telling the story internally
- **Rollout Planning & Sustaining AI Capability:** Developing a 90-day framework, scaling adoption, funding the next phase, and fostering a culture of experimentation

STUDENT TRACK

- **Async:** Continuing as an AI champion

EMPLOYER TRACK

- **Async:** Building wider team AI fluency & capabilities
- **Async:** Guide to other potential funding sources for AI adoption projects

TEAM TAKEAWAY

Finalize the 90-day implementation plan and brief senior decision-makers on results and planned next steps.

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