



**MIT CORPORATE
INNOVATION
PROGRAM
HANDBOOK**



MIT corporate
innovation
program



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Section One

PROGRAM OUTCOMES

Unlock Your Company's Innovation Potential

The MIT Corporate Innovation Program (CIP) helps corporations develop their internal innovation engines and pursue breakthrough innovation in order to stay ahead of the competition.

The CIP is a new model of corporate-university partnerships where global leaders engage in an immersive experience with each other and the faculty, researchers, and students from the world's top ranked university¹.

Strengthen & Expand | Mind & Hand

As a participant in CIP, you will:



Strengthen what works:

Increase your company's existing innovation capacity and build on your current successes



Expand what's possible:

Explore new, cutting-edge technologies and pursue competencies in transformative, breakthrough innovation



innovation (Mind):

Take part in modules led by innovation thought leaders at MIT and exchange best practices with your peers from other companies



innovation (Hand):

Put into action what you've learned through collaborative activities - both externally, with MIT faculty, staff, and students, and internally, with your employees

Learn

Practice

Program Outcomes by Module

MIT Innovation Fundamentals

- Develop foundational understanding of innovation as defined, researched, and practiced at MIT
- Learn innovation success factors at the individual and organizational levels
- Explore the role of regional innovation & entrepreneurship ecosystems
- Establish a baseline for subsequent CIP modules and engagements

Hackathon

- Gain practical, action-oriented innovation tools
- Understand how to refine ideas into innovation-driven impact through an iterative series of experimentation and evaluation
- Practice developing solutions in conditions of limited information and resources
- Explore new ways to team among departments, functions, and geographies

Expert Panel

- Access a view of the frontier of disruptive technology
- Gain unique opportunity to display specific corporate “problem spaces” to MIT researchers developing technology solutions
- Develop relationships with MIT researchers to support future technology exploration

Funding Board

- Low-risk opportunity for corporate leaders to explore experimental solutions to compelling problems
- Opportunities for corporate Leaders to influence corporate culture towards proactive innovative risk-taking and for employees to demonstrate an interest in evolving innovative behavior
- Forcing-function for corporate champions to practice ‘selling’ problems to senior management
- High impact recruiting tool for high-quality talent

Student Engagement

- Corporations develop a network of, and experience with, potential future employees
- Corporates develop a significant student audience and a skilled pipeline of student ideas within their specific problem spaces
- Corporates establish relationships with student organizations that align with their areas of interest and technical skills

Breakthrough Innovation

- Gain theoretical and practical understanding of the overarching methodologies leveraged by some of the world’s leading innovative organizations
- Learn how to create a program based on a challenge with discrete objectives and whose solution has the potential to create new markets
- Learn how to engage with key stakeholders in innovation ecosystems including universities, accelerators, incubators and risk capital organizations

Sustaining Innovation

- Perspectives on leveraging university partnerships to expand the corporate innovation engine
- Engaging corporations with MIT I&E stakeholders and leveraging MIT’s ecosystem to expand corporate innovation capabilities
- Foundation for continuing corporate engagement with MIT
- Opportunity for continuing focus on innovation within each company

Key Corporate Challenges

“We listened to your challenges to build this program.”

Corporations have unique comparative advantages and succeed for different reasons, but many face common challenges in their pursuit of innovation.

Here’s what we learned from listening to organizations and people like you that helped us build the CIP:

CHALLENGE CATEGORIES

CULTURE & STRATEGY

Risk & failure intolerance

Lack of high level innovation strategy and priorities

Incentives don’t align to have an innovation capability

PEOPLE

Employees not incentivized to think differently

Employees lack sufficient skills/tools for innovation

STRUCTURE & PROCESS

Lack of resources and time for innovation

Innovation units not structured properly/siloed

TECHNOLOGY

Lack exposure to/familiarity with disruptive technology

Inability to extract value from existing technology

Participation in the CIP gives you new insights into addressing these and other challenges.



Section Two

PROGRAM STRUCTURE

IMMERSIVE

(go beyond introductions and overviews)

YEAR-LONG

(and beyond through sustaining innovation)

COHORT-BASED

(5 global companies from diverse sectors)

OUTCOME-DRIVEN

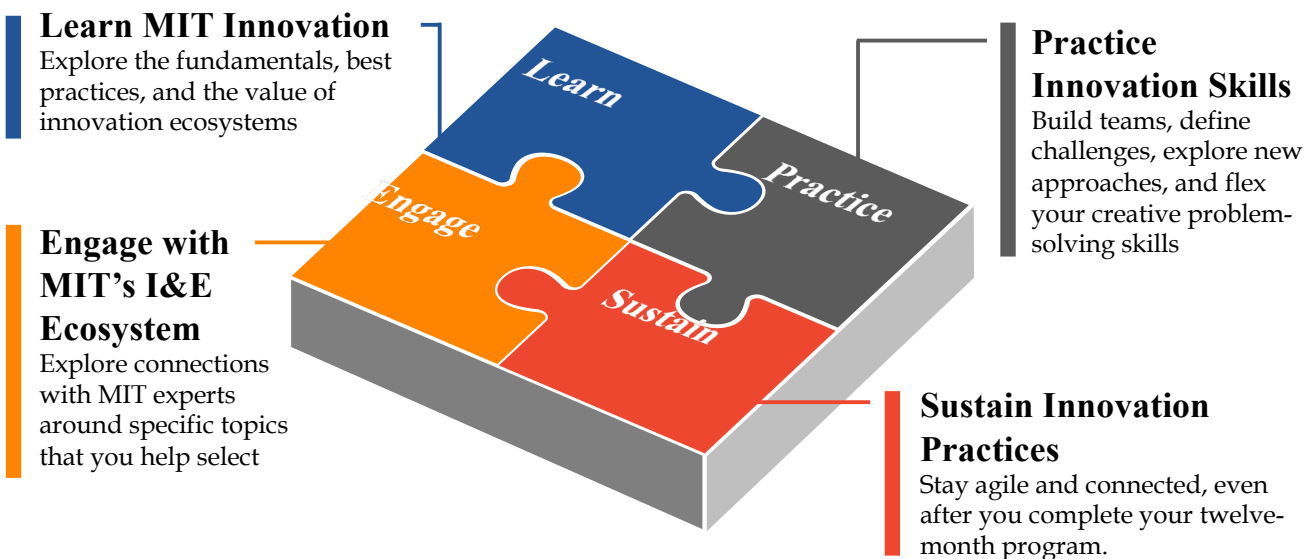
(every module driven by outcomes)

DELIVERED

(at MIT, at Corporate sites, and virtually)

Program Focus

Each activity, assignment, and engagement leverages at least one of the following methodologies in order to enable each company to develop its own innovation skill set, tool set and mind set.

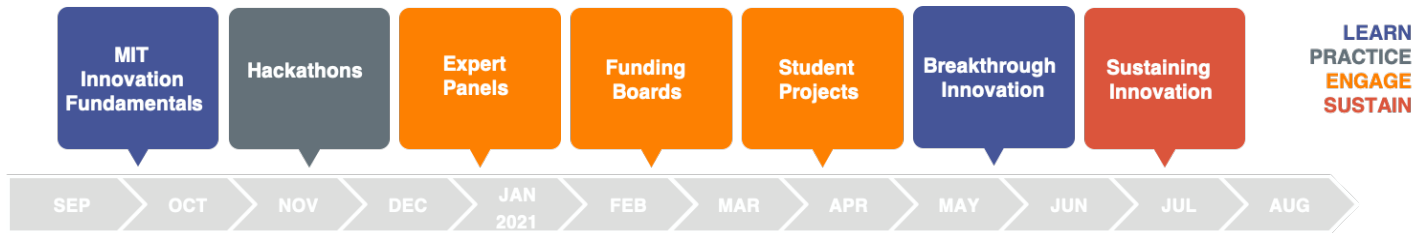


7 Modules

The MIT Corporate Innovation Program consists of seven synergistic modules, each composed of unique MIT content, and curated to optimize corporate experiential opportunities. Company-specific modules are tailored to the objectives, schedule and priorities of each corporation.

The modules, in combination, deliver a signature MIT experience that

- helps corporations address key innovation challenges
- applies CIP methodologies of learn, practice, engage and sustain
- enhances corporate incremental and disruptive innovation capabilities



MIT Innovation Fundamentals

This module provides participants with a foundational understanding of innovation as defined, researched, and practiced at MIT and provides a baseline for subsequent CIP modules and engagements.

Hackathon

The CIP hackathon is a company-specific event designed to provide participants an opportunity to practice acting as innovators within a corporate context and to apply the process of innovation learned during the Fundamentals module within an innovation challenge context relevant to, and selected by, the company.

Expert Panel

The CIP Expert Panels is a company-specific event that brings together a group of corporate executives with a selected group of MIT researchers to discuss a strategic problem space defined by the company and to explore related emerging innovation opportunities.

Funding Board

Leveraging the Expert Panel Module, the company defines a specific innovation challenge for the MIT I&E community to solve and present proposed solutions. If the company judges find value in a particular solution, they may select, award, and fund the solution for further development.

Student Engagement

Each member corporation has an opportunity to engage students through internships to work on company projects in a specific problem space or to further develop solutions presented during the Funding Board module. By engaging students through internships the company develops a significant student audience and a skilled pipeline of student ideas.

Breakthrough Innovation

This module provides opportunities for the cohort to continue developing their respective innovation capabilities through theoretical and practical understanding of methodologies successfully utilized by many of the world's leading innovative organizations, and to learn how to create a program based on a challenge with discrete objectives.

Sustaining Innovation

Delivered consecutively with the Breakthrough Innovation module, Sustaining Innovation introduces member corporations to key MIT I&E stakeholders through a series of presentations, workshops, and meetings with the objective of supporting continuing corporate engagement with the MIT innovation ecosystem and enabling continuing focus on innovation within each company.

Team Formation

In order to participate in the MIT Corporate Innovation Program, member corporations assemble a team to represent the following key corporate functions:

Finance/Strategy	Operations/Infrastructure	R&D/Engineering
Marketing/Sales	HR/Org Development	

Each team is organized as follows:

Executive Sponsor

Senior level executive to represent the company and act as team leader

Core Team:

Two to three mid-to-senior management level participants

Extended Team:

Subject Matter Experts (SME) to represent functions not represented by the Core Team

The Executive Sponsor and the Core Team members are expected to attend and participate in all programmatic events – whether held at MIT, at the company or virtually and to act as innovation leaders within their respective companies.

The Extended Teams participate in program events from their corporate locations.

All team members, in addition to other corporate employees, may be invited to participate in program activities virtually.

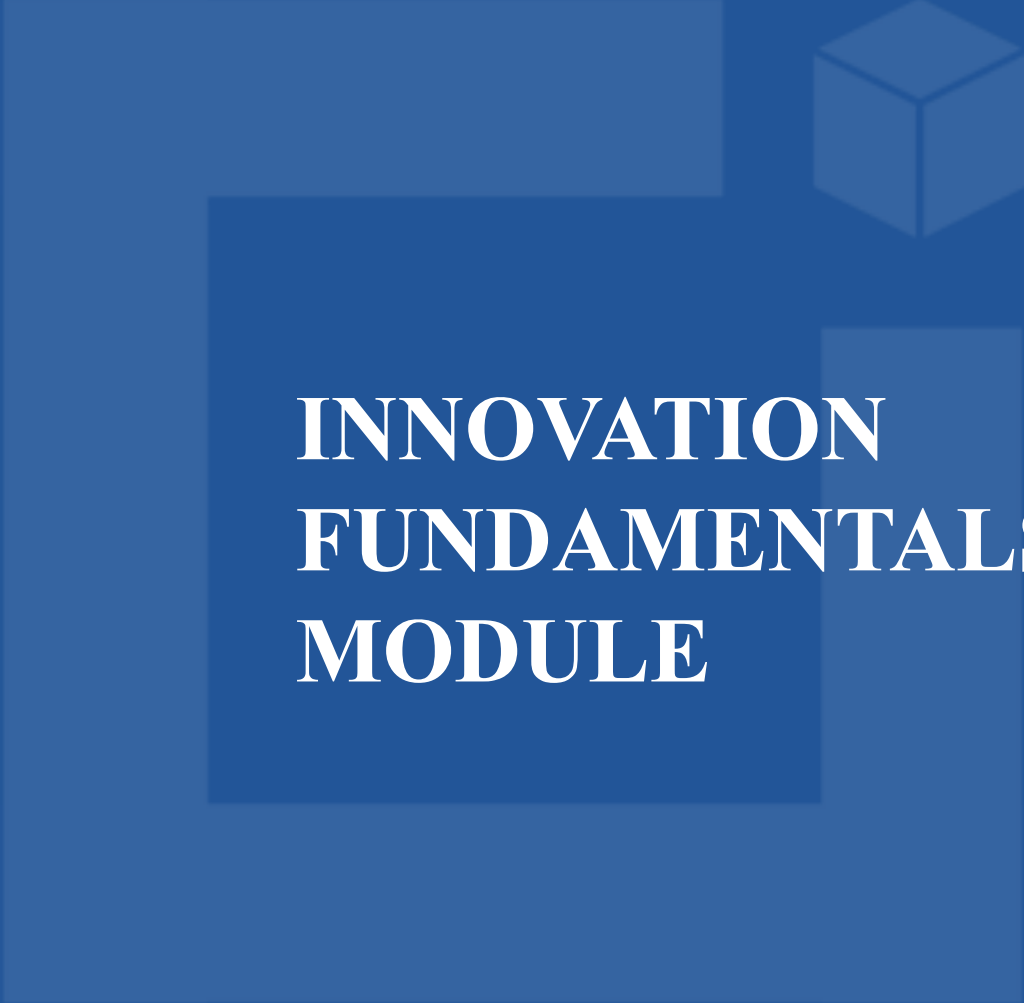
“Leadership of innovation really matters. Without more ‘innovative behaviour’, an organization will not get a return on its digital investments, achieve its full potential during uncertainty, or retain/engage the best staff.”

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A large, light gray graphic element consisting of a thick L-shaped line that forms a partial frame around the text. To the right of the L-shape is a 3D cube icon, and below it is a vertical rectangular bar.

Section Three

THE PROGRAM



**INNOVATION
FUNDAMENTALS
MODULE**

MIT INNOVATION FUNDAMENTALS

The first program module is delivered over 5 days and introduces corporate members to MIT's unique experience, insights, and approach to innovation.

The module consists of Core sessions, Elective sessions, and exploratory self-paced content, with each day developed around a specific theme.

Core content focuses on lectures and workshops delivered by MIT leading faculty and innovation through leaders in an interactive virtual format. Elective content includes live and pre-recorded webcasts on MIT research and emerging technology. Web-based exploratory content introduces participants to the unique culture and experiences of MIT.

Corporate Outcomes

The module provides participants with a foundational understanding of innovation as defined, researched, and practiced at MIT, innovation success factors at the individual and organizational levels; and the role of regional innovation & entrepreneurship ecosystems. The module also provides a baseline for subsequent CIP modules and engagements.

Day 1

Welcome to MIT Innovation

- Corporate Background Presentations
- Interview Observations
- Corporate - University Collaborations
- Continuing Innovation Learning

Day 2

Innovation Leadership in Organizations

- Breaking through Barriers to Innovation
- Innovation Horizons
- Delivering Strategic Change in your Organization

Day 3

Innovation Now - Current Topics for Corporations

- Innovation and Inclusion
- Business Analytics for Innovation
- Work of the Future

Day 4

Technical Leadership

- Proto Ventures Innovation Model
- Radical Innovation

Day 5

Innovation in Practice

- Inventions & Inventors
- Innovation Infrastructure

Participants: Core & Extended Team | Senior Leadership | Corporate Innovation champions



HACKATHON MODULE

HACKATHON

Hackathons are workshops during which participants organize into small teams to develop solutions to a specific challenge or to explore a particular issue or problem space. MIT has a long history of 'hacking' challenging problems through events that bring together diverse teams and skill sets for rapid ideation and community building.

The CIP hackathon is a company-specific event designed to provide participants an opportunity to practice and to apply the process of innovation learned during the Fundamentals module and to **demonstrate how much is possible to learn and to do during a short period of time, with limited resources. The event aims to give participants the skills, knowledge, and practice to more effectively act as innovators (or intrapreneurs) within a corporate context.**

This company-specific three-day virtual event enables a broad and diverse group of corporate employees to practice team building, ideation, creative problem solving, and communication.

Corporate Outcomes

- Learn practical, action-oriented tools
- Understand how to refine ideas into innovation-driven impact through an iterative series of experimentation and evaluation
- Practice “out of the box” thinking and problem solving
- Practice developing innovative solutions in conditions of limited information and resources
- Enabling new ways to team among departments, functions, and geographies

Participants

- Core & Extended team
- Other employees included by the Exec Sponsor

Challenge Ideas

Each corporation will select a challenge with input from the MIT Innovation Initiative

- Strategic Initiative
- Internal Process

Hackathon Teams

- 5-7 people per team to represent different groups, functions & geographies
- Each team will need an internal, senior-level mentor

Mentors:

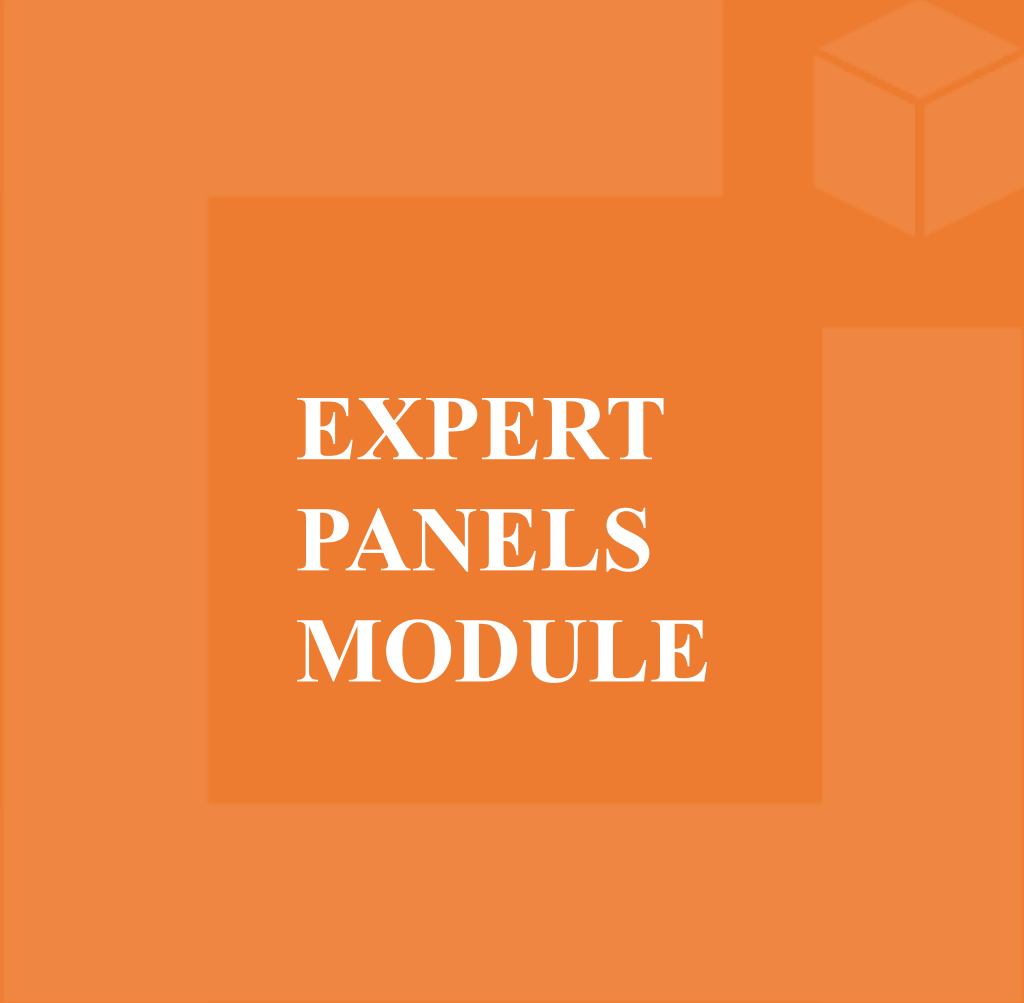
- Senior employee - one per team (designated by Core Team lead)

Judges:

- A panel of company executives (assembled by Exec Sponsor)

Prizes:

- Will be determined with each team's Executive Sponsor



**EXPERT
PANELS
MODULE**

EXPERT PANELS

Disruptive technology plays a key role in determining corporate life-span and, as such, poses a challenge for mature companies. The most valuable companies in the world are technology companies that did not exist 30 years ago; as of 2017, only 60 Fortune 500 companies were founded prior to 1955.

Often driven by IP and research from academic labs, technological innovation typically comes from new market entrants. But translating disruptive technology into business models remains a high-risk/high-reward endeavor, and much can be done to help de-risk the science-to-business “valley of death.”

Specific innovators or technological disruptors of greatest value to a particular company need to connect with researchers who are developing relevant innovations in labs.

This module provides an opportunity for corporate executives to connect with a focused group of MIT researchers and innovators to discuss a strategic problem space defined by the company and to explore related emerging innovation opportunities.

Corporate Outcomes

- Access a view of the frontier of disruptive innovations specifically relevant to their business from experts in the field
- Unique opportunity to discuss your corporate “problem space” with MIT researchers who are developing solutions that may be of value to your business
- Enhance relationships with MIT researchers and innovators working in company-relevant space

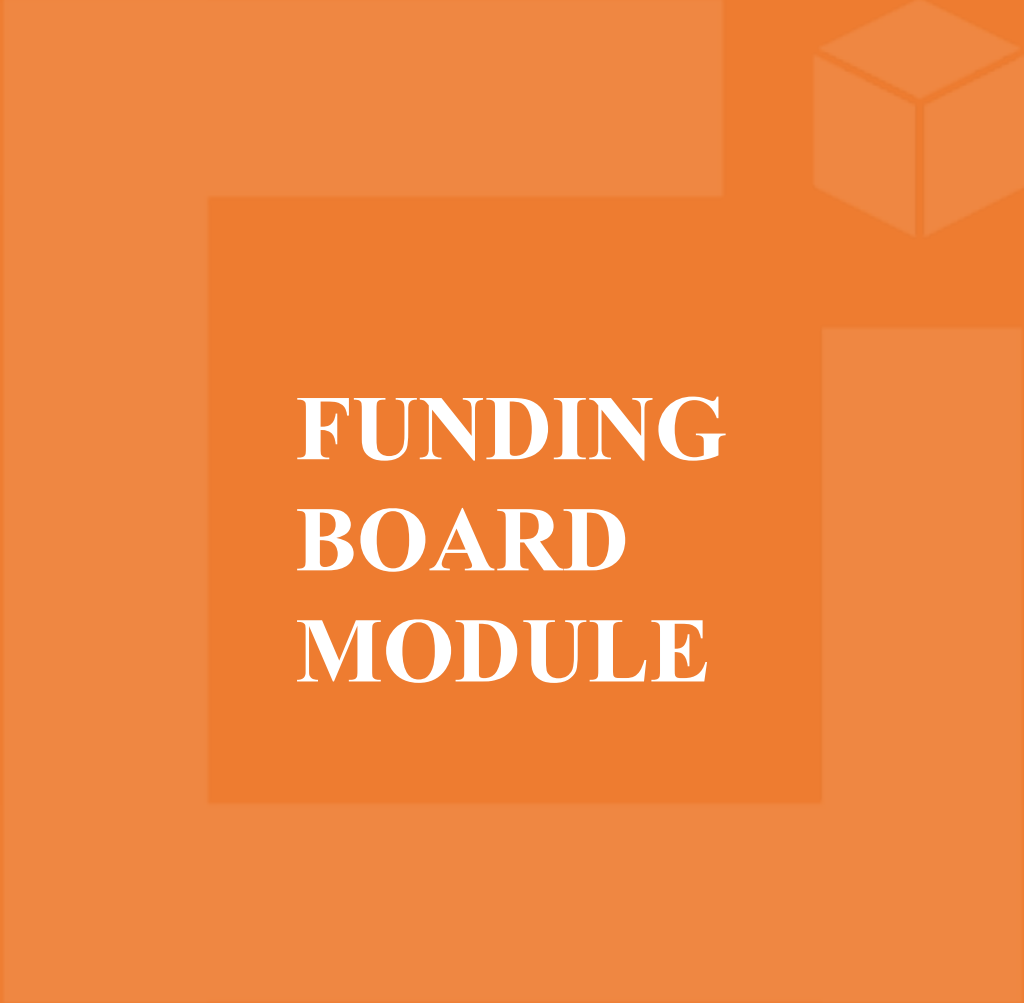
The corporation, with input from CIP, will identify an area of specific focus they would like to discuss with MIT researchers and innovators. CIP will conduct a matching process for relevant MIT experts in that space and arrange either a Focus Group or a Virtual Panel at the Corporation’s discretion. In either case, CIP will schedule the module, solicit pertinent advanced questions/discussion topics, and provide bios to all participants.

Focus Group

The company picks an area of research or emerging technology specific to their industry (e.g., AI applications to finance, 3D printing with metal, quantum computing, etc.). CIP identifies 3+ MIT researchers who specialize in the subject. CIP will host a private dinner (quarantine permitting) for this small, exclusive “focus group” of company executive with MIT experts.

Virtual Panel

The company picks an area of research or emerging technology specific to their industry (e.g., possible AI applications to finance, or 3D printing with metal). CIP identifies 3+ MIT researchers who specialize in the subject and any MIT-connected ventures that may be in development. CIP will host a private virtual panel discussion for a designated number of company executives and employees to listen and ask questions about the particular innovation or technology.



**FUNDING
BOARD
MODULE**

FUNDING BOARD

A key problem most Fortune 500 companies face is a culture that is resistant to innovation. Evolving to a culture of proactive problem-solving is a process that requires both sustained top-down leadership-driven efforts, but also highly visible examples of leadership supported bottom-up initiatives. Such examples signal to employees that attempts at innovative thinking are respected and provide precedents of behavior for employees to model.

This module provides corporate leaders with a company focused idea collection platform. Leveraging the Expert Panel Module, the company defines a specific innovation challenge for the MIT I&E community to solve and present proposed solutions. MIT I&E groups or teams will opt into a defined challenge and develop a solution during a problem-solving period.

Teams will present their proposal to a panel of company judges. If the judges find value in a particular solution, they may select, award, and fund the solution for further development. Alternatively, they may leverage student(s) for further development through an internship during the Student Engagement Model.

Corporate Outcomes

- Employees exposed to innovative solutions developed outside their organization encouraging innovating thinking and out-of-the box problem solving
- Low-risk, low-cost opportunity for Corporate Leaders to explore solutions to high-risk problems
- Activating talent (MIT students) to examine a specific company challenge with limitations of company culture and processes
- High quality, low-cost early model solutions to key problems
- High impact recruiting tool for high-quality talent
- Opportunity for Corporate Leaders to directly influence the direction of proposed solutions

Focus Group

The company (with input from CIP) will define a specific challenge for the Funding Board module. CIP will coordinate and publicize an event during

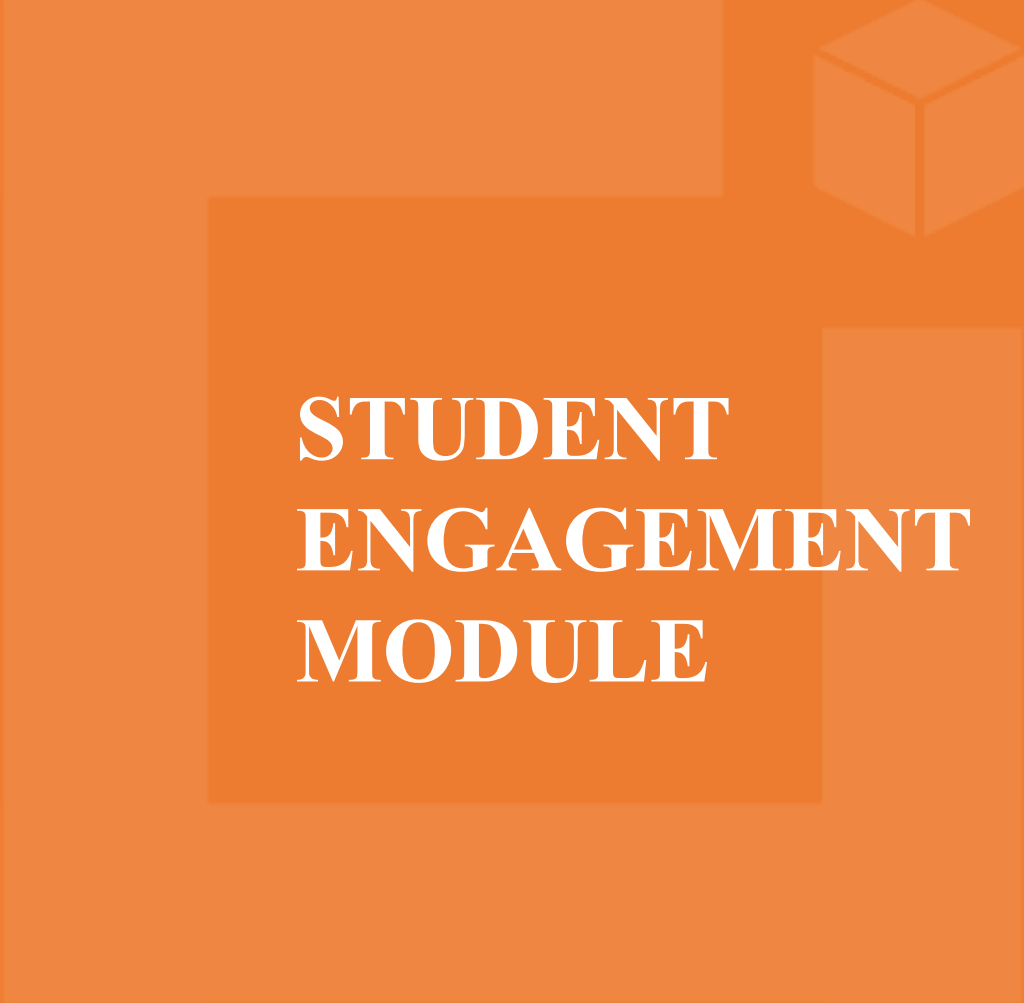
which the company will pitch the problem to MIT students/student groups in order to generate interest in solution development. Student groups will participate in a solution sprint which will culminate in presentations back to a panel of corporate judges with other employees as spectators. Corporate judges may then select, award, and fund any solutions for further development, or use the outcomes to spur iterative innovation loops with their own employees.

Corporate Participants

- Employee-champions of key problem areas to pitch their problem to MIT students
- Corporate Leaders to serve as judges and mentors
- Corporate subject matter experts to mentor student teams during the solution sprint

MIT Participants

- MIT I&E groups interested in the company challenge space



**STUDENT
ENGAGEMENT
MODULE**

STUDENT ENGAGEMENT

Each member corporation has an opportunity to engage with MIT students through internships, either virtually or at the company location, to work on company projects in a specific problem space or to further develop solutions presented during the Funding Board module. Each company, with CIP input, will define a specific company project. CIP will publicize the opportunity to relevant students and student groups, curate the matching process and, if a match is made, guide the company through applicable MIT administrative procedures. The company is responsible for compensating students for their work, providing resources and materials, and assigning company mentors.

Corporate Outcomes

- Corporations develop a network of, and experience with, potential future employees
- Corporates develop a significant student audience and a skilled pipeline of student ideas within their specific problem spaces
- Corporates establish relationships with students and student organizations that align with their areas of interest and technical skills

Company internships can be structured around individual students (Individual Internship) or student groups (Cohort Internships)

Individual Internship

- Corporate partners create specific internship opportunities for individual MIT undergraduate and graduate students for summer 2021.
- Internship content is specific to each corporate member's needs, with CIP offering guidance and advice on developing criteria for a robust MIT-student worthy internship
- In the semester(s) leading up to the internship, companies are encouraged to include their selected interns in specified student-friendly portions of the Corporate Innovation Program modules.

Cohort Internship

- Corporate partners create specific internship opportunities for MIT undergraduate and graduate students in a cohort model (in teams of 3-5) for summer 2021.
- Internship content is specific to each corporate member's needs, with CIP offering guidance and advice on developing criteria for a robust MIT-student worthy internship
- In the semester(s) leading up to the internship, companies are encouraged to include their selected interns in specified student-friendly portions of the Corporate Innovation Program modules.

Corporate Participants

- Executive Sponsor
- Company mentors

MIT Participants

- CAPD
- Sloan Career Services
- MISTI for international corporate locations

STUDENT ENGAGEMENT

Month	Task
November	Corporations define internship opportunities and provide to MITi
December	CIP publicizes internship opportunities within MIT
January	Interns are selected

Corporates are encouraged to invite students to virtual events throughout the semester to learn more about the company and problem space they aim to innovate within.

May - August: internship

May-August	Internship
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**BREAKTHROUGH
INNOVATION
MODULE**

BREAKTHROUGH INNOVATION

The Breakthrough Innovation Module is a **two-day program delivered at MIT**. It is designed in conjunction with the Sustaining Innovation module to be delivered sequentially.

Overview

For most organizations, the innovation process to generate new products and services is relatively well-defined. Such standard process favours “business as usual” and often disregards the most novel ‘outlier’ ideas. As a result, most companies excel in incremental innovation, but struggle with more radical, or breakthrough, innovation - the development of a new technology targeting a discrete challenge that has the potential to create brand new markets.

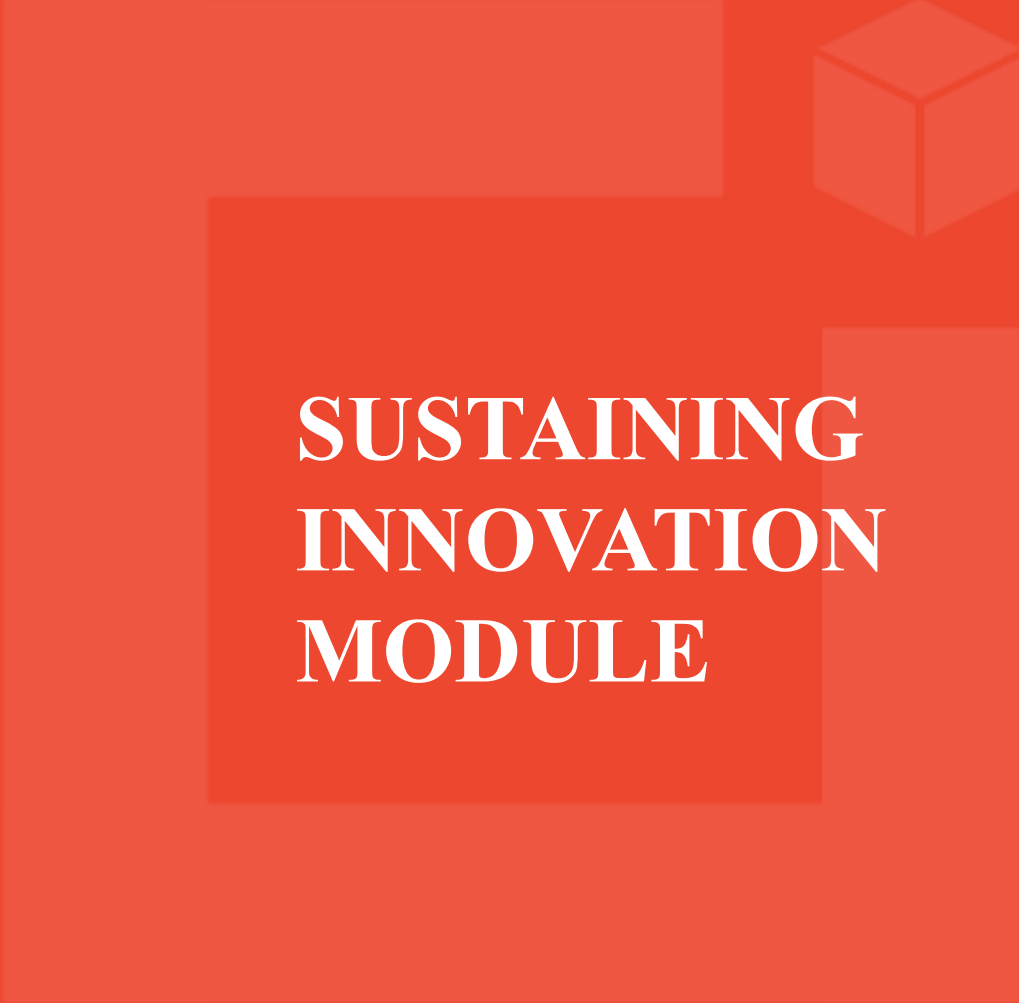
Companies should not disregard incremental innovation - for most, this is the bread and butter of the organization - but they need to consider how to make running higher-risk, higher-impact innovation programs a core organizational competency. Based on years of research into public and private sector organizations such as DARPA, ARPA-E, Bell Labs, Xerox Parc, and X Company (formerly Google X), Breakthrough Innovation addresses a central question: how should you build (or rebuild) an organization to promote breakthrough innovation? This module provides the cohort with opportunity to continue developing their respective innovation capabilities through a deeper understanding of the value of breakthrough innovation.

Corporate Outcomes

- Design the organization: structuring the right boundary conditions to enable organizational freedom to drive breakthrough innovation programs
- Create innovation programs: create high-risk innovation programs focussed on delivering solutions to challenges defined in the overlap between a challenge statement and emerging technological opportunities.
- Engage the world’s leading innovation ecosystems: source external insights for the innovation programs from the leading innovation ecosystems
- Mitigate risk: use active portfolio management (APM) to mitigate risk across a portfolio of high-risk innovation programs
- Implement program results: transition results to product and scaling them up for future growth

Focus Group

- Gain both a theoretical and practical understanding of the overarching methodologies successfully utilized by many of the world’s leading innovative organizations and hear directly from practitioners from these and other organizations;
- Learn how to create a program based on a challenge with discrete objectives and whose solution has the potential to create new markets;
- Learn how to engage with key stakeholders in innovation ecosystems such as universities, accelerators, incubators, risk capital organizations etc.
- Produce a Blueprint Pitch in which CIP participants will describe how their company will nurture breakthrough innovation.



**SUSTAINING
INNOVATION
MODULE**

SUSTAINING INNOVATION

The sustaining Innovation module is designed in conjunction with, and immediately following, the Breakthrough Innovation. Sustaining Innovation will be delivered at MIT.

The last module in the Corporate Innovation Program provides an opportunity for member corporations to come back to MIT to review, reinforce experiences and lessons learned, to celebrate cohort achievements, and to establish ongoing connections with the broader MIT Innovation & Entrepreneurship ecosystem.

During this end of the run year multi-day event at MIT each member corporation will deliver a report out of their experience and lessons learned, will hear additional lectures from MIT experts and will be introduced to members of MIT's I&E ecosystem through a series of meetings, presentations and briefings.

Post-run-year, members will have an opportunity to attend presentations, workshops and meetings to support continuing corporate engagement with the MIT innovation ecosystem, and to enable continuing focus on innovation within each company.

Key Takeaways

- Leveraging I&E ecosystems to optimize corporate innovation capabilities
- Engaging corporations with MIT I&E stakeholders
- Foundation for continuing corporate engagement with the MIT innovation ecosystem
- Enabling continuing focus on innovation within each company

MIT Participants

- Faculty, Staff, Students
- I&E groups

Corporate Participants

- Core Teams
- Executive Sponsors

Sample Agenda

Sample Agenda

- **Day 1**
 - Team reports on CIP experience & lessons learned
 - Presentations by select MIT I&E groups
- **Day 2**
 - Presentations by select MIT I&E groups
 - Award Ceremony

Sustaining Innovation Activities post- Run-year

- Emerging Technology Briefings
- Digital Content access
- Mentoring opportunities
- Sponsorship Opportunities
- Student Internships
- Innovation Visiting "Fellows"

