







BUILD-IT Playbook Series

Resources for a sustainable world class model in STEM Higher Education

Since 2015 the BUILD-IT Alliance, through strategic collaborative dialogue with industry and the Vietnamese Government (MOET), has focused on creating a world class model for innovative technology and engineering higher education. The BUILD-IT public-private ecosystem is designed to produce graduates who can solve problems and engineer solutions and value for Vietnam's social and economic development. BUILD-IT leverages the vast capabilities of the implementing partner, Arizona State University, America's largest and #1-ranked university for innovation, along with diverse government, industry, and academic partners linking T&E higher education to the needs and capabilities of industry partners, building strategic leadership skills to advance university autonomy, program and instructional quality, and formal lasting

partnerships. BUILD-IT supports female empowerment and has provided leadership forums, academic initiatives, and scholarships, and has laid groundwork strengthening the universities' capacity for building technical English and 21st century professional skills.

The BUILD-IT Playbook series has been developed with collaboration and input from BUILD-IT partners and is designed to provide a quick start guide and compilation of best practices that have been effectively implemented in Vietnam by our partner institutions. By leveraging these lessons learned and resources for implementation of tested and effective models, you will have resources that will help you develop a sustainable world class model in STEM Higher Education.

Playbooks in our series include:



The Maker Innovation Space Playbook

Multifunctional spaces with workshops and tools to prototype innovations, Makerspaces provide critical learning spaces to the generation of problem solvers.



A Playbook for University Leaders Seeking AUN-IQA

This playbook presents recommended processes, best practices and key points of emphasis to facilitate the successful completion of AUN-IOA certification.



EPICS

EPICS is an internationally recognized engineering-based service learning and social innovation applied project program. Helping students build both hard and soft skills for success.



Digital Pedagogy in Higher Eduction

Through the digital pedagogy playbook, BUILD-IT university partners have access to proven best practices, methodologies, and approached for teaching and learning in a digital environment.



Women in Project-Based Learning

This playbook presents detailed instructions for creating gender-responsive programs that encourage and support women in engineering.



The Accreditation Playbook

This playbook serves as a quick start guide for leaders and officials of universities who are considering or have begun a journey to external international accreditation for programs.



Certified Facilitator and Master Teacher Training

This playbook provides stepby-step strategies for creating a high yield of trained faculty in a short duration of time who can better drive students towards university success.



The Industry Advisory Board Playbook

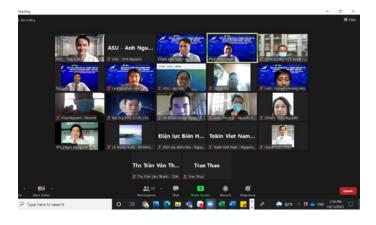
This quick start guide provides a foundation for setting up your IAB. Learn the basics of forming your board, finding participants, and setting expectations.



Summary

This playbook serves as a quick start guide for leaders and officials of universities who are beginning to form their Industry Advisory boards. It is a collection of knowledge and experience from our BUILD-IT partners as they worked over the last five years to better prepare their graduating students to contribute to the Vietnamese workforce. Industry Advisory Boards have also helped BUILD-IT partners work towards AUN-QA certification and ABET accreditation by formalizing and improving stakeholder feedback.

This guide contains a brief introduction to Industry Advisory Boards and how they assist programs in alignment with the industry's needs. It provides a brief overview of forming your IAB and member selection. This guide also explains how IABs help with specific external accreditation criteria. Most importantly, this guide provides lessons learned and best practices from our contributing Vietnamese partner's experience in forming IABs and improving quality throughout the institution.











What is an Industry Advisory Board?

Industry Advisory Boards consist of professionals with experience and responsibility in business and industry-companies ranging in size from small to global. Industry Advisory Board (IABs) contribute their valuable perspectives on the needs and challenges facing an everchanging professional landscape—which helps you prepare your graduates to succeed! An IAB is a group of volunteers from industry and business that want to help improve the quality of Vietnamese education and help prepare your students to be better employees after graduation. IABs accomplish this through meaningful and impactful engagement and dialog with the program's leadership and academic staff. An advisory board's role is not to make decisions for the program; it serves to make recommendations and provide feedback, new information, materials, and possibly resources to the program.

group, not ad hoc, that meets and is engaged with the program on a regular basis (twice a year is a best practice). An IAB is a "relationshipbuilding" activity, one that enhances the program's understanding of industry/business and one that enhances business/industry's understanding of the program. An active and involved Industry Advisory Board enhances the image and relevance of the program as well as increasing the value proposition to the industry of your graduates. Good members are often close to where new graduates enter the workplace, and they may be first line supervisors or even recent graduates with 3-5 years of experience. This ensures that your IAB members provide direct, relevant experience to students.

This section explores how Industry Advisory Boards provide meaningful, valuable assistance to your program by describing 1) how your IAB provides a framework to align your program with industry, 2) how your IAB helps engage industry and 3) how your IAB assists with international recognition.

Quick Reference Guide to Industrial Advisory Boards – Benefits and Creation

How your IAB Helps your Program

An Industrial Advisory Board assists your program in many practical, tangible ways.

Help align your education program with industry's needs

Your Industrial Advisory Board provides a framework to align your education program with the ever-changing needs of industry and business. An IAB adds value by:

- Providing feedback on program education objectives to determine their relevance to industry needs (required by AUN-QA and ABET)
- Providing feedback on program expected learning outcomes to help ensure they reflect the skills graduates need to contribute to the workforce
- Providing feedback on the program of study and specific course content to help alignment with employer needs
- Provide advice on the modern tools and equipment that should be used in the program





Help advance the program

The Industry Advisory Board helps program engagement with industry – more efficiently and effectively. IABs help:

- Build relationships with industry and business
- Develop industry/college partnerships
- Programs acquire equipment and modern software or tools
- Advocate for the program within business and industry
- Connect students and lecturers with other industries and people
- Advance research done by faculty and students



Provide Student Experiences in Industry and Business

The Industry Advisory Board (IAB) contributes to networking between students and industry via:

Internships & Employment

Students can gain direct, relevant experience through the institution's relationship with IAB board members

• Tours

Exposure to industry and business realities via IAB company tours and interactions is a tangible, practical benefit

Lectures and Workshops

IAB members can engage and add value by presenting lectures on topics of relevance to students, staff and faculty

Participation in Student Projects

Leveraging IAB member participation and influence, including sponsoring projects, leads to more robust and impactful handon learning experiences for students by their engagement in real world projects





Assisting with International Recognition or Accreditation

Accreditation agencies require stakeholder input. Both AUN-IQA and ABET require representation and input by organizations that employ graduates. Thus, having an IAB contributes to successful national and international accreditation. Accreditation:

- is increasingly required by Vietnamese educational law
- provides formal recognition by peers of meeting program quality standards (either Vietnamese or international)
- influences and attracts outstanding faculty and students
- encourages institutional planning and helps identify needed improvements, which may support resource allocations
- provides confidence that your program produces graduates prepared to contribute to the global workforce

This section explores how Industry Advisory Boards provide valuable guidance on achieving AUN-QA or ABET accreditation. Here you will learn which specific criteria from both bodies are addressed by the effective management of an IAB.

IABs and AUN-QA/ABET

Industry is an important stakeholder in all STEM programs. Building relationships with industry and business also facilitates program compliance with many AUN-QA and ABET criteria. An Industrial Advisory Board helps your program meet four different AUN-IQA criteria related to stakeholder involvement and different ABET's criteria. One ABET commission requires that programs have an active and documented IAB.

AUN-QA criteria elements (Version 4.0) related to IABs:

- Sub-Criteria 1.4 The program to show that the requirements of the stakeholders, especially the external stakeholders, are gathered, and that these are reflected in the expected learning outcomes.
- Criteria 2.1 The specifications of the program and all its course are shown to be comprehensive, up-to-date, and made available and communicated to all stakeholders
- Criteria 2.3 The design of the curriculum is shown to include feedback from stakeholders, especially external stakeholders.
- Criteria 2.7 The programme to show that its curriculum is reviewed periodically following an established procedure and that it remains up-to-date and relevant to industry.





ABET criteria elements related to IABs:

- Criteria 2: Program Educational Objectives
 The program must have published program
 educational objectives that are consistent
 with the mission of the institution,
 the needs of the program's various
 constituencies, and these criteria. There
 must be a documented, systematically
 utilized, and effective process, involving
 program constituencies, for the periodic
 review of these program educational
 objectives that ensures they remain
 consistent with the institutional mission, the
 program's constituents' needs, and these
 criteria.*
- ETAC Criteria 5: Advisory Committee An advisory committee with representation from organizations being served by the program graduates must periodically review the program's educational objectives and curriculum. The advisory committee must provide advice on current and future aspects of the technical fields for which the graduates are being prepared.

From ABET Criteria 2022 - 2023

This section explores best practices on how to form your Industry Advisory Board. By collecting the experiences and knowledge of our partners who have gone through the process, this quick start guide helps facilitate the creation of your Industry Advisory Board. This section describes 1) the type of board member you want, 2) what effective members look like, 3) how to reach out to potential members and 4) how to set expectations.

Forming your Industrial Advisory Board

Perspective Participants

Because the Industrial Advisory Board is responsible for facilitating the relationships between your program and industry leaders, it is important to determine who best exemplifies potential board members.

Who do you want?

- Which companies and organizations do you want represented on your board?
 - Those that hire your graduates or where graduates go after they graduate
- What size companies can benefit your IAB? All companies, regardless of size, can bring value to your IAB
- Which company representatives do you want to represent the companies? A mix is best. Decision makers in companies,
 - as well as other representatives, who know what graduates do and what graduates will do when they first come to the company as full-time employees are ideal. These people provide perspective and help leverage the IAB's ability to help the program.
- How many companies should be represented? The more the better - between 10 and 20 is desirable. This allows some members to be absent from meetings without the group becoming too small.
- Don't focus on faculty research—the goal is to focus on supporting the student's education!

What do effective IAB members look like?

IAB members have significant influence on your institution and your students. The quality of your members can have either a positive or negative impact, so consider the characteristics of your board members.

- Honest
- Enthusiastic
- Open-minded
- Team-oriented
- Competent

What do ineffective IAB members look like?

- Single-issue obsessed
- Contrarian
- Dogmatic
- Serving on many boards but with no time to actually contribute



"IAB members play an important role in setting up the educational program. They have a practical vision of the requirements of learners to meet the enterprise needs in the future."

Dr. Chau Minh Quan

Industrial University of Ho Chi Minh City (IUH)



Reaching out to Potential Board Members

Once you have selected your potential board members, the method of outreach needs to be considered. How should you contact the company or individual? Do you send an email? Do you reach out to one specific person? What does the communication say?

- Keep it Personal leverage your own personal or institutional network to reach out to potential members. Reach out individually once you identify your target. After speaking with the individual and when they agree to serve, then consider sending an email to the individual's supervisor, as well. This legitimizes the involvement.
- What should I say? Provide background about the purpose of the IAB, as well as time commitment (two meetings a year), role, and expectation of board members in engagement with students
- Remember who you are looking for

 People with experience working with graduates from your institution



Once you have your new board members, it is important to set expectations as to their role on the board. By serving on the IAB, members should understand that:

- There is often one active member who serves as chair or leader of the IAB. The person is usually elected by the IAB. The IAB may also identify specific roles or special sub-committees as needs arise.
- Members are expected to attend two meetings per year (a best practice)
- Members should be prepared to provide feedback on program educational objectives, student learning outcomes, curriculum and other aspects related to the program so graduates are ready for industry





Let us know...

Thank you for your interest in the BUILD-IT playbooks, these useful guidelines will help you develop a sustainable world class model in STEM Higher Education. Make sure to share your input on implementing our playbooks and how you used them.

Additionally, we would like for you to share them with your colleagues, not only in your university but also in your network.

Reach out to builditvietnam@asu.edu to let us know about your successes and any lessons or suggestions you would like to send as feedback.