



Certified Facilitator and Master Teacher Training

A quick start guide for university leads and facilitators

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.

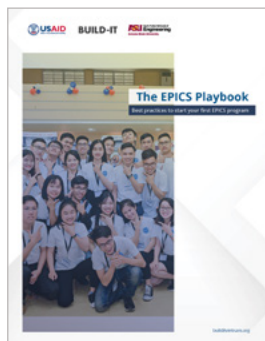
The BUILD-IT Playbook series has been developed with collaboration and input from BUILD-IT partners and is designed to provide a quick start guide and compilation of best practices that have been effectively implemented in Vietnam by our partner institutions. By leveraging these lessons learned and resources 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.



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.



Women in Project-Based Learning

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



Certified Facilitator and Master Teacher Training

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



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-IQA certification.



Digital Pedagogy in Higher Education

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



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.



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.



Discussion among CF participants from 6 university partners during CFT in Ho Chi Minh City.

Sustaining Robust Faculty Development

This Playbook reviews ongoing interventions within Vietnam's BUILD-IT university network. The playbook is a manual for faculty to ensure that The Certified Facilitator and Master Teacher Training program is effectively facilitated and sustained. It is a starting point to inspire faculty to become trained, engaged, and to maintain a highly adaptable, scalable, and sustainable training model.

This Playbook was developed by members of the BUILD-IT staff along with faculty from BUILD-IT partner universities. The CFT/MTT was developed to create a high yield of trained faculty in a short duration of time who will be better prepared to improve project-based and student-centered learning in the classrooms. The CFT/MTT produces champion educators who will be the drivers of success in the universities.

The CFT/MTT training model and curriculum provides universities with a robust and effective faculty training experience that helps faculty reimagine their teaching practices by infusing modern teaching methodology and best practices in tertiary pedagogy, soft skills, and flipped classroom techniques.

“ I really like the way that the course is organized through the LMS system, online, face-to-face, and communication during the MTT class. As one of 25 lecturers participating in an MTT at Lac Hong University, I learned a lot from the CFs and colleagues about how to improve learner’s engagement and motivation. In addition, I realize that organizing appropriate learning activities helps students become more active and engaged in discovering knowledge.”

Dr. Nguyen Thi Nhu Quynh
Dean of Faculty of Pharmaceutical
Lac Hong University

**Created and Facilitated by
BUILD-IT Partner Faculty**

As the CFT/MTT program continues to evolve at your university, please continue to consider the objectives and outcomes that were mutually established during the design and implementation of the program. These objectives and outcomes were at the core of the program and by defining these ensured the continued success of the program. These objectives and outcomes will help CFs remain centered and grounded as they continue to evolve the program.



Lecturer participants work on an activity for “everyday examples” in a Face-to-Face during a Master Teacher Training (MTT).

CFT/MTT Objectives:

- Demonstrate a design-thinking entrepreneurial mindset using applied curriculum that reflects workforce and industry priorities, utilizing active teaching/ learning techniques and problem/project-based learning within their courses and programs.
- Utilize measurable course learning outcomes and utilize robust assessment and evaluation procedures in support of continuous course and program improvement as well as international accreditation and recognition.
- Incorporate digital pedagogy and best practices while evaluating instructional technology to achieve course and program outcomes, share resources, and collaborate with other faculty.
- Integrate professional (soft) skills into their instructional model and improve their teaching practices and courses utilizing an understanding of pedagogy, educational theory, and best practice combined with analysis of assessment.
- Sustain the viability and execution of this program after curricular migration has been completed. Continue to offer, at a minimum, 1 CFT and 3 MTT per year.

CFT/MTT Outcomes:

- Demonstrate the ability to effectively utilize modern pedagogy and instructional methods in STEM courses.
- Demonstrate the application of relevant educational theory and practices, in the Vietnamese educational context, to increase student engagement, and facilitate retention and achievement of learning outcomes in their primary STEM course.
- Demonstrate effective instructor presentation, communication, and facilitation techniques.
- Clearly articulate the need for education change in Vietnam using written and oral communication methods.
- Identify and outline opportunities to collaborate with STEM faculty on student projects.

Certified Facilitator Training

Building a Facilitator Community

The CFT is the foundation of this training program and the key driver to the success of the training program. Current and trained CFs should continue to certify faculty members at their university who have previously completed the Master Teacher Training. The CFT should be viewed as a pool of faculty who all have the ability and knowledge to facilitate an MTT on their own. Partner universities should:

- Strive to have between 1-2 CFTs per year
- A CFT should last 1 or 2 days
- Recruit 10-15 new CFs per year
- Organize and facilitate CFTs on campus
- Be responsible for the CFT and MTT Moodle shells and all documents and supplies needed to conduct MTTs.
- Be responsible for maintaining and keeping track of all digital tools and applications used to track progress during MTTs.

Managing Content and Innovating Curriculum

In order to provide a rich learning experience for faculty year after year, CFs should convene periodically to discuss changes or revisions to the curriculum, work to coordinate trainings with the university, and identify faculty to engage in the program. The content could be expanded to satisfy the needs of the departments or areas of student need. The BUILD-IT CFT/MTT is very heavily structured towards STEM content. Universities should try to certify faculty from other departments outside STEM departments to demonstrate value to faculty from other departments.



Activity for lecturer participants to experience designing classroom activities at different level of Bloom's Taxonomy led by Dr. Hoang Trung Kien, CF lead from HCMUTE.

“The training helps enhance outcome-based education which is at a very initial stage in Vietnam. It provides faculty a practical approach to implement better teaching and learning activities to help students achieve higher order thinking learning outcomes.”

Dr. Ngo Van Thuyen

Chairman of University Council

Ho Chi Minh City University of Technology



Activity for lecturer participants to experience designing classroom activities at different level of Bloom's Taxonomy led by Dr. Hoang Trung Kien, CF lead from HCMUTE.

Master Teacher Training



A training session led by Dr. Nguyen Huy Phuc, CF lead from IUH.

The CFT is the foundation of this training program and the key driver to the success of the training program.

Producing Trained Faculty

In the Spring of 2020, partner universities have cultivated and maintained their own Moodle MTT Moodle course. The sustainability of the MTT is reliant on the institution's Certified Facilitators should:

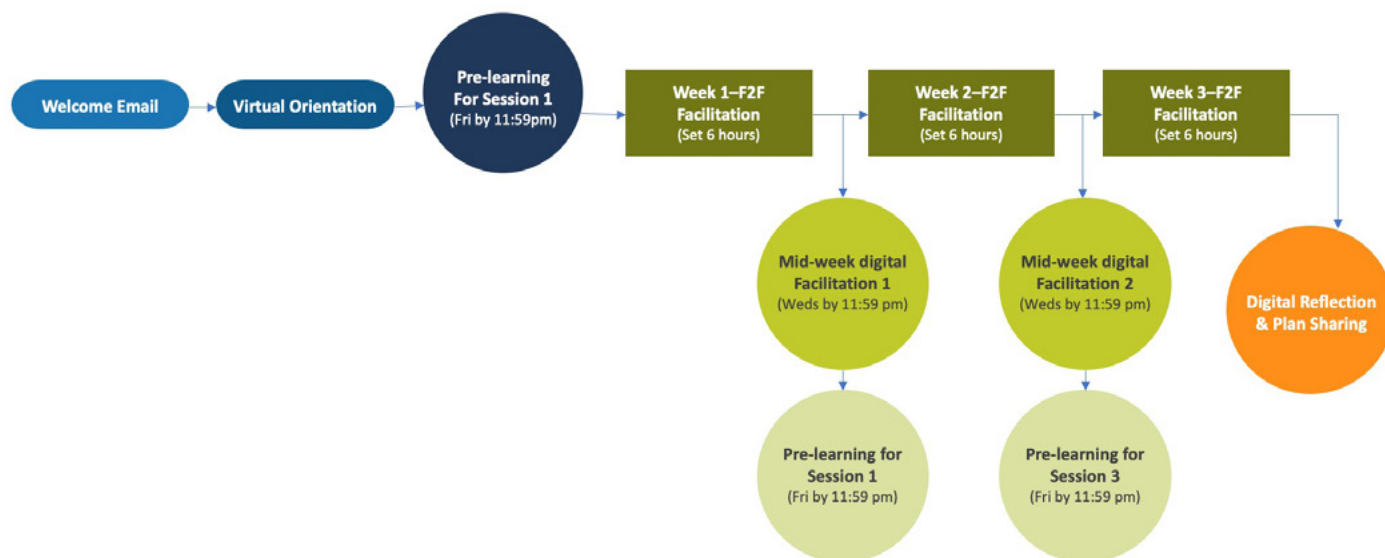
- Curate the MTT Moodle Shell, curriculum, e-tool accounts, and materials
- Update content periodically to meet the demands of the university's faculty development strategy
- Expand curriculum to be inclusive of other non-STEM related programs
- Strive to have 2-3 MTT per year
- Organize and facilitate MTT on campus
- Enroll participants in Moodle course
- Facilitate F2F sessions using MTT course curriculum
- Recruit MTT graduates into CFT

Since 2017, over 300 faculty from BUILD-IT partner universities have been trained through the Master Teacher Training Program.

Facilitating Cohorts

- Since the Fall of 2020, each university has been successfully conducting autonomous rounds of the MTT. In order to continue this progress, CFs should convene regularly to map out an annual training schedule to target 45-60 faculty per year.
- With a 3-week, intensive training program, CFs should be giving applicable faculty a few weeks of lead time to work the training into their schedule. While the structure of both the CFT and MTT remains unchanged since inception (see diagram below), once the training was moved into an autonomous state, some universities have experimented with alternative schedules and delivery modalities. It is up to each universities' CFs to decide how best deliver the training.
- The CFT/MTT has been a successful training program because of the faculty who have developed and facilitated it. It is a Vietnamese designed program for Vietnamese faculty.

Master Teacher Training Course Structure



BUILD-IT University CFT/MTT Leads (As of June 2021):

- Industrial University of Ho Chi Minh
Dr. Nguyen Huy Phuc
- Ho Chi Minh University of Technology and Education
Dr. Pham Bach Duong
- Ho Chi Minh University of Technology
Dr. Tran Viet Hong
- Lac Hong University
Dr. Nguyen Thanh Lam
- The University of Danang – University of Science and Technology
Dr. Ngo Dinh Thanh
- Can Tho University
Dr. Nguyen Minh Luan

Special 'Thanks' to the CFT/MTT Development Team

Dr. Nguyen Cao Tri

Ho Chi Minh University of Technology

Dr. Phan Thi Mai Ha

Ho Chi Minh University of Technology

Dr. Ngo Van Thuyen

Ho Chi Minh University of Technology and Education

Dr. Pham Huy Tuan

Ho Chi Minh University of Technology and Education

Dr. Ngo Dinh Thanh

The University of Danang – University of Science and Technology

Dr. Pham Van Tuan

The University of Danang – University of Science and Technology

Dr. Phan Minh Duc

The University of Danang – University of Science and Technology

Dr. Nguyen Huy Phuc

Industrial University of Ho Chi Minh

Dr. Pham Tran Bich Thuan

Industrial University of Ho Chi Minh



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.