

ALIGNING STUDENTS INTO ACCELERATED PATHWAYS IN ENGINEERING, TECHNOLOGY, & BUILDING SCIENCES (ASAP)

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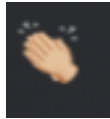


This project is supported by the National Science Foundation under Grant No. 1800937. Any opinions, findings, and conclusions or recommendations expressed on this site are those of the authors and do not necessarily reflect the views of the National Science Foundation.

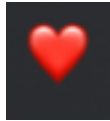
FLASH POLL

PRIOR LEARNING ASSESSMENT

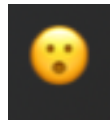
Are you implementing prior learning assessment for incumbent workers and veterans as a pathway into BAS?



We're giving it a good effort! We have more work to do.



We've got this! We have implemented and are attracting students.



We could be doing more! Need better process clarity and institutional support.

TODAY'S OBJECTIVES

1

ENGAGE – take the next step to implement accelerated pathways at your institution

2

NETWORK – participate and / or disseminate information on accelerated pathways

3

INFORM – know about existing opportunities for adult students seeking BAS

4

ARTICULATE – establish pathways from MOET to BAS degrees

PROBLEM

1. Prior grant award, NSF-ATE 1406320 -> Sustainable Building Science Technology BAS Degree (Bachelor of Applied Science)
2. STEM completion rates remain low nationally.
3. The STEM student profile has shifted from recent high school graduates to working adults.
4. Some highly skilled workers/military veterans end up starting from scratch when pursuing a degree, even with years of skills/learning experiences.
5. Students navigate in and out of programs due to complexity of requirements, class offerings, and life situations.
6. Recent data suggests that a combination of benefits from PLA – cost savings, time savings, credit accumulation, improved motivation and validation – help propel students toward graduation.

*Reference: National Academies of Sciences, Engineering, and Medicine. (2016). Barriers and Opportunities for 2-Year and 4-Year STEM Degrees and CAEL/WICHE's (2020) PLA Boost



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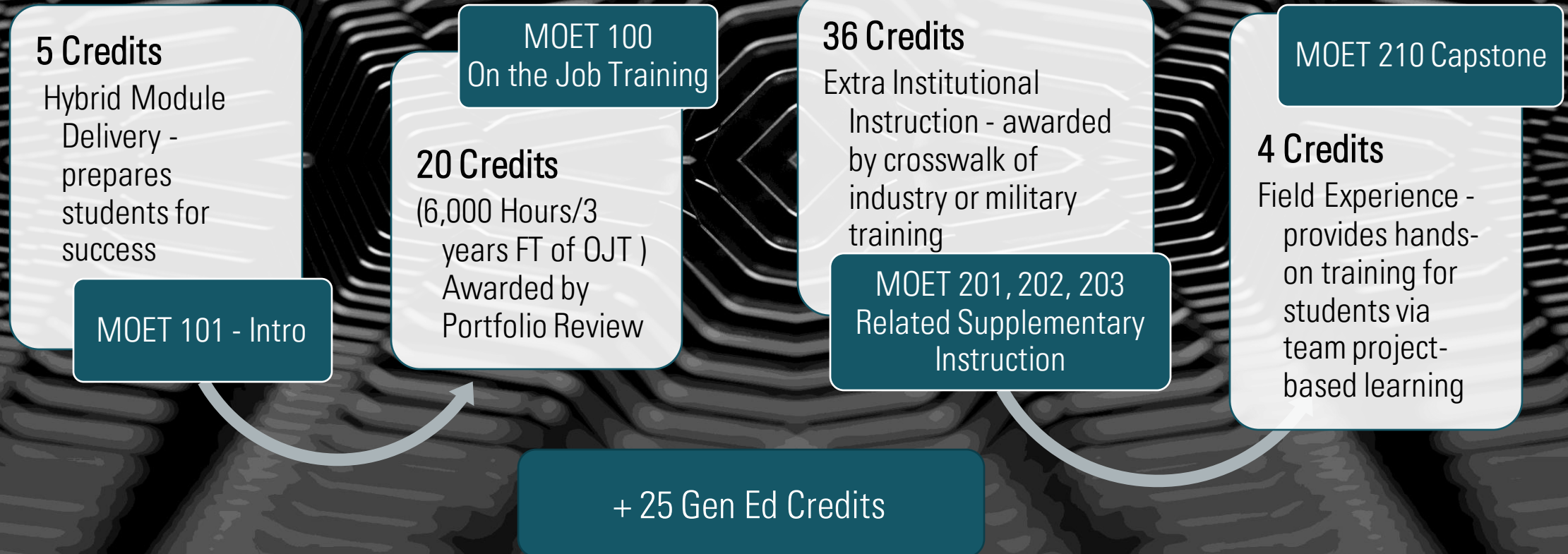
SOLUTION → *NEW DEGREE*

Integrate prior learning assessment into degree requirements of **Multi-Occupation in Engineering & Technology (MOET) AAS-T Degree.**

1. Create a portfolio of skills/learning related to their work experience.
2. Provide documentation of extra-institutional courses/professional development opportunities.
3. Complete Orientation and Capstone classes as well as general-ed



MULTI OCCUPATION IN ENGINEERING & TECHNOLOGY COURSE SEQUENCE



MOET COURSE DETAIL

Course	Name	Credits	Type
MOET 100	On the Job Training (OJT)	20	Prior Experiential Learning
MOET 101	MOET Introduction	5	Hybrid – Module based
MOET 201	Occupational Safety/Environmental Health	12	Extra Institutional Learning
MOET 202	Engineering & Technology	12	Extra Institutional Learning
MOET 203	Operations & Management	12	Extra Institutional Learning
MOET 210	Capstone	4	Hybrid
GEN ED	Multiple	25	
		Total Credits	90



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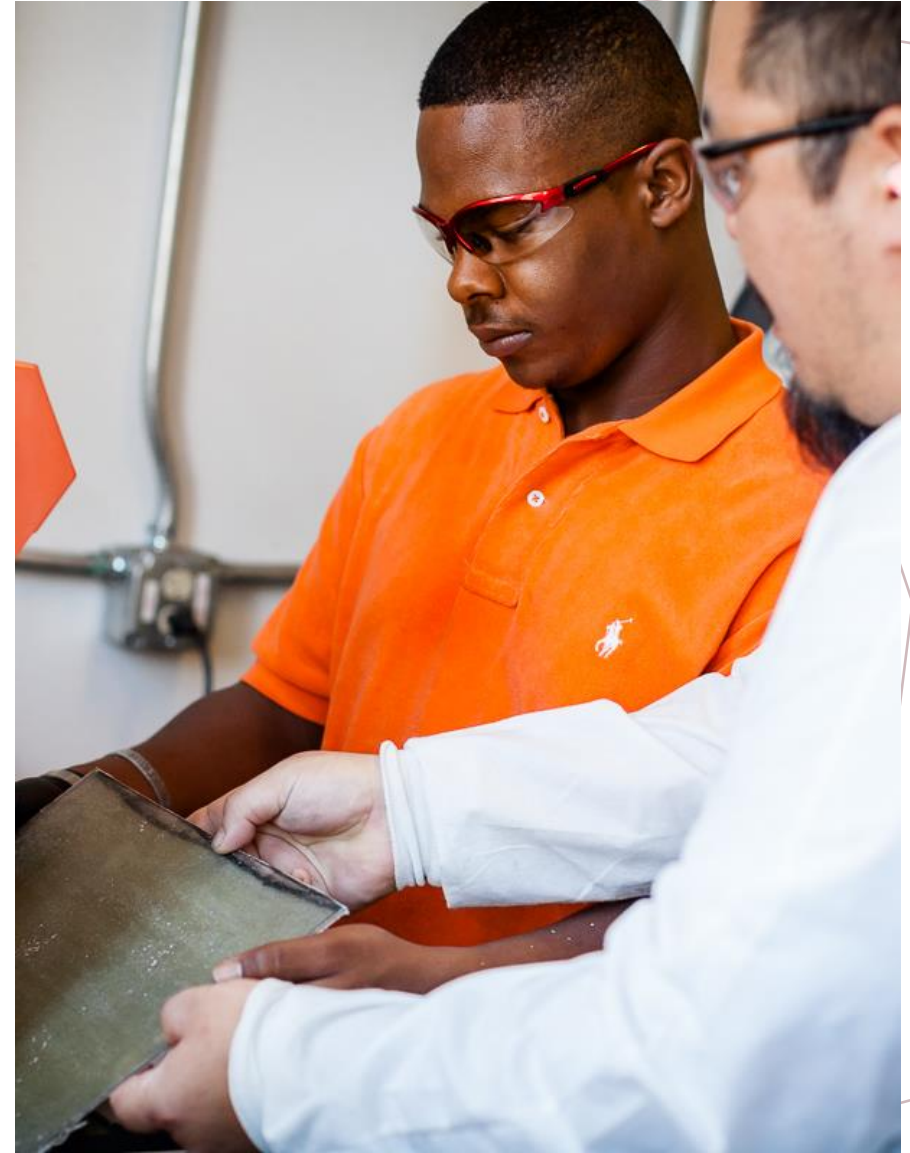
WHAT WE'VE LEARNED

- **Traditional assumptions regarding credit**
 - Credentials Evaluation
 - Prior Learning Assessment and Extra Institutional Instruction
 - Advising Team
- **Breaking through silos**
 - Workforce
 - Academic Programs
 - Apprentice (basis for workplace credit)
- **COVID**



SOLUTIONS (IN PROGRESS)

- Collaboration & Outreach
 - Work in small groups
 - Faculty and administrative champion
- Develop Process
 - Agree to establish “pilot” and evaluate outcomes
- Hybrid Design (online & in-person)
 - Designed pre-COVID for working adults



EXPANDING AND ADVANCING ACCELERATED PATHWAYS

- Soliciting interest for multi-institution grants to build on the MOET model
- Create network to advance accelerated STEM degree programs – accessible, navigable, flexible and affordable for working adult students
 - Develop agreed upon processes for crosswalk creation and institutional changes to support accelerated degrees
- Professional development opportunities to learn best practices for implementing PLA to award credit for learning outside of academia. [March 3 via Zoom]
- Create articulation agreements to STEM BAS programs

RESOURCES/CONTACT US

- Our Military Crosswalk for occupations for engineering & technology-related MOS
- Our PLA (prior-learning assessment) Process/Methodology for this project as well as integration of PLA for our BAS degree.
- CAEL 2020 Report (Council for Adult and Experiential Learning):
[The PLA Boost](#), www.cael.org
- ACE Resources: American Council on Education – crosswalks for evaluation/assessment
 - [The ACE National Guide](#)
 - [The Military Guide](#)
- Degree Materials
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