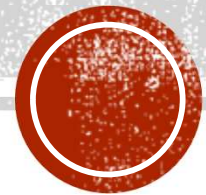




American Society for Engineering Education



AGENDA

- ✧ Introduction
- ✧ Overview of ASEE
- ✧ ASEE P12 - Communities of Practice
- ✧ Case Study: The School at Marygrove
- ✧ ASEE Capacity Building - Communities of Practice
- ✧ Case Study: CyBR-MSI
- ✧ Questions



ASEE: UNIQUE AMONG ENGINEERING SOCIETIES

Our Vision, Mission, Values, Goals, and Objectives

Statements below approved by the ASEE Board of Directors on February 2, 2020.

Our Vision

Excellent and broadly accessible education empowering students and engineering professionals to create a better world.

Our Mission

ASEE advances innovation, excellence, and access at all levels of education for the engineering profession.

Our Values

Excellence, engagement, innovation, integrity, diversity and inclusion.



STRONG IMPACT AND SUPPORT



**Dr. Watford appointed
to the National Science
Board**

More than
70,000
Readers

**Communications
ASEE Publications**

618
Attendees
309
Institutions

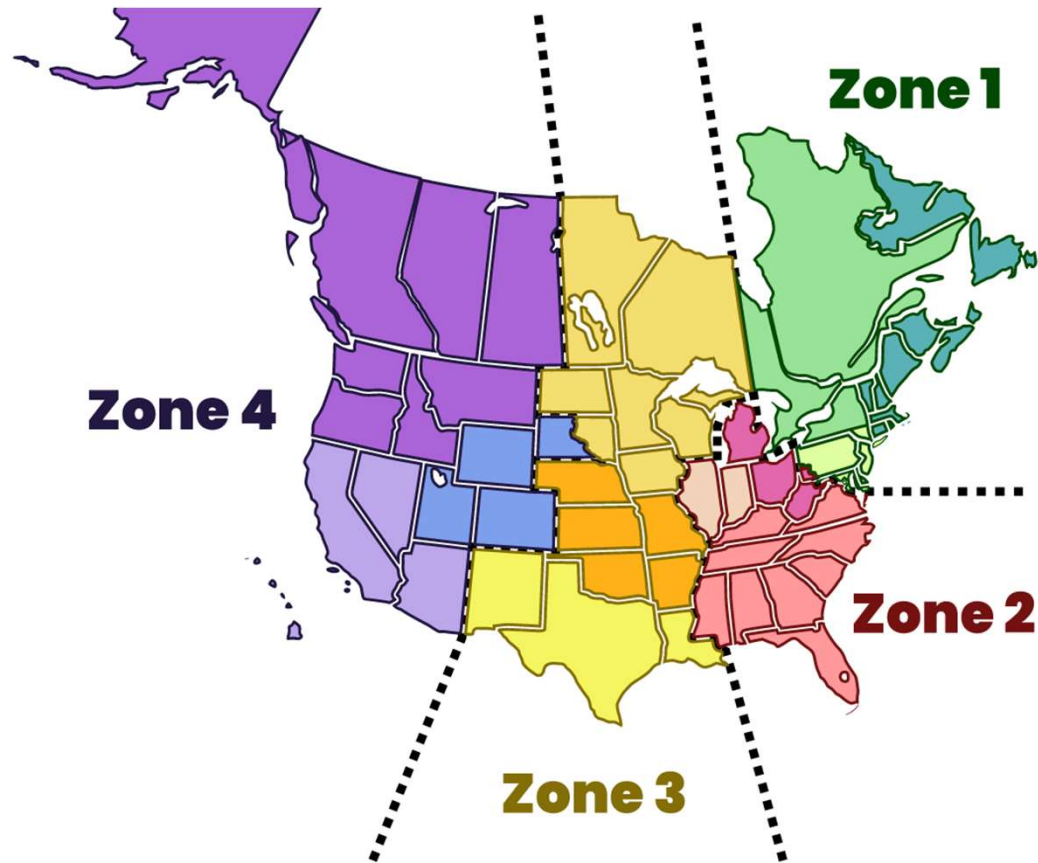
**MSI Capacity
Building Events**

323
Deans

**Engineering Deans
Council**



ASEE REGIONAL ZONES AND THEIR SECTIONS



ASEE PUBLICATIONS

JOURNALS

Journal of Engineering Education (JEE)

Advances in Engineering Education (AEE)

Chemical Engineering Education Journal (CEE)

Computers in Education Journal (CoED)

Engineering Design Graphics Journal (EDGJ)

Journal of Engineering Technology (JET)

The Engineering Economist (TEE)

ASEE PUBLICATIONS

Prism Magazine Online

Prism PDF Issues (Members Only)

Conference Papers - PEER

Engineering Go For It! (eGFI)

College Profiles

ASEE Reports

NEWSLETTERS

Connections

Division Newsletters

First Bell

The Accelerator

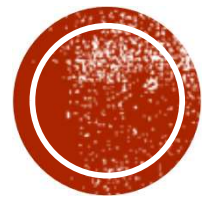
ASEE News



ASEE EVENTS

CONFERENCES AND MEETINGS	COUNCIL EVENTS	FEATURED EVENTS
2024 Annual Conference	EDC Public Policy Colloquium (PPC)	2024 Conference for Industry and Education
2024 Paper Management	Research Leadership Institute (RLI)	Collaboration (CIEC)
Section & Zone Meetings	Engineering Deans Institute (EDI)	CoNECD
Future Conference Dates	Engineering Technology Leaders Institute (ETLI)	First Year Engineering Experience
Past Annual Conference Locations	CMC Workforce Summit	Frontiers in Education





ASEE P12

Communities of Practice

ASEE PICS AND THEIR DIVISIONS

PIC 1	PIC 2	PIC 3	PIC 4	PIC 5
• Biological and Agricultural Engineering • Biomedical Engineering • Chemical Engineering • Community Engagement • Engineering Communicators • Engineering and Public Policy • Engineering Ethics • Engineering Libraries • Liberal Education/Engineering and Society • Materials • Technological and Engineering Literacy/Philosophy of Engineering	• Educational Research and Methods • Engineering Economy • Engineering Management • Equity, Cultural and Social Justice in Education • Faculty Development • Graduate Studies • Industrial Engineering • Manufacturing • New Engineering Educators • Student • Systems Engineering	• Computers in Education • Computing and Information Technology • Data Science and Analytics • Electrical and Computer • Energy Conversion, Conservation, and Nuclear Engineering • Engineering Leadership Development • Engineering Physics and Physics • Entrepreneurship and Engineering Innovation • Experimentation and Laboratory-Oriented Studies • Instrumentation • Mathematics • Software Engineering	• Architectural Engineering • Civil Engineering • Construction Engineering • Environmental Engineering • First-Year Programs • International • Military and Veterans • Minorities in Engineering • Pre-College Engineering Education • Two-Year College • Women in Engineering	• Aerospace • College Industry Partnerships • Continuing, Professional, and Online Education • Cooperative and Experiential Education • Design in Engineering Education • Engineering Design Graphics • Engineering Technology • Mechanical Engineering • Mechanics • Multidisciplinary Engineering • Ocean and Marine Engineering





Commission on
**P-12 Engineering
Education**



[Home](#) [About](#) [Resources](#) [News & Events](#) [Awards](#) [Committees](#) [CP12 Executive Committee](#) [ASEE Division Delegates](#)

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ASEE Commission on P-12 Engineering Education

A commission dedicated to lifelong
excellence in engineering
education

The Commission on P-12 Engineering Education exists to emphasize the importance of engineering education for learners in preschool all the way through the end of high school. This is done through increasing knowledge and communication about P-12 engineering education and by sharing the committee's expertise with other organizations.



<https://sites.asee.org/p-12committee/>





Pre-College Engineering Education

A division of the American Society for Engineering Education

[Home](#)

[About](#)

[News](#)

[Events](#)

[Teacher Resources](#)

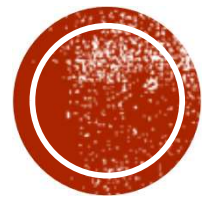
[Join Us](#)

[Publications](#)

[Contact Us](#)

<https://sites.asee.org/precollege/teacher-resources/>





CASE STUDY:

The School at Marygrove in Detroit

[Home](#) [About Us](#) [Enrollment](#) [Contact Us](#) [Parents](#) [Student Support Services](#) [Programs & Activities](#) [Calendar](#)

THE SCHOOL AT MARYGROVE

Students Rise. We All Rise.



THE SCHOOL AT
MARYGROVE



Rise with Us at The School at Marygrove

[Learn about how our school is creating future legends](#)



QUICK LINKS



[Contact Us](#)



[Calendar](#)



[Lunch Menu](#)

<https://www.detroitk12.org/domain/1941>



MARYGROVE
CONSERVANCY



The P-20 educational partnership is funded by The Kresge Foundation



The Marygrove Early Education Center was designed to harmonize with existing campus buildings, particularly the Liberal Arts Building erected in 1925. (Photo: Timothy Hursley copyright)



THE SCHOOL AT MARYGROVE

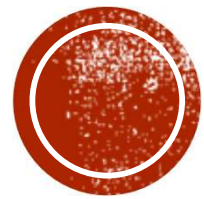
- **What Makes us Unique**
- K-12 focus on engineering principles and practice.
- Social justice-oriented curriculum.
- Extensive and extended support from college admissions through college graduation.
- Elementary and high school FIRST Robotics.



Principal Lisa Williams in a classroom at the School at Marygrove Elementary. Photo: Annalise Frank/Axios

<https://marygroveconservancy.org/p-20-educational-programs/educational-programs/>





ASEE CAPACITY BUILDING

Communities of Practice

ASEE INSTITUTIONAL RESEARCH AND ANALYTICS



<https://ira.asee.org/overview/>



ASEE DIVERSITY RECOGNITION PROGRAM



2024-2026 RECOGNIZED INSTITUTIONS

Silver status is valid for 3 years (January 2024-December 2026)

San Diego State University

2023-2025 RECOGNIZED INSTITUTIONS

Silver status is valid for 3 years (January 2023-December 2025)

University of Nebraska-Lincoln

Dartmouth College

Oregon State University

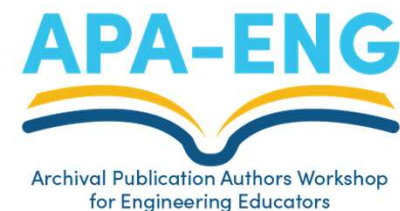
<https://diversityrecognition.asee.org/>





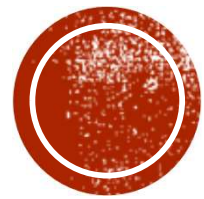
Interactive Learning Experiences for Engineering Educators

WWW.LEARNING.ASEE.ORG | LEARNING@ASEE.ORG



Engineering Mindset
INCLUSIVE MINDSET FOR THE FUTURE

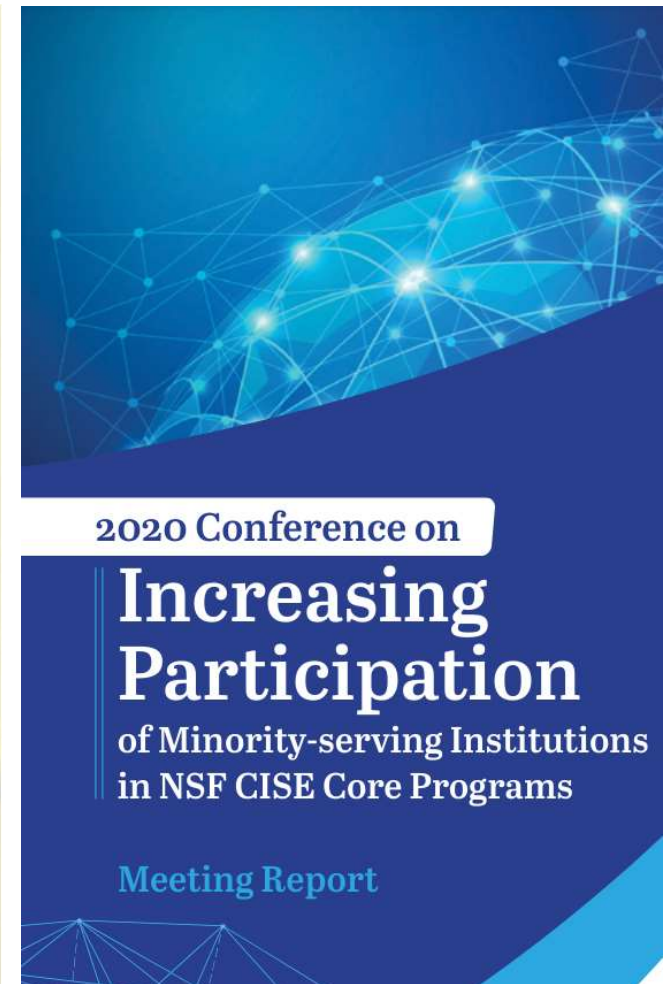
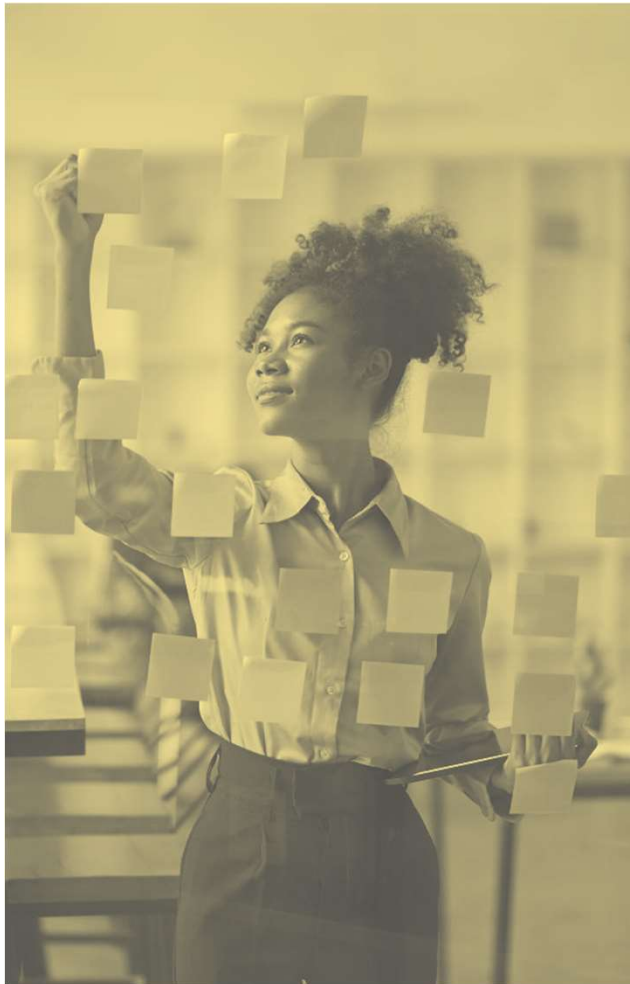




CASE STUDY:

CyBR-MSI

2020 MSI CISE CONFERENCE



CISE-MSI

Proposal Development Workshop

**Computer and Information Science and
Engineering Research Expansion Program
(CISE MSI)**

[View guidelines](#)

[NSF 24-536](#)

**PROPOSAL DEVELOPMENT
WORKSHOP**

MENTORING PROGRAM

**SIMULATED PROPOSAL
REVIEW PANEL**



NSF Award No. CNS-2039244

CyBR-MSI



**NETWORKING,
IDEATION, & TEAM-
BUILDING**



**PROPOSAL
DEVELOPMENT**

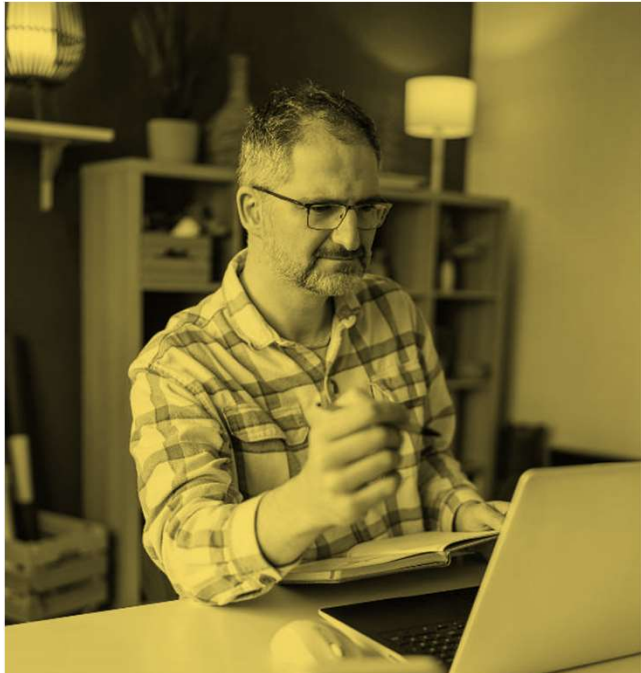


**MENTORING &
COACHING**



**SEED
FUNDING**

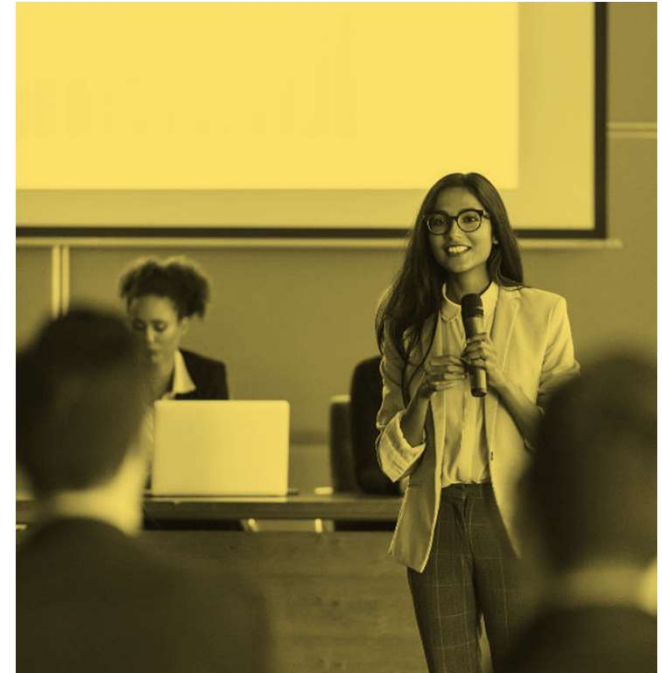




**RESEARCH
INFRASTRUCTURE
ASSESSMENT TOOL (RIAT)**



**COMMUNITY OF PRACTICE
(CoP)**



**CULMINATING ACTION
PLANNING MEETING (CAP)**



CISE RESEARCH EXPANSION Grantees Meeting

**60+ AWARDS
REPRESENTED**

**32 HISPANIC-
SERVING
INSTITUTIONS**

**19 HISTORICALLY
BLACK COLLEGES
& UNIVERSITIES**

**3 ASIAN AMERICAN
& NATIVE AMERICAN
PACIFIC ISLANDER-
SERVING
INSTITUTIONS**

Impact & Reach

6

AWARDS

390+

PARTICIPANTS

150+

INSTITUTIONS



ASEE

We help our members thrive!



Questions?

Dr. Jacqueline El-Sayed, CEO
American Society for Engineering Education
j.elsayed@asee.org

