

COLLEGE OF ENGINEERING AND MATHEMATICAL SCIENCES

Inclusive Excellence Action Plan 2023-2028

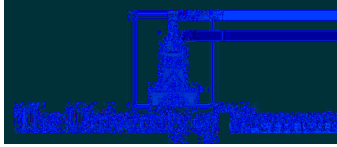
INTRODUCTION

Inclusive Excellence Committee/Implementation Team Members and College of Engineering and Mathematical Sciences (CEMS) Diversity, Equity, and Inclusion (DEI) Committee:

KC Williams	Asst Dean, Equity, Belonging, and Student Engagement	CEMS and DEI Committee
Bree Mathon	Sr. Lecturer, Civil and Environmental Engineering	CEMS and DEI Committee

CEMS DEI Committee:

Name	Title	
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Unit(s) within College, Division, Department or Unit

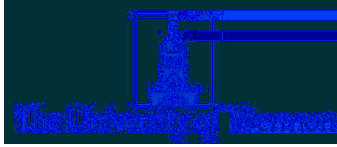
- x Civil and Environmental Engineering Department
- x Computer Science Department
- x Electrical and Biomedical Engineering Department
- x Mathematics and Statistics Department
- x Mechanical Engineering Department
- x Physics Department
- x Dean's Office which includes:
 - o Administrative Support
 - o Equity, Belonging, and Student Engagement
 - o Laboratory Safety and Support
 - o Student Services

A Vision of Responsible and Equitable Development and Implementation of Technology

UVM's College of Engineering and Mathematical Sciences will create a more sustainable and equitable future through its excellence in education and research focused on solving the complex problems facing our world. The College's graduates will be recognized for: their acumen in discipline, interpersonal and inclusive communication skills, commitment to a just world, lifelong learning, creativity, and actively empathetic leadership.

The Mission of CEMS @ UVM

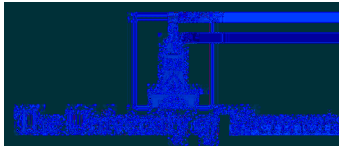
UVM's College of Engineering and Mathematical Sciences is an open and conscientious intellectual community focused on excellence and committed to its public responsibilities as part of a comprehensive land grant institution. The College's mission is to:



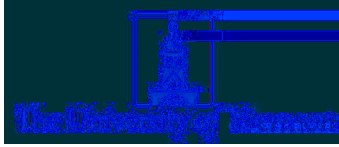
SIX PART STRATEGY FOR DEI SUCCESS

Part 1 – Academic Success Goals and/or Co-Curricular Learning

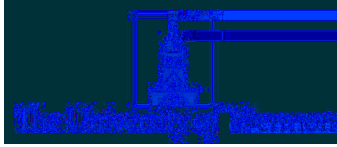
Since 2018, CEMS has increased its financial investment in DEI for student support. The new office of Equity Belonging and Student Engagement (EBSE) has a full-time staff member, plus two graduate assistants. We have supported student groups including NSBE (National Society of Black Engineers), SWICS (Society of Women in Computer Science), and SWE (Society of Women Engineers). We have grown the summer bridge program to include CEMS students (a few a year) that is run by the MOSAIC center



Create coordinated graduate student office hours and locations in the early evening sudent		
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Part 2



- b. [CEMS Study C.A.T.S.](#) (Connect. Achieve. Thrive. Succeed.) The Study CATS program started at the University of Vermont (UVM) in the College of Engineering and Mathematical Sciences (CEMS) in Fall 2020. It is an academic success program designed to support first- and second-year CEMS students who have a cumulative GPA of 2.3 or below with the goal of increasing CEMS retention by reducing the number of students who transfer to another college or who do not meet the academic requirements for continuing their degree or for graduation from CEMS.
 - i. Students are automatically enrolled in Study CATS when they reach a 2.3 cumulative GPA with the hopes of supporting students before their GPA is low enough for the student to be at risk for academic dismissal.
 - ii. The program focuses on connecting students with academic and holistic campus resources and supporting students to develop more effective study habits and time management skills.
 - c. Provides professional development (including inclusive excellence training) for our student club leaders
 - d. Conducts professional development for our faculty
 - e. Participates in Admitted Student Visit (ASV) days
 - f. Provides support for students and faculty from underrepresented groups in STEM, as well as faculty in CEMS looking for ideas and assistance with incorporating inclusivity into their course/lab materials, adjusting their classroom environment, and managing other DEI issues.
4. We have provided many workshops for our faculty to encourage their participation in creating more inclusive classrooms and provided a library of articles and journals to assist with implementation.
 5. We have begun DEI cultural competency discussions for our professional development for our faculty committee that decides whether students on trial are dismissed.
 6. We have a regular DEI moment at the College meeting that brings reminders to our faculty on cultural awareness, best practices, and more.
 7. We have begun more regular faculty advisor training and asked all faculty to ask at least three career readiness questions as part of their advising. The questions to ask are sent out annually.

We are supporting a full FTE (Full Time Equivalent) worth of staff in the UVM Extension office to help us improve our K-12 pipeline programs and ensure that they reach across the State.

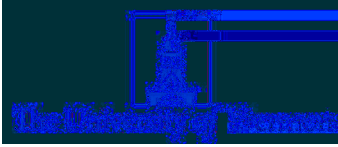
Recruitment and Retention SMART Goals



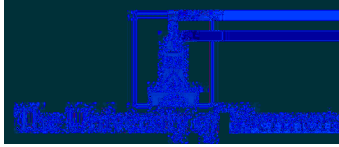
Numerous CEMS goals in this area overlap with our academic goals mentioned earlier. Our role as a college in recruiting is limited to our partnership with Enrollment Management on ASV days, tours, individual meetings with applicants, writing handwritten letters, and much more. Our Office of Student Services and our Office of Equity, Belonging, and Student Engagement focus on student retention. Our data shows that creating a welcoming space is a key area of focus for us to both recruit and retain students from students traditionally underrepresented in STEM. Our specific goals:

1. Increasing the percentage of undergraduate women to 35% by 2028, and the BIPoC students to 20% by 2028

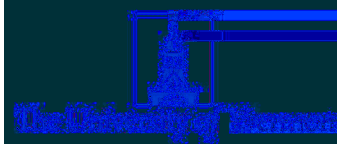
Sub Goal and Action Items	Responsible Group	Time Frame
Develop a cohort-based program for students of color modeled after the Meyerhof Program that will house them together and provide added advising and career readiness support. It would require participation in research and/or internship programs and focus on building a community of learners of color in STEM.	x CEMS Dean's Office & Provost's Office	x No later than fall 2024. Note: This depends on securing an external grant in this space.
Create a Student DEI Advisory Board. Students can run their own meetings/have discussions about current issues/successes, schedule talks by underrepresented identities in STEM.	x CEMS DEIC	x Spring 2023
Continue the practices listed at the start of this section around faculty and staff professional development and those described in the next section. Work to make those more action oriented.	x CEMS Dean's Office and The Office of Equity Belonging and Student Engagement	x Ongoing
Work with NSBE, SWICS and SWE to create a comprehensive interdisciplinary set of professional development opportunities that also help build community.	x CEMS Dean's Office and The Office of Equity Belonging and Student Engagement	x Start Fall 2023



2.



To provide ongoing faculty advisor training



5. To welcome new faculty and staff and help them understand the University's structure and functions and what is available to them as appropriate. (This is in addition to the more formal mentoring program already in place).
6. To support piloting common graduate student TA office hours in coordinated spaces in the early evenings.
7. To take seriously the components of an RPT document that discuss a faculty members participation in and commitment to DEI when voting on RPT cases.

In addition, the staff of CEMS agree to the following:

1. To attend at least one workshop a year that has DEI-related content offered by the Provost's Office, CTL, or CEMS.
2. To intervene when they observe behavior that is inappropriate or harmful. This can be done in private, or can be done by asking a clarifying question, with the goal of creating dialog. Professional development in this space will be made available.
To reach out to new staff with similar roles and offer informal mentoring.

The CEMS leadership (Chairs and Dean) agrees to:

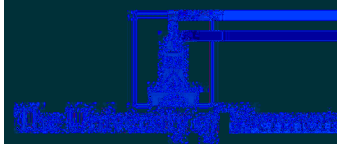
1. Review faculty participation in DEI and other professional development and hold their faculty accountable for engagement in DEI.

Work with faculty as they innovate, trying and failing forward, towards inclusive pedagogical advances in creating inclusive classrooms and laboratories.
3. Provide financial support and guidance for the initiatives listed above.
4. Provide time annually at a College meeting for faculty (TT/NTT) and staff to discuss issues and concerns or challenges to the IEAP.

Part 4 – Accessibility

“Universal Design is the design and composition of an environment so that it can be accessed, understood, and used to the greatest extent possible by all people regardless of their age, size, ability, or disability. An environment (or any building, product, or service in that environment) should be designed to meet the needs of all people who wish to use it. This is not a special requirement, for the benefit of only a minority of the population. It is a fundamental condition of good design. If an environment is accessible, usable, convenient and a pleasure to use, everyone benefits. By considering the diverse needs and abilities of all throughout the design process, universal design creates products, services and environments that meet peoples' needs. Simply put, universal design is good design” (What is Universal Design, 2020).

Our primary goal is to create accessible classrooms, laboratories, and advising spaces for students, faculty, and staff



neurodivergent or have cognitive differences.		
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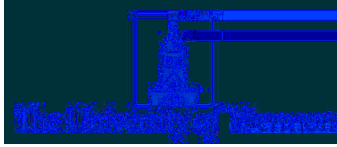
Part 5 – International Inclusion and Global Education

CEMS has a significant population of international faculty, staff, and students. In addition, students study abroad, and faculty spend sabbaticals abroad. We have been doing the following to support faculty transition, and grow the graduate student community, but there is significantly more to do. We currently:

- x Have a formal tenure track faculty mentoring program. Faculty meet annually with their chair off cycle for non-evaluative feedback. In addition, chairs are available regularly for consultation. The Dean meets annually with junior faculty in small groups with the Associate Dean of Research (ADR), and the ADR also meets with junior faculty one-on-one. New TT faculty receive a set of workshops on teaching, advising, and writing research grants.
- x Have an informal lecturer / senior lecturer mentoring program. In addition, new lecturers receive workshop on teaching and advising.
- x We hold a CEMS-only graduate student orientation day.
- x We have initiated a graduate student council to plan social events and provide feedback on programming.
- x We have begun professional development programming for the graduate students.
- x We have hired a Graduate Program Director to support students and to act as an independent advisor.

Our goal is to more fully develop these programs and continue to hear from students through the graduate council about student needs.

Sub Goal and Action Items	Responsible Group	Time Frame
Include international students studying abroad at UVM from specific exchange locations in the recruitment efforts for UVM study abroad. This will provide these international students with an important opportunity to share their stories and will provide UVM students with a unique opportunity to learn more	x Student Services	x FY 23

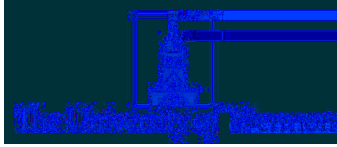


about their intended study abroad program.		
Work to identify at least one travel study course taught by a CEMS faculty member and will include a component of global education specifically tied to the mission and values of CEMS.	x Department Chairs and Dean's Office	x FY 24
Encourage a faculty or staff member from CEMS to lead a Global Trek trip.	x Department Chairs and Dean's Office	x FY 24
CEMS Student Services will have a dedicated advisor who serves as a primary or secondary advisor for all undergraduate international students, who will also serve as a liaison to campus partners (Office of International Education, similar advisors across academic units, Residential Life, etc.).	x Student Services	x Ongoing
The CEMS DEIC will incorporate international cultural awareness in the College meeting DEI moments.	x DEIC	x FY 23
CEMS Student Services and EBSE will collaborate to provide programming designed to build community within the international student community and within CEMS as a whole.	x EBSE and Student Services	x FY 23

Part 6 - Building Faculty and Staff Community

CEMS has regular college meetings, a December and a May college event that includes a luncheon, and Departments have their own traditional events. Regular coffee events have not been successful, but coupons for groups of 3 or more to get coffee have had some use. We have also had one or two staff only events. We have worked to include some wellness (Yoga, plants) into CEMS programming. The overall goal would be to provide more options for faculty and staff to gather and get to know each other either in formal or informal settings.

Sub Goal and Action Items	Responsible Group	Time Frame
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Build staff and faculty community by working together with departmental social committees to find options that are inclusive and accessible.	x Department Chairs, Faculty	x Launch summer 2023
Identify areas where staff and faculty can work together or create something together to build camaraderie.	x Create a college-wide committee	x Launch summer 2023
Creative active learning activities in college meetings for people to meet each other and learn more about each other.	x Dean x Presenters	x Spring 2023
Incorporate fun and esprit de corps into College meetings.	x Chairs x Dean x Presenters	x Spring 2023
Better communicate to the public how we as a community and team are contributing to important societal solutions through excellent stories, social media, and more.	x Dean's Office, department chairs, staff	x Launch summer 2023