

## Introduction

The University of Vermont's College of Engineering and Mathematical Sciences (CEMS) is committed to continuing to build a culture of inclusive excellence in the college. The number of women in the college has increased from approximately 18% to 31% in the first-year class over the last 5 academic years. Currently, women graduate at a higher rate than men in the college. Overall, our 1-year retention rate has increased from 85% to 89%, but our college's six-year graduation rates hover around 72%. In our college, students from historically underrepresented groups have significantly lower retention and graduation rates which vary widely due to the small numbers.

In our college, 28% of our faculty are women (not including research professors) and 5% belong to historically underrepresented groups.

As part of our new strategic planning initiative, diversity and inclusion emerged as the second most important major initiative. In our [strategic plan](#) (Spring 2019) the second goal is to work towards developing a college that is open and affirming for all. The desired outcomes are listed below:

### A College that is Open and Affirming for All

CEMS is committed to a welcoming atmosphere for all faculty, staff, and students. We believe diversity and inclusion are a critical component to solving the world's grand challenges.

#### Desired Outcomes:

- Parity in retention and graduation rates no matter a students' background or identity.
- Increase in our retention rate to 90% and our 6-year graduation rate to 80%.
- Increase the percentage of undergraduate women and underrepresented minority students (40% women and 10% underrepresented minority students in the first-year class by 2025).
- A student, faculty, and staff culture that embraces diversity, inclusion, respect, and collaboration.

The following summarizes our actions to achieve these outcomes

## New Annual Events:

1. Diversity workshop for faculty and staff on inclusive excellence at our January College meeting.
2. Financial and staff support of student travel to conferences focused on supporting students from underrepresented groups

3. Discussion of inclusive excellence during faculty and staff annual evaluations and RPT and advising surveys, starting in FY 20.
4. A diversity and inclusion committee to review and provide recommendations
5. Co-sponsorship of programming across campus on diversity and inclusion. To date these have been invited speakers and student programs run by other groups on campus.

## Pillar One: Academic

*Overarching Goal: Parity in graduation rates for students regardless of their background*

### Recent Diversity and Inclusion Activities:

1. Diversity workshop in the College Meeting on implicit bias and microaggressions
2. \$10,000 of support for the new National Society of Black Engineers chapter to support travel to both the regional and national conference.
3. Supported travel to the [Grace Hopper Conference](#) for underrepresented groups in Computer Science (we recently received the funding for next year so this will continue) and our continued participation with [BRAID](#).
4. Student Services attended [McKnight Fellows Conference](#) last fall, which was geared toward recruitment of current graduate students from historically underrepresented groups who were seeking to continue in academia.
5. In the selection process for last year's and this coming year's recipients of the CEMS Scholarship, we gave preference to qualified women and historically underrepresented groups.
6. For the past three years, we've been sending representation from CEMS Student Services to the annual [NACAC STEM College Fair](#) in NYC, which attracts a diverse population of prospective students and parents from the NY metro area.

### Year 1 (2019-2020) Action Items:

1. Create, empower, and support the work of a CEMS Diversity and Inclusion Committee of 3 students, 3 staff, and 3 faculty members to identify opportunities for CEMS to build a stronger culture of inclusive excellence. The Dean will meet with this group each semester.
2. Begin planning for (and raising funds for) a cohort-based program to recruit and retain students from underrepresented groups.
3. Offer and strongly encourage participation in workshops at our pedagogy workshop on Universal Design for Learning and ADA compliance.

### Year 2-3 (2020-2022) Action Items:

1. Continue to empower and support the work of the Diversity and Inclusion committee and then revise the action plan based on their recommendations each year.
2. Work with the University to pilot a cohort-based program to recruit and retain students from underrepresented groups, and assign at least a .5 FTE staff member position to support this program.

3. Work with the University to develop Student Success workshops that would be made available for all students to help build academic study skills and confidence.

## Pillar Two: Community

Overarching Goal: A College that is open and affirming for all

### Recent Diversity and Inclusion Activities

1. Diversity workshop at the January College Meeting on implicit bias and microaggressions
2. Revamped hiring process that included [best practices from U. Michigan](#) on the interview evaluation process. (Of the 8 faculty who accepted during the 2018-2019 academic year, 4 are women or from an underrepresented group).
3. \$10,000 of support for the new National Society of Black Engineering (NSBE) student chapter.
4. Financial support for a variety of diversity programming run by other groups on campus.
5. Partnered with RSENR and the Peace & Justice Center to train graduate students on diversity & inclusion during orientation. (This training was required for all Graduate Teaching Assistants (GTAs)).

### Year 1 (2019-2020) Action Items:

1. Educational and Outreach activities to K-12 groups to increase the pipeline of students interested in STEM with a focus on school systems with a more diverse student body. This is evolving, but currently includes a robotics club with Winooski High School.
2. Continued financial and workload support of faculty participating in inclusive excellence activities that align with the College's IE Action Plan.
3. As new positions for hiring become available, continue to aggressively recruit faculty from historically underrepresented groups.
4. A Diversity in the Workplace workshop is built into the new Graduate Career Series that we're developing for CEMS graduate students. This is for their professional development (in addition to the GTA training for students to help them as they interact with undergraduates).

### Year 2-3 (2020-2022) Action Item:

1. We will continue to focus on the activities in Year 1 and expand as suggested by our new Diversity and Inclusion Committee.

## Pillar Three: Environment

Overarching Goal: Accessible curriculum and spaces

### Recent Diversity and Inclusion Activities

1. Swapping of space to enable the development of a larger and more impactful student services space connected to our student lounge space that ensures ADA accessibility.

2. New classrooms with technology that can better enable students access to class-based material. This includes classrooms that support active learning, and the ability for faculty to create a flipped classroom experience.

**Year 1-3 (2019-2022) Action Items:**

1. New classrooms (see #2 above).
2. Offer and strongly encourage participation in workshops at our pedagogy workshop on Universal Design for Learning and ADA compliance

## Pillar Four: Operations

Overarching Goal: Operations that support and evaluate inclusive behavior

**Recent Diversity and Inclusion Activities**

1. Inclusion of advising activities as part of the annual evaluation process for faculty.

**Year 1-3 (2019-2022) Action Items:**

1. Comprehensive document review to ensure that inclusive excellence criteria are present in the advising survey, RPT, annual review, staff performance appraisals, course evaluations, and onboarding of new employees.

## General Information

1. **Dean:** Linda Schadler
2. **Person submitting plan on behalf of College:**

Name: Linda Schadler  
Title: Dean  
E-mail address: linda.schadler@uvm.edu  
Phone number: 802-656-7889

3. **Departments within the College:**
  - a. Mathematics and Statistics
  - b. Computer Science
  - c. Civil and Environmental Engineering
  - d. Electrical and Biomedical Engineering
  - e. Mechanical Engineering
4. **Implementation team members (including team lead/chair):**

Name	Title	Department/Office/Unit
Linda Schadler	Dean	CEMS
Lisa Dion	Lecturer	Computer Science
Dan Bentil (starting Fall 2020)	Associate Professor	Mathematics and Statistics
Rachel Oldinski	Associate Professor	Mechanical Engineering
John Lens	Lecturer	Civil and Environmental Engr
Matt Manz	Academic Advisor for International and Special Programs	CEMS Student Services
Barbara Asiiimwe	Administrative Assistant	Mathematics and Statistics
Katarina Khosravi	Administrative Assistant	Electrical & Biomedical Engr
Students (to be chosen this fall)		