THE COLLEGE OF ENGINEERING AND MATHEMATICAL SCIENCES
http://www.uvm.edu/~cems/

The college offers stimulating, professionally-oriented programs for students interested in careers in engineering, computer science, mathematics, statistics and data science. An engineering education combines the study of mathematics and the physical, life, and engineering sciences with application to the analysis and design of devices, equipment, processes, and complete systems to serve the needs of humanity. The breadth and flexibility of the engineering programs at UVM provide a sound background for engineering practice in public or private domains, for graduate study in engineering and science, and for further professional study in such fields as business, law, or medicine. Computer science develops creative problem-solving ability, along with essential skills in current programming and computing environments. It offers the flexibility to gear studies toward business, science, engineering, mathematics, and the arts. The study of mathematics and statistics is designed to train students in critical thinking, problem solving, and sound reasoning, while developing a strong level of technical competence and a substantial breadth of exposure to other fields. Data science is a unique, interdisciplinary educational program that combines studies in computer science, mathematics and statistics to prepare students for careers in big data science and analytics, rapidly growing fields with huge unmet demand. Degrees in each of the CEMS disciplines provide distinctive recognition based on challenging course work, valuable field experience, and intensive student-faculty interaction.

HONORS THESIS PROGRAM

The undergraduate Honors Thesis program, designed for the superior student with unusual initiative and intellectual curiosity, provides an opportunity to pursue a special program without the restrictions of classroom routine. The Honors Thesis program consists of reading, research, design, or creation in a curricular area of the student’s choice, leading to a written thesis. At the time of graduation, the student’s transcript and the graduation program will be appropriately denoted with “Honors Thesis” and the title of the thesis, provided that Honor’s level performance has been demonstrated.

The student must be matriculated in the college at the time of application for the program and have a cumulative grade-point average of at least 3.00 for sophomore and junior work.

A thesis committee consists of at least three UVM faculty members, at least two of whom are from the offering area. The chair of the committee, a permanent UVM faculty member, is also from the offering area. The thesis proposal must be approved by the student’s thesis committee prior to the Add/Drop deadline of the student’s first semester of matriculation into the Honors Thesis Program. The thesis committee advises the student, approves of the thesis proposal, and approves of the oral defense of the thesis. The course grade is assigned by the committee chair based on consultation with the thesis committee. Six credits of effort are expected for the thesis, usually apportioned evenly over two semesters. Some programs within the college require senior projects as part of their prescribed curricula. Such projects can provide alternative opportunities to students interested in a design or research challenge.

MAJORS

- Biomedical Engineering B.S.BME.
- Civil Engineering B.S.CE.
- Computer Science B.S.CS.
- Computer Science and Information Systems B.S.
- Data Science B.S.
- Electrical Engineering B.S.EE.
- Engineering B.A.E.
- Engineering B.S.E.
- Engineering Management B.S.EM.
- Environmental Engineering B.S.EV.
- Mathematics B.S.MSC.
- Mechanical Engineering B.S.ME.
- Statistics B.S.MSC.

MINORS

- Computer Science
- Electrical Engineering
- Geospatial Technologies
- Mathematics: Pure
- Statistics

REGULATIONS

ACADEMIC STANDARDS IN CEMS

The required minimum semester and cumulative grade point average (GPA) for good academic standing in the College of Engineering & Mathematical Sciences (CEMS) is 2.00. Additional regulations for each CEMS degree are outlined in the individual department, program or degree sections of this catalogue.

Academic performance is reviewed at the end of each regular (fall and spring) semester. CEMS Student Services – a division of the CEMS Dean’s Office – is responsible for reviewing academic performance and notifying students who are not in good academic standing. Notification of trial status and dismissal for low scholarship is sent to the student’s UVM email account.

Criteria for Placement on Trial

A student earning less than a 2.00 semester or cumulative GPA will be placed on trial.

Criteria for Continuation on Trial

A student who has been on trial for one or more semesters but does not meet the criteria for removal from trial or dismissal for low scholarship (see below) will be continued on trial.
Criteria for Dismissal for Low Scholarship
A student earning less than a 2.00 semester GPA for two successive semesters, or less than 2.00 cumulative GPA for three successive semesters will be dismissed for low scholarship. A student will be dismissed for low scholarship only after the student has been on trial for the preceding semester.

Appealing Dismissal for Low Scholarship
A student who has been dismissed for low scholarship normally has the opportunity to appeal the dismissal in writing to the CEMS Studies Committee within the timeframe stipulated in the dismissal letter. As a condition of a student’s reinstatement following an initial dismissal, the CEMS Studies Committee may prohibit a future dismissal appeal as specified in the student’s reinstatement letter.

Criteria for Removal from Academic Trial
A student who has been Placed on Trial or Continued on Trial is Removed from Trial when both the semester and cumulative GPA are 2.00 or higher.

DISMISSAL FOR LOW SCHOLARSHIP
First Dismissal
A student who is dismissed for low scholarship for the first time is dismissed from CEMS and UVM for a full academic year. If dismissal occurs at the end of fall semester, the student will be suspended from continued enrollment through the end of the following fall semester. If dismissal occurs at the end of spring semester, the student will be suspended from continued enrollment through the end of the following spring semester. (Note: A student dismissed at the end of spring semester is eligible to return in the summer or fall term of the following year).

Second Dismissal
A student who is dismissed for low scholarship for the second time is dismissed from CEMS and UVM for two full academic years.

Third Dismissal
A student who is dismissed for low scholarship for the third time is dismissed from CEMS and UVM. The third dismissal for low scholarship is final.

READMISSION AFTER DISMISSAL
A dismissed student who presents evidence of the ability to perform satisfactorily may be considered for readmission on trial. A student who has been dismissed for low scholarship for a second time will not be considered for readmission on trial until at least two years have elapsed. A student who has been dismissed for low scholarship for a third time will only be considered for readmission if the student is granted an Academic Reprieve. Further information regarding readmission may be obtained from CEMS Student Services.

A student must earn a minimum 2.00 semester GPA the first semester back. A student must raise the cumulative GPA to at least 2.00 by the end of the second semester back, or earn a minimum semester GPA of 2.50 during the second semester back and all subsequent semesters until the cumulative GPA is 2.00 or higher. A student who fails to meet these academic performance requirements will be dismissed for low scholarship.

For additional information on academic standing and the trial, dismissal and readmission processes, please contact CEMS Student Services.