# Computational Science, Engineering, and Mathematics (CSEM) Graduate Program

# Graduate Student Handbook

Master of Science in Computational Science, Engineering, and Mathematics (MSCSEM)

and

Doctor of Philosophy (PhD)

Academic year 2024-25

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## 1.0 Introduction

## 1.1 Purpose of this Handbook

The Oden Institute for Computational Engineering and Sciences houses the premier graduate program in Computational Science, Engineering, and Mathematics (CSEM). This document outlines the formal requirements and informal guidelines for the CSEM Graduate Program and articulates both Oden Institute policies as well as Graduate School and CSEM program requirements. Each student is personally responsible for becoming familiar with the University rules and requirements contained in the Graduate Catalog as well as the General Information Catalog. Deadlines for completion of requirements and the filing of essential forms are enforced by the Program and by the Graduate School; the student bears the sole responsibility for learning all appropriate deadlines and meeting them. This document is intended to to be used as a reference for questions about the CSEM graduate program.

## 1.2 Organization and Administration of the Graduate Program

#### **Oden Institute Director** – Karen Willcox

The director sets policies on a variety of academic and research issues and administers the Institute's budget.

#### Graduate Advisor - George Biros

The Graduate Advisor is appointed by the faculty and is responsible for the graduate program within the Institute, including admitting, recruiting, and advising graduate students who intend to obtain a degree in CSEM.

The Graduate Advisor represents the Vice President and Dean of Graduate Studies in all matters pertaining to the graduate program. Administrative and supervisory functions are discharged by the Graduate Advisor, who also serves as liaison with the Graduate Studies Committee. The Graduate Advisor's functions extend from monitoring progress to offering advice about financial support, course work, degree requirements, and employment.

#### Graduate Studies Committee Chair - Todd Arbogast

The GSC Chair presides over all GSC meetings. All matters concerning policy and legislation affecting graduate studies should be addressed to the GSC Chair.

#### **Graduate Studies Committee (GSC)**

The GSC consists of all members of the faculty who are deemed qualified to supervise the dissertations of CSEM students and are eligible to solely supervise students. All dissertation committees must include at least three GSC members (in addition to the supervisor.) The GSC is officially in charge of the academic affairs of the graduate program. The current CSEM GSC members may be found by searching the Oden Institute directory (filter: GSC Faculty) at: <u>https://www.oden.utexas.edu/people/directory/</u>.

#### Graduate Studies Subcommittee (GSSC)

The CSEM GSSC serves as the oversight committee of the GSC and is comprised of 12 members plus the Graduate Advisor. The GSSC includes at least 3 representatives from

each CSEM Area (A, B, and C) who serve 3-year terms. The GSSC meets monthly during the Fall & Spring semesters to review program requirements, approve abstracts, review student petitions, and attend to business on behalf of the GSC. To communicate with the GSSC, students may contact the Graduate Coordinator.

Waivers of requirements, extensions of deadlines, and transfers of credit are acted on by the GSSC in response to graduate student petitions.

#### Graduate Coordinator – Stephanie Rodriguez

The Graduate Coordinator is responsible for all administrative duties surrounding the graduate program and reports to the Graduate Advisor and GSC Chair.

The Graduate Coordinator manages the day-to-day operations of the graduate program. Responsibilities include responding to applicant and student inquiries, handling petitions and special requests, coordinating admissions, registration, course scheduling, fellowship administration, international student support, and maintaining graduate student records.

#### **CSEM Student Representatives**

The CSEM student representatives are elected to represent the student body to faculty, staff, and the wider university. They assist with student recruitment and organize social and outreach events for graduate students in the program. Elections are held annually in the Spring semester for the upcoming academic year. See Appendix A for an overview of the student representative roles and responsibilities and election process.

## 2.0 Registration Information

#### 2.1 Registration

Students register for classes through the Registrar's website during their assigned access periods every semester: <u>https://onestop.utexas.edu/registration-and-degree-planning/registering-for-classes/</u>.

It is the student's responsibility to be aware of the registration deadlines and requirements.

#### 2.2 Course loads

Full-time registration for graduate students is 9 credit hours in Fall and Spring semesters and 3 credit hours in Summer. International students are required to be registered full-time, unless they are in candidacy and finishing their degree.

#### 2.3 Summer Registration

Summer registration is required for students who are: 1) employed in a student academic title; 2) are planning to graduate in the Summer; or 3) hold a Graduate School or Oden Institute fellowship that requires full-time registration. Full-time registration in the summer is 3 hours. Students wishing to receive student loans must be registered for 6 hours in order to be eligible to receive them.

#### 2.4 Grades and GPA requirements

The Graduate School requires all graduate students to maintain a cumulative graduate GPA of at least 3.0. If your cumulative GPA falls below 3.0, the Graduate School will place you on probation. You will have one semester to raise your cumulative GPA above 3.0 or be dismissed from the program.

The CSEM doctoral program has additional GPA requirements which are outlined in section: 3.4 Course Work.

#### 2.5 Credit/No Credit

Some course work may be taken on a Credit/No Credit (CR/NC) basis; the requirements and methods of evaluation are the same for students taking a course CR/NC as they are for a student taking the course for a grade. A performance at the level of C or above is required to earn credit (CR). No more than 20% of courses counted on the Program of Work may be taken on the CR/NC basis.

#### 2.6 Incomplete grades

If a student does not complete all the assignments before the end of the course, the instructor may report the symbol X (temporary incomplete) to the registrar in place of a grade. The student must then complete the course requirements by the last class day of the next long-session semester of enrollment. The instructor must report a final grade by the end of the grade reporting period in that semester. If these deadlines are not met, the symbol X is converted to the symbol I (permanent incomplete). The symbol I cannot be converted to a grade, and when the symbol I is recorded, the symbol X also remains on the student's record.

#### 2.7 Continuous Registration

The Graduate School requires that all graduate students be continuously registered for all long semesters (Fall and Spring) until completion of the degree.

#### 2.8 Add/drop Procedures

Adding a course – During the first four class days of a long semester, students may add courses online. During the 5<sup>th</sup> through the 12<sup>th</sup> class days, students must have the approval of the department in which the course is offered. The 12<sup>th</sup> class day is the last day to add a course. After this date, students may not add a course, except for extenuating circumstances as approved by the Graduate Advisor and Graduate Dean or for doctoral students switching to dissertation hours after being admitted to candidacy. Rules are similar for summer, but with shorter deadlines.

*Dropping a course* – With the required approvals, a student in good standing may drop a course through the last class day of a semester. Students employed as Assistant Instructors, Teaching Assistants, and Graduate Research Assistants and students on Graduate School or Oden Institute fellowships may not reduce their course load to less than full-time status.

*Delete drop* – Through the  $4^{\text{th}}$  class day, a student may delete drop a course through the online registration system and receive a full refund. During the  $5^{\text{th}}$  through the

12<sup>th</sup> class days a student may delete drop a course through the department offering the course with a full refund.

Q drop – From the 13<sup>th</sup> through the 20<sup>th</sup> class day of a long semester, a student may drop a course with the approval of the Graduate Advisor and the Graduate Dean, but without a refund. A Graduate Add/Drop form signed by the Graduate Advisor must be submitted to the Graduate Dean for approval. Courses dropped during this period will appear on the student's transcript with the symbol Q. Courses assigned the symbol Q appear on the transcript, but are not included in the student's GPA.

Q or F drop – After the 20<sup>th</sup> class day of the Fall and Spring semesters through the last class day the instructor will determine whether the symbol Q or a grade F will be recorded. Courses assigned the symbol Q appear on the transcript, but are not included in the student's GPA.

#### 2.9 **Registration holds**

A hold is a code placed on a student's record that prevents registration. Any holds will be listed on the student's <u>Registration Information Sheet</u> (RIS). Registration holds may include:

*Advising* – All students in the CSEM Program will have an advising hold every semester and must be advised by their advisor and the Graduate Advisor before registering for classes (exceptions: doctoral students in candidacy and doctoral students who have completed their Area A, B, and C course work.)

*Financial* – In most cases, financial holds may be paid online at the <u>What I Owe</u> page.

*Nonfinancial* – You must resolve a nonfinancial hold in person at the administrative office that imposed it.

#### 2.10 Completing Registration

Once students have registered for classes, the tuition bill may be viewed at: <u>https://utdirect.utexas.edu/apps/studentfinancials/mytuitionbill/</u>.

A student's registration is not complete until payment has been made and/or attendance has been confirmed.

If students do not confirm attendance by the registration deadline, their registration will be cancelled, and they will have to pay a late registration fee to re-register.

## 3.0 Doctoral Degree Requirements

## 3.1 Overview

The University of Texas at Austin offers the degree Doctor of Philosophy with a major in Computational Science, Engineering, and Mathematics (CSEM). Within this graduate studies program, each student must develop a program of study and research in Computational Science, Engineering, and Mathematics that includes a substantial component from each of the three CSEM concentration areas:

- Area A Applicable mathematics
- Area B Numerical analysis and scientific computation
- Area C Mathematical modeling and applications

The student must demonstrate breadth and proficiency in each of the three concentration areas. Research for CSEM dissertations must demonstrate an interdisciplinary theme and draw on knowledge from the CSEM disciplines and each of the three concentration areas.

#### 3.2 Degree Options

CSEM has two degree options. Upon entering the program, each student must select an option.

- The Computational and Applied Mathematics (CAM) option stresses the mathematical (Area A) side of the program, and is suited more to students with a solid undergraduate background in mathematics. This option also allows the student more time to explore and develop interests regarding an application topic for Area C.
- The Computational Science and Engineering (CSE) option stresses the application area (Area C) and allows more time to develop graduate level proficiency in applicable mathematics (Area A). This option is suited to undergraduate engineering, science, and business students who know generally the application area of their interest, but who desire a slower-paced introduction to the intellectual demands of graduate level mathematics.

#### 3.3 Advisors

Every student is required to have a faculty dissertation advisor (or co-advisors). The primary advisor must be chosen from the CSEM Graduate Studies Committee (GSC). The student must select an advisor willing to serve as a mentor, supervise the dissertation, and give advice on course work. A dissertation advisor does not need to be selected until the end of the second long semester of the student's studies. Prior to the selection of a dissertation advisor, the CSEM Graduate Advisor will appoint a faculty mentor who, along with the Graduate Advisor, will advise the student on course work and their progress in the program.

#### 3.4 Course Work

The student's overall cumulative grade point average must be 3.25 or better. The student must satisfactorily complete courses in the three CSEM concentration Areas A, B, and C. These requirements include 12 hours of approved graduate level course work

in each Area, taken for a letter grade. The student must achieve a grade point average of 3.25 or better in those courses. Moreover, in one of Areas A, B, or C, the student must achieve a grade point average of 3.5 or better. The student must complete all required course work by the end of the seventh long semester.

#### Area A Course Work

During the first full academic year of the program, the student must complete the following first year sequence, depending on the degree option.

#### CAM option:

Fall:	CSE 386C	Methods of Applied Mathematics I
Spring:	CSE 386D	Methods of Applied Mathematics II

#### CSE option:

Fall:CSE 386MFunctional Analysis in Theoretical MechanicsSpring:CSE 386LMathematical Methods in Science and Engineering

By the end of the seventh long semester, the student must complete two additional courses (6 credit hours) of graduate level course work approved by the Graduate Advisor. At least six credit hours of Area A course work must be earned in courses listed or cross-listed with the Mathematics Department.

#### Area B Course Work

During the first full academic year of the program, the student must complete the following courses:

Fall:	CSE 383C	Numerical Analysis: Linear Algebra
Spring:	CSE 383L	Numerical Analysis: Differential Equations
	<i>0r</i>	
	CSE 382M	Foundational Techniques of Machine Learning and Data
		Sciences

By the end of the seventh long semester, the student must complete two additional courses (6 credit hours) of graduate level course work approved by the Graduate Advisor. If deemed appropriate by the student's advisor and the Graduate Advisor, up to 3 credit hours may be earned at the undergraduate (upper-division) level.

#### Area C Course Work

During the first full academic year of the program, the student must complete the following first year sequence:

Fall:	CSE 389C	Introduction to Mathematical Modeling in Science &
		Engineering I
Spring:	CSE 389D	Introduction to Mathematical Modeling in Science &
		Engineering II

By the end of the seventh long semester, the student must complete two additional courses (6 credit hours) of graduate level course work in some application area consistent with the student's proposed research area, and as approved by both the student's dissertation advisor and the Graduate Advisor. If deemed appropriate by the student's advisor and the Graduate Advisor, up to 3 credit hours may be earned at the undergraduate (upper-division) level.

#### 3.5 **Preliminary Exams**

At the end of the first full academic year, the student is required to demonstrate a graduate level proficiency in CSEM Areas A, B, and C by taking and passing a written preliminary examination in each area. These exams cover the subject material of the first-year courses taken by the student.

A student failing any of the preliminary exams will be required by the examining committee to do one of the following:

- take a make-up exam before the start of the Fall semester
- repeat that particular exam the following year
- leave the program

#### 3.6 Dissertation Committee

The student and dissertation advisor must recommend to the Graduate Advisor a dissertation committee to pose the qualifying exam and evaluate the dissertation. The dissertation committee must consist of the advisor and at least four additional faculty members. The committee must include at least one CSEM Graduate Studies Committee faculty member representing Area A, a second representing Area B, and a third representing Area C, not including the student's advisor. Moreover, at least three of the committee members must represent distinct UT departments through positive time appointment. Per Graduate School rules, the committee must include at least one faculty member who is not the CSEM GSC. The Graduate Advisor must approve the composition of the committee.

#### 3.7 Dissertation Proposal

Before the end of the sixth long semester, the student must propose research for their PhD dissertation.

#### 3.8 **Proposal Abstract**

The student must write a concise abstract of the dissertation proposal. The abstract must address how each of the three CSEM Concentration Areas A, B, and C will be addressed in, and form an integral part of, the proposed research. The student must meet with each member of his or her dissertation committee to discuss the abstract, the expertise the committee member will contribute to the dissertation, and the background knowledge expected of the student, as well as the types of questions that might be asked at the proposal presentation (see Proposal Presentation section below.) The abstract must be signed by each member of the committee. Before the dissertation proposal presentation may be scheduled, this abstract must be submitted to and approved by the Graduate Studies Subcommittee (GSSC.) Submit the abstract in pdf format to the Graduate Coordinator who will make it available to the GSSC for review.

Abstract Guidelines:

- Length: 2 pages (total, not including title page).
- May be single spaced, 11-point font, 1-inch margins.
- List committee members on title page of the abstract.
- General background on the research area and identification of the problems to be addressed ( $\frac{1}{2} 1$  page).
- Discussion of Areas A, B, and C. It should be made clear what techniques will be used or developed and what outstanding issues will be addressed in each of these three areas. This part of the abstract must be written precisely; vague or ambiguous statements should be avoided as much as the current state of research makes possible (1 − 1 ½ pages).
- May additionally include short list of important references and courses taken in each area related to the research if it helps the reader understand the work better.

The overriding concern regarding the abstract is that it must represent a program of research involving an interdisciplinary theme that draws on knowledge from the three CSEM concentration areas. An abstract that describes merely disciplinary work is not acceptable.

#### 3.9 **Proposal Document**

The student must write the dissertation proposal and submit it to each member of the dissertation committee and to the Graduate Coordinator. The proposal must conform to the following set of requirements:

- Proposal must be set in 11- or 12-point font and conform to standard U.S. letter dimensions using 1-inch margins.
- <u>Title page</u>: The title page must contain the title of the proposed work, the date of the proposal presentation, and the name of the student, the dissertation advisor, and committee members.
- <u>Proposal abstract</u>: The two-page proposal abstract, as approved by the dissertation committee and the GSSC.
- Description of the proposed work: The body of the proposal is not to exceed 20 pages. The student should incorporate the following elements:
  - A description of the technical background and context needed to understand the proposed work, including a survey of the relevant literature;
  - A statement of the objectives, significance, and originality of the work;
  - A statement of work completed to-date;
  - A description of the work yet to be completed, including a description of the methodology or approach to be used, where appropriate.
- <u>References</u>: A list of references must appear, which contains items cited in the proposal and, optionally, other uncited references of a general nature related directly to the work.

- <u>CV</u>: The student must include a one- to two-page CV of their professional career to-date. The CV should include a listing of all degrees earned, papers published or in preparation, technical talks or posters presented in a professional setting, and other relevant information.
- <u>Timeline</u>: A timeline of the effort required to complete the proposed work should be given.
- <u>Appendices</u>: At most 10 pages of additional material may be included as appendices. This material is to be supplemental in nature only, and the committee may or may not read it.

#### 3.10 **Proposal Presentation**

Approximately two weeks after submission of the written dissertation proposal, the student is required to give a private, oral presentation of it to his or her dissertation committee. The presentation itself should be about 45 minutes in length. The committee will then examine the student to explore details of the proposal and to test his or her general background knowledge relevant to the proposed research, including the ability to integrate ideas from areas A, B, and C. The committee will expect somewhat greater depth and breadth in Area A as opposed to Area C for students in the CAM option, and the opposite for CSE option students.

The student's performance is satisfactory if the committee agrees, with at most one dissenting vote, that the student developed a sufficiently rich, original and interdisciplinary research program and demonstrated competence to complete the proposed research. In the event of an unsatisfactory performance, the committee is charged with explaining to the student the reasons that his or her performance was not satisfactory. The committee may impose requirements on the student, such as requiring changes to the proposal, additional course work, and/or another presentation to be given within one year.

#### 3.11 Admission to Candidacy

After completing the course work, examination, and proposal requirements, the student must submit a Graduate School application for candidacy. The Candidacy Checklist (Appendix B) outlines the steps covered in sections 3.6 - 3.11.

#### 3.12 Dissertation and Oral Defense

Generally, by the end of the tenth long semester (5<sup>th</sup> year), and definitely before the end of the fourteenth long semester (7<sup>th</sup> year), the student must prepare a written dissertation of their research results and give a copy to each member of the PhD dissertation committee and to the Graduate Coordinator. This dissertation must be presented in a seminar of about 45 minutes that is open to the public, and it must be announced publicly to CSEM faculty and students within the Oden Institute. Immediately after the presentation, the student will meet privately with the dissertation committee will judge whether the dissertation and the oral defense are acceptable.

Both the dissertation and the oral defense must follow appropriate Graduate School requirements and procedures.

#### 3.13 Seminar Attendance

Each doctoral student is expected to attend regularly the Oden Institute sponsored seminars. The GSSC will set the number required each semester.

#### 3.14 Annual Progress Reports

At the end of the academic year, each student is required to complete an annual progress report summarizing their course work, research activities, professional development, and financial support. Students not making satisfactory progress will be given specific requirements that must be met to return to good standing in the program.

#### 3.15 Probation

A student failing to satisfy the requirements of the program in a timely manner will be put on probation by the GSSC, and the student's progress will be monitored closely. The student will stay on probation until satisfactory progress is achieved. A student may stay on probation for a maximum of two long semesters. A student who has been on probation for a total of two long semesters and is found to be out of compliance with the timely requirements of the program will not be allowed to continue in the program.

#### 3.16 Appeals and Petitions

The student may appeal to or petition the CSEM GSSC for a waiver or alteration of any CSEM requirement, except for a waiver of an exam or a waiver of a Graduate School degree requirement. Written appeals or petitions may be submitted to the GSSC through the Graduate Coordinator, Graduate Advisor, or the CSEM Graduate Studies Committee Chair.

#### 3.17 Milestones

Doctoral students are required to review the degree plans for their program, along with information about specific degree requirements and estimated timelines to reach various benchmarks for the different degree plan specializations. A copy of the milestones for the CSEM doctoral program may be found in Appendix C.

After orientation, students must confirm that they have reviewed the milestones online by following these steps:

- 1. Go to your Graduate Degree Planner (https://utdirect.utexas.edu/ogs/gdp/index.WBX) and click on "See Your Program of Work At-a-Glance"
- 2. Click on the "Program of Work At-a-Glance" link associated with your CSEM PhD degree plan. You will get a display of the requirements associated with that degree plan.
- 3. At the bottom of the page is the Milestones section. Click the "I have reviewed the Milestones for my degree" button.

For complete instructions and an explanation of why this is required by the University, see: <u>https://gradschool.utexas.edu/academics/milestones</u>

## 4.0 Master's Degree Requirements (General)

#### 4.1 **Overview**

Students entering the Master's program are expected to have an undergraduate degree in engineering, computer science, mathematics, or a natural science such as physics or chemistry.

#### 4.2 Degree Options

The master's degree can be earned with approved course work and optionally, a report or thesis. The student may fulfill any of the following options:

- Thesis option: 24 credit hours of approved course work plus 6 credit hours of thesis preparation (30 credit hours total)
- Report option: 30 credit hours of approved course work plus 3 credit hours of report preparation (33 credit hours total)
- No Thesis/No Report option: 36 credit hours of approved course work without a thesis or report

Regardless of the option chosen above, the course of study must include 24 credit hours of approved course work chosen from courses in the three CSEM concentration areas: Area A (applicable mathematics), Area B (numerical analysis and scientific computation), and Area C (mathematical modeling and applications):

- At least six (6) hours in Area A
- At least six (6) hours in Area B
- At least six (6) hours in Area C
- Courses must be taken on a letter-grade basis

The student's overall grade point average must be 3.0 or better. All requirements of the Graduate School must also be fulfilled.

#### 4.3 Master's Reports & Theses

Each Master's Report or Thesis is developed under the guidance of a supervising committee with two or more members, one of whom is designated as supervisor. The Report or Thesis is subject to the approval of the committee and ultimately of the graduate dean. The supervisor or co-supervisor must be a member of the CSEM Graduate Studies Committee (GSC).

A report is a library project, reviewing what scholars have said about a particular topic, and a thesis is an original contribution to knowledge in which a novel analysis or argument is offered, a problem is analyzed using a new or previously untried framework, or data about a subject is collected and analyzed. The work required to produce the document is expected to be equivalent to 3 credit hours for a report and 6 for a thesis.

#### 4.4 Annual Progress Reports

At the end of the academic year, each student is required to complete an annual progress report summarizing their course work, research activities, professional development, and financial support. Students not making satisfactory progress will be given specific requirements that must be met to return to good standing in the program.

## 5.0 Master's Degree Requirements (5-year Integrated BSCS/MSCSEM program)

#### 5.1 Overview

The integrated BS CS / MS CSEM program enables students to earn a Bachelor of Science in Computer Science and a Master of Science in Computational Science, Engineering, and Mathematics within a five-year period. The BS in Computer Science prepares students with a strong foundation in computing. The MS in Computational Science, Engineering, and Mathematics complements the Department of Computer Science's focus on data with a strong emphasis on mathematics, scientific computing, and applications of computing to real-world problems. The CSEM Master's Program is a highly interdisciplinary program and consists of three concentration areas: Area A — applicable mathematics; Area B — numerical analysis and scientific computation; and Area C — mathematical modeling and applications. The BS CS and MS CSEM degrees will be simultaneously awarded upon completion of the MS CSEM degree requirements.

#### 5.2 **Degree Requirements**

The BS CS Option IV degree requires a total of 120 hours. The MS CSEM degree associated with this program requires a total of 30 hours. Combined, the degrees total 150 hours, spread out over five years.

The Master's degree requires 27 hours of graduate-level coursework plus 3 hours of Report preparation (30 hours total.) The course of study must include at least 18 credit hours taken for a letter grade and chosen from courses in the three CSEM concentration areas: Area A (applicable mathematics), Area B (numerical analysis and scientific computation), and Area C (mathematical modeling and applications):

- Six (6) hours Area A
- Six (6) hours Area B
- Six (6) hours Area C
- Six (6) hours Area A, B, or C or other technical/CSE elective
- Three (3) hours Elective course approved by CSEM Graduate Advisor
- Three (3) hours Master's Report

The student's overall grade point average must be 3.0 or better. All requirements of the Graduate School must also be fulfilled.

#### 5.3 Master's Report

Each Master's Report is developed under the guidance of a supervising committee with two or more members, one of whom is designated as supervisor. The Report is subject to the approval of the committee and ultimately of the graduate dean. The supervisor or co-supervisor must be a member of the CSEM Graduate Studies Committee (GSC).

A report is a library project, reviewing what scholars have said about a particular topic. The work required to produce the document is expected to be equivalent to 3 credit hours.

## 6.0 Computational Medicine Portfolio Program

#### 6.1 Overview

Graduate portfolio programs provide opportunities for enrolled graduate students to obtain transcriptable credentials in cross-disciplinary academic areas of inquiry while completing the requirements for a master's or doctoral degree in a particular discipline. Portfolio programs promote cross-disciplinary scholarship and study by bringing together faculty and students from a variety of disciplines whose interests transcend boundaries of traditional academic disciplines. The <u>Office of Graduate Studies</u> provides an overview of the university's general portfolio program requirements.

<u>Computational Medicine</u> is an emerging discipline that uses physics-based and datadriven advanced mathematical approaches to model complex systems across a spectrum of scales, from the molecular to cellular, to the organ to system levels of the human body, and even to the entire health care system. To accurately represent these complex systems, such modeling efforts need to capture the individuality of health and disease for accurate decision making at all levels, ranging from patient to policy. To do so requires substantial computational and mathematical skills, as well as detailed medical knowledge. The models can be theory-driven, knowledge-driven, or data-driven, or typically a novel combination of these.

The Computational Medicine Portfolio Program is intended for graduate students with strong mathematical and physical science backgrounds, but limited knowledge of biology and/or medicine, to pursue a program of study that will prepare them to interact knowledgably and collaborate productively with members of the medical community on interdisciplinary, cutting-edge research. It is important to realize that medicine itself is an enormous field, consisting of numerous subdisciplines, and Computational Medicine has become an important research direction in most of the larger subdisciplines. For these reasons, the Computational Medicine Portfolio will allow for the maximum flexibility to suit students whose interests reside within specific subdisciplines, which are currently Cardiovascular, Oncology and Neurology.

#### 6.2 Eligibility and Requirements

List of recommended portfolio courses may be found at: https://oden.utexas.edu/academics/computational-medicine-portfolio/

- Must be a currently enrolled, degree-seeking graduate student at the University of Texas at Austin
- Must be in good academic standing (minimum cumulative GPA of 3.0)
- Requires 4 courses (12 credit hours) taken from the list of Recommended Portfolio Courses (or approved alternatives)
- Requires at least 3 courses (9 hours) must be taken from at least 2 departments other than the student's major
- No more than 2 courses may be taken from the same department
- No more than 1 Independent Study course or Internship course may be used to satisfy portfolio requirements

## 7.0 Academic Policies

#### 7.1 Leave of Absence

Graduate students may apply for a leave of absence of no more than two semesters. Master's students and doctoral students not yet advanced to candidacy must obtain authorization from the Graduate Advisor for a Leave of Absence. Doctoral students in candidacy must receive approval from the Graduate Advisor and the Graduate Dean for a Leave of Absence. Additional information and forms are available from the Graduate School at: <u>https://gradschool.utexas.edu/academics/policies/leaves-of-absence</u>.

Students should contact the Graduate Coordinator to get the forms signed and obtain a petition letter from the Graduate Advisor, if required.

Leave of Absence forms must be submitted to the Graduate School *prior to the first class day* of the semester for which the leave is being requested. A student on leave may not use any university facilities nor is the student entitled to receive advice from any member of the faculty. A leave of absence does not alter the time limits for degrees or coursework.

#### 7.2 Grievance Policy

Grievance policies for the CSEM Program can be found in Appendix D.

#### 7.3 Parental Accommodation Policy

The Oden Institute has a Parental Accommodation policy which is outlined in Appendix E.

#### 8.0 Finances

#### 8.1 Fellowships

The Oden Institute and the Graduate School award and administer several fellowships for students in the CSEM Program.

Oden Institute Fellowships (summarized in Appendix F) include:

- CSEM Fellowship
- NIMS Fellowship
- Sarofim Fellowship

Graduate School fellowships include:

- Professional development (travel) awards
- <u>Continuing fellowships</u>
- <u>Recruitment fellowships</u>
- Dissertation writing fellowships
- Dean's Prestigious Fellowship Supplement

*External fellowships* – Students are encouraged to apply for external fellowships during their enrollment in the graduate program. Continuing students have been very successful in winning prestigious external awards during their time in the program.

#### 8.2 Non-resident tuition waivers based on employment

Students who are employed as a GRA or a TA should request a non-resident tuition waiver based on employment every semester they are appointed as a GRA/TA. This will waive the non-resident portion of their tuition bill for that semester, based on their employment status: <u>https://utdirect.utexas.edu/acct/fb/waivers/rte\_request.WBX</u>

#### 8.3 International Students & Scholar Services (ISSS) Fee

All international students are charged a fee of \$125 per semester (ISSS fee), which covers the cost of services provided. ISSS assists student with immigration, tax services, financial services, orientation, CPT/OPT applications, and advising.

#### 9.0 Health Insurance

#### 9.1 Overview

All students have access to comprehensive insurance coverage through the university. Options differ, depending on the nature of students' funding. Students are also encouraged to compare policies on healthcare.gov.

#### 9.2 Student Health insurance plan

All currently enrolled UT students are eligible for the UT student health plan from Academic Health Plans: <u>https://utexas.myahpcare.com/enrollment</u> International students will be automatically enrolled in this insurance plan if they do not submit a waiver and the charges will appear on their tuition bills. ISSS adds a 5% administrative charge to all insurance rates for international students.

#### 9.3 Academic Graduate Student (AGS) Employee Insurance Options

An AGS employee is benefits eligible if expected to work in one or a combination of the following AGS job titles for at least 20 scheduled weekly hours (SWH) and for at least 4.5 months (135 calendar days): Assistant Instructor, Teaching Assistant, Graduate Tutor, Academic Assistant, Graduate Assistant, or Graduate Research Assistant.

Full information on insurance options for AGS employees may be found at: <u>https://hr.utexas.edu/student/student-employee-insurance-benefits/academic-graduate-student-employee-insurance-options</u>

#### 9.4 Graduate Student Fellows Insurance Options

Insurance options for Graduate Student Fellows (those with competitive fellowships of \$10,000 or more per year, internal or external) are outlined at: <u>https://hr.utexas.edu/student/insurance-graduate-student-fellows</u>

#### 9.5 Student Insurance Fee Waivers for International Students

The UT Board of Regents requires that international students be covered by health insurance; therefore, international students are automatically charged for the student health insurance on their tuition bills. Benefits eligible AGS employees may request a waiver of this fee online. Full information and eligibility requirements for waivers can be found at: <u>https://global.utexas.edu/isss/advising-services/insurance/waivers</u>

#### CSEM Student Representatives Overview of Officer Roles & Responsibilities

#### **Officer Roles**

#### Ombudsman

- Serves as a point person between the students and faculty to represent the views and concerns of the students:
  - Responsible for leading the annual student-faculty feedback meetings.
  - Creates student surveys and aggregate responses.

#### Social Chair (2 positions)

- Organizes at least one student social event per semester.
- Delivers a short presentation on workplace culture at incoming student orientation.
- Organizes events at POB to foster engagement between faculty and students.

#### Recruitment Chair

- Responsible for assisting Graduate Coordinator with recruiting activities, including organizing social events for prospective student visits.
- Organizes student panel discussions, as needed, for recruitment purposes.

#### Additional Officer Roles

If a student would like to serve a role other than those listed, there is a procedure for adding officer roles in the election section.

#### Shared responsibilities

- The officers organize regular meetings throughout the academic year that will be publicly announced and open to all current CSEM students.
- The officers will maintain documentation for budgetary expenditures.
- All officers are expected to attend the student-faculty feedback meetings.
- At the end of the officers' terms, they are responsible for helping the newly elected officers assume their new roles.

#### **Overall Chair**

- Once officers are elected by vote of the current CSEM students, the officers, amongst themselves will elect an Overall Chair.
- The Overall Chair is responsible for calling the semester meetings and serving as a point of contact for the Oden Institute, regarding, especially, budgetary concerns.

## Budget

- Each year, the Institute will allocate funding to the Student Representatives to be used to support:
  - Student social events
  - Student-faculty events (must hold at least 1 event per year)
  - Student intramural team (1 per semester)
- The SIAM organization has a separate budget for their events.
- There is a separate allocation for providing food at the Student Forums.

#### Election

- The election will be overseen by the Graduate Studies Subcommittee (GSSC) via the Graduate Coordinator and held in early April. The elected officers start their roles at the end of the spring semester.
- Students may run for more than one position. Candidates running for multiple positions will submit their preferences of office to the Graduate Coordinator prior to the election.
- The student body will cast their votes electronically, and the election will be managed by the Graduate Coordinator.

<u>Process for uncontested elections</u>: For any position with only one candidate running, that candidate will be appointed to the position, regardless of the candidate's preference. Appointed candidates will then be eliminated from running for other positions. This may leave other positions uncontested and may lead to another appointment.

<u>Process for contested elections</u>: For elections that remain contested, a simple plurality voting system will be used. For each elected office, the students will cast a vote for their preferred candidate. If candidate A wins positions X and Y and prefers X, A will be assigned to X. Then any votes for candidate A in position Y will not be counted. **Plurality wins, and ties are decided by coin flip.** 

<u>Proposed positions</u>: If an officer position, other than those listed, is proposed by a current CSEM student, then the position, along with its description, will be added to the election ticket. The current CSEM students will decide by majority vote (i.e. over 50% support) whether the proposed officer position is added.

Appendix B

## CSEM Program - Doctoral Candidacy Check-list

Submit proposed committee to Graduate Advisor for approval ( <u>GSC Faculty Member Areas</u> ). Minimum committee requirements:
<ol> <li>Advisor</li> <li>CSEM GSC faculty member from Area A</li> <li>CSEM GSC faculty member from Area B</li> <li>CSEM GSC faculty member from Area C</li> <li>Additional faculty member (must NOT be on the CSEM GSC)</li> </ol>
Submit abstract to each committee member for approval (see <u>Abstract Guidelines</u> ). Each member must sign abstract. To obtain signatures via DocuSign, send abstract to the Graduate Coordinator, who will send it to each member. For any non-UT faculty, provide e-mail address.
□ Submit abstract to Graduate Coordinator for approval by the CSEM Graduate Studies Subcommittee (GSSC). The GSSC meets monthly during Fall & Spring semesters. If you need the abstract reviewed before the next scheduled GSSC meeting, inform the Graduate Coordinator with your submission. Once the GSSC has approved your abstract, you may schedule the proposal.
Submit proposal to each committee member and the Graduate Coordinator at least two weeks before the proposal presentation (see <u>Proposal Guidelines</u> ).
<ul> <li>Title page</li> <li>Abstract</li> <li>Description of proposed work (no more than 20 pages)</li> <li>References</li> <li>C.V.</li> <li>Timeline</li> <li>Appendices (no more than 10 pages)</li> </ul>
Schedule proposal and inform Graduate Coordinator of date, time, and location. To reserve a room in POB, visit <u>Oden Institute Room Reservations</u> . NOTE: Proposal may be held virtually or in hybrid format.
Proposal attendance: One non-supervisory committee member may be absent from the proposal presentation. The student is not required to give a separate presentation to the absent committee member, but must provide them with a copy of the proposal document.
☐ After you pass the proposal – The Graduate Coordinator will send you instructions to submit the <u>Degree Candidacy Application</u> form to the Graduate School <u>after</u> your advisor has confirmed you have passed. Once the candidacy application is approved, you may register for dissertation hours.
Full CSEM Doctoral Program requirements: https://www.oden.utexas.edu/academics/phd-program/
Program Contacts

Graduate Advisor: George Biros – <u>biros@oden.utexas.edu</u> Graduate Coordinator: Stephanie Rodriguez – <u>slr@oden.utexas.edu</u> Milestones

Timeline illustration for PhD students in Computational Science, Engineering, & Mathematics

Degree Plan ID CSE990++D20152

(Program)

UT Austin Milestones	Expected Time of Achievement
Review degree requirements and milestones agreement form with adviser	First semester
Successful completion of all exams (oral and/or written) needed to advance to candidacy	End of 3rd year
Complete all required, formal coursework	End of 7th long semester
Advancement to candidacy	End of 7th long semester
IRB (human testing) approvals (if needed)	
IACUC (animal testing) approvals (if needed)	
Dissertation/treatise (or equivalent) completed, successfully defended, and approved by committee	End of 5th year
Student completes and files all paperwork required for graduation	End of 5th year
Dissertation/treatise (or equivalent) accepted by Graduate School	End of 5th year
Exit interview completed and submitted to Survey of Earned Doctorates	
Other program specific requirements Describe: <b>Pass all preliminary exams</b>	End of 1st year
Other program specific requirements Describe: Proposal abstract and proposal approved	End of 3rd year
Form completed by: Stephanie Rodriguez, Grad Prog Coord	Date: 7/15/13

## Appendix C

## **Degree Plan Requirements**

## Recommended Steps for Completing a Ph.D. in Computational Science, Engineering, & Mathematics Degree Plan ID = CSE990++D20152

Note: Only a few items from this broad list of degree requirements will be required for a given Ph.D. program. Always check with your Graduate Adviser or Graduate Coordinator for the most complete description of degree requirements.

Required	Recommended	Does not apply	PROGRAM REQUIREMENTS / OPTIONS	Required	Recommended	Does not apply	PROGRAM REQUIREMENTS / OPTIONS		
			Complete Milestones Agreement Form with Adviser			~	Satisfactorily complete second year paper		
		2	Plan coursework / complete any required background coursework			~	Define area of specialization / Identifydissertationtopic		
		~	English certification (if needed, before student contact)	~			Defendresearchproposal		
		~	X98T, as needed			~	IRB (humans) or IACUC (animals) approval from UT, if needed		
		~	Proseminar / Introduction to faculty research	~			Form dissertation committee		
	~		Complete teaching assistant requirement				Copyright tutorial		
		~	Safety training, as needed				Statement of Research with Human Subjects (IRB) Form Submitted		
		~	Learn research protocols				Apply for candidacy		
		~	Fulfill first foreign language competency				Enroll in dissertation/treatise hours (X99R, then X99W)		
		~	Complete second foreign language competency			~	Revisit career options		
		~	Fulfill foreign language requirement, as needed			~	Continue to develop research proposal / proposal review		
		~	Complete lab rotations			~	Give research presentation		
~			Identify supervising professor (or temporary advisor)			~	Begin dissertation data collection and/or dissertation fieldwork		
		~	Visit Career Center, or equivalent			~	Apply for dissertation fellowship		
~			Complete required coursework for degree			~	Develop timeline for dissertation completion with supervisor		
~			Complete Pre-Qualifying/Pre-Comprehensive Exam Procedure			~	Complete data collection and/or dissertation fieldwork		
		~	Prepare for major exams		~		Internship		
		~	Pass project proposal and defense		~		Submit paper(s) for publication		
~			Write and submit research proposal				Apply to graduate / Provide placement data		
		~	Establish qualifying exam committee				Contact committee members to schedule date for defense / defend		
~			Pass all written and/or oral qualifying exams				Submit dissertation to the Graduate School		
		~	Complete master's level requirements				Approval of GSC Chair that all degree requirements met ("Gold Sheet")		
	>		Apply for pre-doctoral fellowship or other extramural funding				Exit interview		
		2	Establish comprehensive exam committee				Survey of Earned Doctorates		
		~	Pass comprehensive exams			~	Register to attend convocation / Order regalia		
		~	Formal request for admission to Ph.D. program	<b>v</b>			<sup>Other:</sup> Seminar attendance		

\* Items in bold are Graduate School requirements of (nearly) all doctoral students

Reset

## Appendix D



The University of Texas at Austin Oden Institute for Computational Engineering and Sciences

## Grievance Policies for Graduate Students

The graduate student grievance policies summarized below are outlined on the Graduate School's website at:

## https://gradschool.utexas.edu/navigating/policies/academic/grievances

"Graduate students have the right to seek redress of any grievance related to academic or nonacademic matters. Every effort should be made to resolve grievances informally between the student and the faculty member involved or with the assistance of the graduate adviser, Graduate Studies Committee chair, or department chair."

If the grievance cannot be resolved informally, students have recourse through the formal grievance procedures described below.

## I) Academic Grievances

## https://gradschool.utexas.edu/navigating/policies/academic/grievances

Many graduate student grievances are related to the student's academic responsibilities and thesis/dissertation research and meeting the requirements for their graduate degree. Examples include adherence to degree requirements, changes in supervising committee membership, situations involving program termination. When these grievances cannot be resolved at the departmental level, the Graduate School will handle the formal grievance process, which is outlined in the Handbook of Operating Procedures, The Graduate School – section VII.E: <u>https://compliance.utexas.edu/university-policy-office</u>.

A graduate student may submit a formal grievance with the assurance of timely and thorough consideration. A graduate student will not be retaliated against for filing a formal grievance. A graduate student who believes he or she has been retaliated against should immediately report his or her concern to an associate or assistant dean of Graduate Studies. Allegations of retaliation will be referred to the appropriate office for review.

All grievances must be submitted in writing to the Graduate School, which will notify the chair of the graduate studies committee, the department chair (or the director of the academic program if there is no department), and the dean of the college or school that a grievance has been filed and of the procedures for handling the grievance. The time limits given below may be extended for good cause.

A student must submit their grievance within 60 days of the incident that is the subject of the grievance; or, when there is written notification to the student of the action that is the subject of the grievance, an intent to grieve must be submitted to the Graduate School within 30 days, and the grievance must be completely submitted within 60 days.

First Level of Adjudication: Graduate Studies Committee

The first level of consideration is the appropriate graduate studies committee. The graduate studies committee, having received formal notification of the grievance from the Graduate School, shall review the grievance and meet with the grievant if requested. The graduate studies committee shall then vote either to uphold or to reconsider the action that is the subject of the grievance. The chair of the graduate studies studies committee shall notify the Graduate School of the results of the graduate studies committee review within 30 days of receiving the grievance.

The results of the graduate studies committee review will be provided to the grievant. The grievant will have 30 days to notify the Graduate School if they are satisfied with those results or if they wish to proceed to the second level of adjudication as provided below.

Second Level of Adjudication: Dean of the Graduate School and Senior Vice Provost for Academic Affairs

When the grievance cannot be resolved at the level of the graduate studies committee to the satisfaction of the grievant, the grievance and the decisions of the graduate studies committee will be forwarded to the dean of the Graduate School. The dean of the Graduate School, in consultation with the college or school dean(s), may decide the case on their own review and authority, or if they deem it appropriate, convene a Graduate School ad hoc panel to review the case and provide advice.

The dean of the Graduate School will review the facts of the case, including any recommendations received from a Graduate School ad hoc panel if constituted, and render a decision within 45 days of the grievant's request for review by the dean of the Graduate School. A copy of the decision will be sent to the grievant, any ad hoc panel constituted during the review process, the chair of the graduate studies committee, the graduate adviser, the department chair (or the director of the academic program if there is no department), and the college or school dean(s). The decision of the dean of the Graduate School is final.

#### Exception to the academic grievance policy:

**Grade disputes** – Grade disputes are to be filed with the department offering the course in question, and the dean of the college or school offering the course makes the final decision on an appeal of the departmental ruling.

Graduate Student Academic Services Director, Julie Meyer, is the Graduate School contact for questions/concerns about academic grievances: julie.meyer@austin.utexas.edu

## II) Non-academic grievances:

- Discrimination: Grievances involving any form of discrimination or harassment should be filed directly with the Division of Campus and Community Engagement, <u>https://community.utexas.edu/care/</u>. See the Handbook of Operating Procedures for Nondiscrimination Policy: <u>https://compliance.utexas.edu/university-policy-office</u>.
- 2. Misconduct: General guidelines indicate that an internal resolution should be pursued in cases of student or faculty/staff/supervisor misconduct. Otherwise:
  - Issues involving student misconduct should be handled through the office of Student Conduct and Academic Integrity, which investigates alleged violations of institutional rules and implements any disciplinary action (<u>https://deanofstudents.utexas.edu/conduct/</u>).
  - Issues involving faculty, staff or supervisor misconduct should be presented first to the department chair, then to the college Dean, and then to the Graduate School (if necessary, in that order).

## **III)** Employment Grievances for Teaching Assistants and Assistant Instructors:

Such grievances may include issues related to academic freedom of individual TAs/Als, nonrenewal of a TA or Al, withholding of salary or promotion. When there is a grievance, the teaching assistant or assistant instructor may request the informal assistance of the Faculty Grievance Committee and Hearing Panel, or a formal complaint can be filed with the chairperson of the Faculty Grievance Committee.

#### **IV) Employment Grievances for Graduate Research Assistants:**

Whenever possible, grievances should be resolved informally between the GRA and the employing faculty member. Employment disputes by GRAs should be handled according to departmental review policies. The order for review for employment disputes is:

- The faculty member employing/supervising the GRA
- The graduate advisor
- The department chair or head of the hiring unit that employs the GRA
- The dean of the college

The decision of the dean is final.



## **Parental Accommodation Policy**

The Oden Institute recognizes that its graduate students may start (or add to) their families while enrolled in their graduate program and is committed to providing necessary support and accommodation. To assist students in balancing the demands of their academic and parental responsibilities, the Institute provides four types of accommodation for qualifying CSEM students in the cases of childbirth or adoption. Faculty are encouraged to remain flexible in their expectations so that students can meet the demands of graduate study while adjusting to the new demands of their parental role.

## **Eligibility**

To be eligible for parental accommodation, student must be

- 1) pursuing a master or doctoral degree;
- 2) enrolled full time (9 credit hours in Fall/Spring, 3 credit hours in Summer);
- 3) in good academic standing (3.0 minimum GPA); and
- 4) making normal progress toward the degree.

#### Types of Accommodation

*Options are not mutually exclusive – students may request an Academic Accommodation in conjunction with GRA/TA/Leave of Absence Accommodation* 

#### 1. Academic Accommodation

Eligible students will be granted a one-semester extension of the academic milestones required to fulfill the requirements of their degree. The extension may include coursework, qualifying exams, proposals, committee meetings, presentations, and any other required academic responsibilities. After the approved accommodation period, students are expected to resume progress toward degree completion.

#### 2. GRA Accommodation (allows for continuation of student's employment)

Some graduate students may be able to carry out modified research duties following the birth or adoption of a child – thereby continuing progress towards the goals of their research, meeting the requirements of the external funding agency, and remaining in compliance for reporting effort on federal grants, if applicable. Modified duties may include: scholarly research and literature compilations, data processing and analysis, scientific writing (manuscript or thesis writing, manuscript preparation), or preparation of other scientific communication materials (e.g., lectures or poster presentations).

Students should discuss the feasibility of a GRA accommodation with their research supervisor. The Parental Accommodation Request must describe the work in detail, define a work product, and include a method for evaluation of the work by the research supervisor during the period where modified duties are granted. Supervisors are encouraged to be flexible to allow for remote work as part of the accommodation plan. The research supervisor will be responsible for verifying that the proposed duties are within the scope of work outlined in the grant that funds the graduate student's appointment.



#### 2. GRA Accommodation (cont.)

In the event that a flexible GRA work arrangement is deemed appropriate, it is recommended that the student and supervisor complete a Flexible Work Arrangement Form (<u>https://hr.utexas.edu/current/fwa</u>) to ensure that both the supervisor and the student understand the terms of the temporary arrangement.

#### 3. TA Accommodation (allows for continuation of student's employment)

The Institute strongly encourages faculty to provide non-TA support for graduate students during the semester in which they receive a parental accommodation. If this cannot be done, students may request to be appointed to TA positions whose duties can be done in flexible environments and on flexible schedules. Flexibility regarding the distribution of specific TA duties within a semester is strongly encouraged for supervisors of students with an approved parental accommodation. The student and Graduate Advisor (or TA supervisor) should agree to review these TA duties on a periodic schedule to ensure that work is being completed in a timely and satisfactory manner. Examples of such duties may include: generating or proofreading exams, homework sets, or exam review materials; preparing detailed solution keys to problems; grading or grade-book maintenance; and assisting students with course content through email correspondence. Students should check with the Graduate Coordinator for information about available TA positions that may be appropriate for parental accommodation. Because of limited TA options within the Institute, it may not be possible to identify flexible TA positions for students requesting parental accommodation.

In the event that a flexible TA work arrangement is deemed appropriate, it is recommended that the student and supervisor complete a Flexible Work Arrangement Form (<u>https://hr.utexas.edu/current/fwa</u>) to ensure that both the supervisor and the student understand the terms of the temporary arrangement.

#### 4. Leave of Absence

In some cases, a complete break from all academic and employment responsibilities may be the most appropriate option for new doctoral student parents. In these cases, the student may wish to apply for a Leave of Absence from the university.

The <u>Title IX Office</u> facilitates leaves of absence for pregnant and parenting students. A pregnant or parenting student may undertake a leave of absence and, if in good academic standing at the start of the leave of absence, return to the student's degree program in good academic standing without being required to reapply for admission. Forms available at: <u>https://titleix.utexas.edu/pregnancy-and-parenting-leave-absence</u>

Students on leave are not enrolled and, therefore, may not use any University facilities or resources; nor are they entitled to receive advice from any member of the faculty. A leave of absence does not alter the time limits for degrees or coursework.



## Accommodation Request Process

It is the responsibility of the student to inform their research supervisor and the CSEM Graduate Advisor of any anticipated accommodation needs as early as possible. The Parental Accommodation Request form must be submitted prior to the onset of the semester in which the accommodation is requested.

After consulting with their research supervisor, students should submit the Parental Accommodation Request form to the CSEM Graduate Advisor. The request will be reviewed for approval by the CSEM Graduate Advisor, subject to final approval from the Oden Institute Director.

#### University Policies (FMLA / Parental Leave)

Students often have questions about the following federal and university policies – please note that these policies are generally intended to provide protections to full-time employees and don't typically cover student employees. They are included here for reference.

#### Family and Medical Leave Act

The <u>Family and Medical Leave Act</u> (FMLA) is an unpaid leave which provides job protection and insurance premium sharing for eligible employees for serious medical conditions. In order to be eligible for FMLA, an employee must have been employed by the state of Texas for a total of at least twelve (12) months, and have worked at least 1,250 hours during the twelve-month period prior to the commencement of the requested leave.

# Most graduate student employees (employed as a 20 hr/wk GRA or TA) do not qualify for FMLA.

#### Parental Leave

The University of Texas at Austin has a <u>Parental Leave policy</u> intended to cover employees who are ineligible for FMLA.

# Students employed in positions that require student status as a condition of employment are NOT covered by the University's Parental Leave Policy.

#### Other accommodations

#### Fellowship Accommodation

Students supported by a Oden Institute Fellowship (CSEM Fellowship, NIMS Fellowship, O'Donnell Fellowship, Sarofim Fellowship) may be eligible for the continuation of their fellowship support during the semester the accommodation is requested. Students should contact the Graduate Coordinator to discuss options based on their particular fellowship and accommodation request.

Students supported by a Graduate School Fellowship or external fellowship should consult with the awarding department/agency.



#### Quiet room

The Oden Institute will make a room available in the Peter O'Donnell Building (POB) to be designated as a quiet/lactation room upon request. Students should contact the Graduate Coordinator for access.

#### Additional considerations

#### Complications/Amendments to plan

In the case that unforeseen complications related to pregnancy/delivery arise after an Accommodation Request has been made, the student may request review of and adjustments to the original request. Students should communicate with their supervisor in a timely manner to discuss modifications to the plan.

If medical conditions indicate that additional accommodations may be necessary, students should contact the <u>Disability and Access</u> office to determine what additional accommodations are reasonable.

#### Insurance - COBRA

Students who elect to take a Leave of Absence with a subsequent break in GRA/TA employment may be eligible for <u>COBRA</u> (Consolidated Omnibus Budget Reconciliation Act), which provides a temporary extension of medical, dental and/or vision coverage at group rates in instances where coverage under the plan would otherwise end. If a student loses eligibility for university insurance coverage, the HR Service Center will send them a COBRA Election Notice and application after their insurance terminates (last day of the month in which they separate.)

#### International Students

International students may have to satisfy additional requirements and are strongly encouraged to consult in advance with the International Office about possible visa implications of utilizing any of the parental accommodations detailed above.

#### Appeals **Appeals**

In the event that a student's request for accommodation is denied by the CSEM Graduate Advisor, the student may appeal to the Oden Institute Director. If the request is denied by the Director, the student may make a final appeal to the UT Vice President for Research.



Appendix E

## **Parental Accommodation Request**

Student Name	EID	Date			
Semester entered CSEM Program	Expected grad date				
Supervisor name	Funding source				
Semester of requested accommodation					
Accommodation requested: (check all that apply)					
Academic Accommodation					
GRA Accommodation					
TA Accommodation Leave of Absence					
Explanation of need for accommodation (childbirth/adoption, expected dates, etc.)					

For Academic/GRA/TA accommodation, complete applicable sections on back of form.

#### Signatures

Student name	Signature	Date
Supervisor name	Signature	Date
Graduate Adviser	Signature	Date
Final approval		

Karen Willcox Date Director, Oden Institute for Computational Engineering and Sciences



Appendix E

#### **Parental Accommodation Request**

Academic Accommodation

(describe proposed modifications of academic requirements and timeline for completion)

GRA Accommodation

(describe proposed modifications to research duties)

If applicable:

□ I verify that the proposed duties described above are within the scope of work outlined in the grant funding this student's appointment.

Signature of research supervisor

Date

TA Accommodation (describe proposed modifications to TA duties)



## Appendix F

## Oden Institute / CSEM Program Fellowship Summary and Policies Academic Year 2023-24

Fellowship	Years	Annual stipend	Distribution	Tuition	Health Insurance
		\$40,000	Year 1: \$40,000 from CSEM Fellowship Fund	Year 1: Non-resident tuition waiver submitted by CSEM Program; resident tuition paid in full (up to 9 credit hrs Fall/Spr; 3 credit hrs Sum)	Year 1: Stipend equal to cost of Student Insurance paid to student by CSEM Fellowship Fund
CSEM Fellowship	4		Year 2-4: \$20,000 from CSEM Fellowship Fund; \$20,000 from GRA or TA	Year 2-4: Non-resident tuition waiver submitted by student based on employment; resident tuition paid in full (up to 9 credit hrs Fall/Spr; 3 credit hrs Sum)	Year 2-4: Student qualifies for Academic Graduate Student Employee Insurance through GRA/TA appointment
			Year 1: \$38,000 from NIMS Fellowship Fund	Year 1: Non-resident tuition waiver submitted by CSEM Program; resident tuition paid in full (up to 9 credit hrs Fall/Spr; 3 credit hrs Sum)	Year 1: Stipend equal to cost of Student Insurance paid to student (U.S. students) or paid on tuition bill (International students)
NIMS Fellowship	4	\$38,000	Year 2-4: \$19,000 from NIMS Fellowship Fund; \$19,000 from GRA or TA	Year 2-4: Non-resident tuition waiver submitted by student based on employment; resident tuition paid in full (up to 9 credit hrs Fall/Spr; 3 credit hrs Sum)	Year 2-4: Student qualifies for Academic Graduate Student Employee Insurance through GRA/TA appointment
Sarofim Fellowship (to support computational cardivascular engineering research)	1	\$34,000	\$34,000 from Sarofim Fellowship Fund	Non-resident tuition waiver submitted by CSEM Program; resident tuition paid in full (up to 9 credit hrs Fall/Spr; 3 credit hrs Sum)	Stipend equal to cost of Student Insurance paid to student (U.S. students) or paid on tuition bill (International students)

#### **Fellowship Policies**

- Fellows are required to be enrolled full-time (including summers): 9 credit hours in Fall/Spring; 3 credit hours in Summer.
- Payment of tuition for additional credit hours (above full-time enrollment) requires approval of Graduate Advisor and may be limited by availability of funds. Additional hours must be related to student's degree program.
- Fellowship stipends are paid in 12 equal installments beginning September 30 and ending August 30 each academic year. Payment schedule may be adjusted by contacting Graduate Coordinator.
- Continuation of fellowship support is contingent upon maintaining a minimum cumulative GPA of 3.0 and making good academic progress as evaluated by the CSEM Graduate Studies Committee and the student's advisor.
- Fellows may not hold another major external fellowship while holding an Oden Institute fellowship. If awarded an external fellowship, contact Graduate Coordinator. External fellowship recipients may be eligible for a fellowship supplement (supplemental fellowship policies outlined below.)
- Students participating in an off-campus internship while holding an Oden Institute Fellowship must inform Graduate Coordinator prior to the onset of the program. Student may forego the Summer fellowship payments if not enrolled while participating in an off-campus, paid internship.
- First-year CSEM Fellows, first-year NIMS Fellows, and Sarofim Fellows may NOT be concurrently employed by the university in a 20 hr/wk student academic title (e.g. GRA, TA, AI) while holding the fellowship.
- Duration of CSEM/NIMS Fellowship support and/or supplemental fellowship support is not to exceed 4 years.
- Special situations not covered by the policies above should be brought to the Graduate Coordinator and will be reviewed on a case-by-case basis.



Oden Institute / CSEM Program Fellowship Summary and Policies Academic Year 2023-24

#### Supplemental Fellowship Policies for External Fellowship Holders

- CSEM or NIMS fellows who accept an external competitive fellowship with a stipend that is less than the CSEM/NIMS stipend may apply for a Supplemental Fellowship to bring their stipend up to the CSEM/NIMS stipend level. If the external fellowship does not provide an insurance stipend, Supplemental Fellowship may provide stipend to cover cost of the Student Insurance. Contact Graduate Coordinator to apply.
- Students who are awarded an external competitive fellowship who are not CSEM or NIMS Fellows may apply for a Supplemental Fellowship to cover the cost of the Student Insurance if not provided by external fellowship. Contact Graduate Coordinator to apply.
- Students who were awarded a 4-year CSEM or NIMS Fellowship and subsequently accept a 3-year external fellowship in their first year will be granted the 4th year of their original fellowship.
- Students who receive external competitive fellowships will be nominated for a \$1,000 Prestigious Fellowship Supplement administered by the Graduate School. This fellowship supplement qualifies students to pay resident tuition rates.
- Special cases not covered by the policies described above will be reviewed and handled individually by contacting Graduate Coordinator.

Insurance options for Graduate Student Fellows https://hr.utexas.edu/student/insurance-graduate-student-fellows

Insurance options for Academic Graduate Student Employees

https://hr.utexas.edu/student/student-employee-insurance-benefits/academic-graduate-student-employee-insurance-options