MECHANICAL & AEROSPACE

GRADUATE STUDENT HANDBOOK

UNIVERSITY OF CALIFORNIA, DAVIS

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I. INTRODUCTION & MISSION

1 INTRODUCTION

The faculty and staff of the Department of Mechanical and Aerospace Engineering (MAE) at UC Davis welcome you to the graduate program. We sincerely hope you have a rewarding and successful experience. The purpose of this handbook is to help you become acquainted with the requirements, regulations and procedures affecting your graduate studies.

Graduate students on the UC Davis campus are officially students of the Office of Graduate Studies. Graduate work is performed under the supervision of faculty members who are organized in graduate groups and departments. It is important to point out that the MAE graduate program has degree requirements, policies, procedures, and deadlines that are in some cases more stringent than those of the College of Engineering and the Office of Graduate Studies. It is the responsibility of the student to meet all MAE Graduate Program requirements and deadlines.

This Handbook is for familiarizing graduate students with academic resources, policies and procedures. When you begin the MAE Graduate Program, you should carefully review this handbook as well as the degree requirements. You are responsible for knowing and adhering to the policies, procedures and regulations detailed here and within the degree requirements. No handbook, however, can answer all of the questions you have and certainly cannot replace contact with the faculty and staff who are here to help you. If you have any questions about the material in this Handbook or about matters not addressed herein, you should see the Graduate Program Coordinator, Eveline Gibson, 2132 Bainer Hall, or the Graduate Adviser for Continuing Students, Professor Vinod Narayanan, Rm 105 TB 207, or email our Graduate Student Help email address: gmaehelp@ucdavis.edu.

2 MAE MISSION STATEMENT

The MAE Department is committed to educating future engineers so that they may contribute to the economic growth and well-being of both the state and nation and to the advancement of knowledge in the mechanical and aeronautical sciences.

II. ACADEMIC RESOURCES

1 ADVISERS

a GRADUATE ADVISER FOR CONTINUING STUDENTS

The Graduate Adviser for Continuing Students for the MAE program is a resource for all graduate students in the department. The Graduate Adviser provides information and advising on academic requirements, policies and procedures and the Graduate Adviser’s signature is the only signature recognized as official by the Office of Graduate Studies on a variety of petitions and forms used by graduate students. In particular, the Graduate Adviser for Continuing Students is responsible for the following:

- Serves on the MAE Graduate Study Committee & TA Selection Committee
- Handles all Office of Graduate Studies and MAE departmental forms
- Performs periodic review of student progress toward degree objectives
- Enforces MAE graduate procedures and requirements
- Has responsibility for the content of MAE graduate program webpages
- Assists the Graduate Adviser for Admissions in Graduate Program Fellowship Allocation (GPFA) decisions

The Graduate Adviser for Continuing Students is available for consultation by direct appointment.
**b  Graduate Adviser for Admissions**
Responsibilities of the Graduate Adviser for Admissions include:

- Acts as Chair of the MAE Graduate Admissions Committee
- Serves on the MAE Graduate Study Committee & TA Selection Committee
- Leads MAE graduate student recruitment
- Allocates GPFA funds
- Approves change of major, change of degree objectives, and readmissions applications

**c  Major Professor (Faculty Adviser)**
A student’s major professor is the faculty member who assists the student in preparing a detailed program of study and who supervises the preparation for the comprehensive exam (MS Plan II) or the research that forms the basis for the thesis (MS Plan I) or dissertation (PhD).

Responsibilities of the Major Professor include:

- Assists students with preparation of program of study
- Supervises student comprehensive exam/thesis/dissertation research
- Assigns grades for MAE-299 (research) and MAE-290C (research conference) units
- Serves as the chairperson of the comprehensive exam or thesis or dissertation committee

One of the most critical decisions in a graduate student’s career is the selection of a Major Professor, especially for those students pursuing a MS Plan I or a PhD. The selection of a Major Professor and a research topic requires careful thought because the thesis/dissertation research is the principal activity of a graduate student pursuing a MS Plan I or a PhD and often defines the future career directions of the student.

Each student is assigned an initial faculty adviser upon admission. The Graduate Program Coordinator must be notified if the student decides on a Major Professor who is different from the initial faculty adviser. The Major Professor must be a member of the MAE Graduate Program.

**d  Graduate Program Coordinator**
The MAE Graduate Program Coordinator should be the first person consulted on all actions regarding graduate affairs. The Graduate Program Coordinator may advise the student to contact the MAE Graduate Adviser or the Office of Graduate Studies to address particular issues. You can reach the Graduate Program Coordinator by emailing gmaehelp@ucdavis.edu.

All forms and petitions may be provided by the MAE Graduate Program Coordinator in 2132 Bainer Hall or found on the Office of Graduate Studies website: https://grad.ucdavis.edu/current-students/forms-information. All forms requiring a signature from the MAE Graduate Adviser must first be submitted to the MAE Graduate Program Coordinator, who will acquire the signature and submit the forms to the appropriate office(s).

Responsibilities of the Graduate Program Coordinator include:

- Responsible for various department-level graduate matters including prospective student recruitment, new student orientation, and various academic and social functions
- Corresponds with prospective students and reviews applications for admission
- Informs current students of department announcements and initiatives

**e  Advisory Committees**
Various advisory committees including the Ph.D. Qualifying Examination Committee and the M.S. Thesis or Ph.D. Dissertation Committee will guide each student during the progress toward a graduate degree. The Graduate Adviser for Continuing Students must approve of the committee members and nominate them for approval by the Graduate Council. The Graduate Adviser for Continuing Students has the prerogative to reject the selection of advisory committees if the committee is deemed as inappropriately
constitute d. Please see our degree requirements for details on the appropriate constitution of these committees.

2 FACULTY COMMITTEES

a GRADUATE STUDIES COMMITTEE (GSC)
The GSC is chaired by the Chair of the MAE Department, or delegated to the Graduate Adviser for Continuing Students. Its members include the Chair, the Graduate Adviser for Continuing Students, the Graduate Adviser for Admissions, and two other faculty members. The Graduate Program Coordinator is an ex-officio member.

Responsibilities include:

- Making recommendations regarding requirements for graduate degrees and other programmatic proposals for consideration by GMAE faculty.
- Assisting the MAE Program Chair, Graduate Adviser for Continuing Students, and Graduate Adviser for Admissions in administering the graduate program
- Making fellowship decisions
- Appointing standing and ad hoc committees as necessary to properly administer the activities of the Program

b GRADUATE ADMISSIONS COMMITTEE
The Graduate Admissions Committee is chaired by the Graduate Advisor for Admissions. Its members include the Graduate Adviser for Admissions and two other faculty members. The Graduate Program Coordinator is an ex-officio member. The Graduate Admissions committee is responsible for recruiting and admitting students to the MAE Graduate Program.

c TEACHING ASSISTANT (TA) SELECTION COMMITTEE
The TA Selection Committee is chaired by the Vice Chair of the MAE Department. Its members include the Vice Chair, Department Chair, the Graduate Adviser for Continuing Students and the Graduate Adviser for Admissions. The Graduate Program Coordinator is an ex-officio member. The responsibility of the TA selection committee is to make all TA assignments. See page 12 for information about the TA assignment process.

III. ADMISSION

Admission recommendations are made by the Graduate Admission Committee with the final admission decision made by the Dean of Graduate Studies. Admission to the graduate program normally requires a minimum of 3.0 (out of 4.0) for the M.S. program and a minimum of 3.5 (out of 4.0) for the Ph.D. program. However, admissions decisions are made on a case-by case basis. A student may apply for admission for either an M.S. or a Ph.D. The M.S. is not a prerequisite to the Ph.D., and completing the M.S. requirements does not guarantee admission to the Ph.D. program.

Prospective students must adhere to the application instructions, deadlines and requirements detailed on the MAE website.

a) Enrollment Requirements for New International Students

New international students must work with the Services for International Students and Scholars Office (SISS) to obtain and maintain lawful status in the USA.

New international graduate students are required to take an English language course (UWP 25 or UWP 26 or UWP 225 or UWP 226) during their first academic year, unless at least one of the following is true:

- The student has a college degree from an approved English-medium institution as confirmed with the UC Davis Office of Graduate Studies
- The student has a TOEFL(iBT) score of 105 or higher or IELTS score of 7.5 or higher
• The student scored 24 or higher on the TOEFL (iBT) writing and 23 or higher on the TOEFL (iBT) speaking.

b) Admission to the Doctoral Program for a Current MAE Master’s Student

MAE M.S. students may apply to continue on to the doctoral program. The Graduate Adviser for Admissions will evaluate these students on a case-by-case basis. For students who wish to change their degree objective to the Ph.D. the Department requires a minimum overall GPA of 3.5 in a minimum of 18 units of graduate coursework. A Petition for Change of Degree Objective must be submitted before the end of the academic quarter in which a candidate intends to complete the Master’s program. If submitted late, the student must apply for re-admission to the program for the Ph.D.

In addition, candidates must take the Preliminary Examination the first time it is offered after submitting a Petition for Change of Degree Objective. Acceptance into the doctoral program is not automatic and completion of the M.S. requirements does not in itself guarantee admission to the Ph.D. program.

c) Admission to the M.S. Program for a Current MAE Doctoral Student

A Ph.D. student may wish to obtain a M.S. degree during the course of his/her doctoral studies. It is necessary to submit a Change of Degree Objective form. The student must Advance to Candidacy for the M.S. degree and fulfill the requirements for either the M.S. Plan I or Plan II degree.

VI. REGISTRATION REQUIREMENTS AND PROCEDURES

1 UNIVERSITY REQUIREMENTS

Upon matriculation in a particular program, students are expected to register continuously from the first quarter to completion of the degree. Full-time students must be enrolled in a minimum of 12 units per quarter. The only exceptions to this rule are Planned Education Leave Program (PELP) and Filing Fee Status. Students failing to register will be regarded as having withdrawn from the University, unless they are in PELP or Filing Fee status. Students failing to register in a quarter are not guaranteed readmission for a later quarter.

Students must be registered to be eligible to:

• Be employed as a Teaching Assistant, Associate In __, Reader, or Graduate Student Researcher. Students holding these titles must be enrolled in at least 12 units.
• Hold graduate fellowships or scholarships.
• Take the Master’s Comprehensive Examination or the Ph.D. Qualifying Examination.
• Use university facilities or faculty time for research or other studies except for final reading of thesis or dissertation.

2 ACADEMIC RESIDENCE

Students working towards a Ph.D. degree must be registered and in University residence for a minimum of six regular quarters of full time enrollment (12 units/quarter minimum). Two consecutive regular summer sessions may be counted as the equivalent of one regular quarter.

Students working towards a Master’s degree must be registered and in University residence for a minimum of three regular quarters of full time enrollment (12 units/quarter minimum).

3 PART-TIME STATUS

Students are able to apply for part-time status if they cannot pursue their studies full-time because of employment (30 hours or more worked per week), health conditions, accommodation for disability, or primary care responsibilities. Students must apply for part-time status through the Registrar’s Office website. Part-time graduate students are required to complete six units per quarter. If a student in part-time status enrolls in more than 6 units, he/she will automatically be assessed full-time fees and will need to reapply for part-time status.
Students in part-time status are not eligible for employment as either teaching assistants or a graduate student researchers. International students cannot be part-time. International students seeking exceptions to the full-time enrollment requirement must contact SISS for prior approval. A Ph.D. student cannot be on part-time status once he/she has advanced to candidacy.

4 REGISTRATION PROCEDURES

Registered students can use Schedule Builder to enroll in classes, adjust class schedules, view and print class schedules (http://sisweb.ucdavis.edu). Courses taught by the MAE department can also be viewed on our department’s course webpage: https://mae.ucdavis.edu/courses/. MAE 298 courses are new courses and don't have a permanent number yet. In order to find the course reference number (CRN) for a MAE 298 course, you will need to look on our department’s course webpage.

Students wishing to add courses which require instructor approval (290C, 299 and 396) must see the Graduate Program Coordinator to obtain the appropriate course reference number (CRN) before adding the units to their schedule.

Students must receive instructor approval before changing the number of 299 (research) units in which they are registered. Failure to secure instructor approval before registering for a variable-unit course or changing units may result in disciplinary action, academic penalty, or both.

Students cannot enroll in more than 12 units of graduate level coursework, or for more than 16 units of upper division and graduate level courses combined.

5 ADDING/DROPPING

Adding or dropping courses is done on Schedule Builder. Students may add and drop courses until the deadlines listed on the Office of the University Registrar’s webpage: https://registrar.ucdavis.edu/calendar/quarter.cfm.

Students wishing to drop a course after the deadline must file a late drop petition with Graduate Studies. On this petition the student must state a legitimate reason for dropping the class. Neither academic difficulties nor missed deadlines are acceptable reasons for late drops. The late drop must be reviewed by the Graduate Adviser for Continuing Students and then submitted to the Dean of Graduate Studies for approval. If approved, the student will be issued a Permission to Drop (PTD) number to drop the course through Schedule Builder. A $3.00 fee will be charged to the student account for using the number.

To add a course after the 12th day of instruction, approval of the program is required. If approval is given, the department will issue you a Permission to Add (PTA) number to add the course through Schedule Builder. PTAs may be given until the last day of instruction. A $3.00 fee will be charged to the student account for using the number.

A student wishing to either add or drop a course after the last day of instruction must submit a retroactive petition to the Registrar's Office for consideration by the Grade Change Committee. Such petitions are approved only in unusual and compelling circumstances.

VII. GRADING AND COURSE CREDIT

1 TIME MAXIMUM ON COURSES

Courses can only be counted on a student’s program of study within 8 years of taking them. If courses have been taken prior to 8 years ago, the student and their faculty advisor will need to petition to see if any of the expired courses can be counted towards their program of study. Approval is not guaranteed and depends on whether sufficient evidence is provided that proves the information in the older courses is still relevant.

2 SATISFACTORY/UNSATISFACTORY (S/U)

The purpose of the S/U option is to encourage students to explore academic coursework in areas unrelated to their academic discipline. Courses that are offered by the student’s academic major may
not be taken on an S/U basis. With the approval of the Graduate Adviser for Continuing Students, a student may petition to take one graded lower or upper division or graduate course per quarter on an S/U basis, as long as it is unrelated to their academic discipline.

Under the S/U grading option, a student is assigned a letter grade by the instructor on the same basis as other students in the class. To receive a grade of S in lower or upper division work, a student must earn a C- or better in the course. To receive a grade of S in a graduate course, the student must earn a B- or better. When a program permits a student to take a course under S/U grading, only the officially recorded S or U (not the original letter grade) can be used to determine satisfactory academic progress. A student who has advanced to candidacy for the Ph.D. may, with the approval of the Graduate Adviser for Continuing Students, take an unlimited number of courses on an S/U basis.

Petitions for any course(s) to be taken on an S/U basis must be filed with the Dean of Graduate Studies by the 25th day of instruction. A petition received after the deadline must include an explanation for the missed deadline. Petitions received after the end of instruction will not be approved. The grading option change petition may be obtained from the MAE website: https://mae.ucdavis.edu/graduate/current-mae-graduate-students/.

3 REPETITION OF COURSES

Any student may, with the consent of the graduate adviser for continuing students and the dean of Graduate Studies, repeat a course in which s/he received a grade of C (including C+), D, F or Unsatisfactory up to a maximum of three courses. In such repeated courses, only the most recently received grade and corresponding grade points shall be used in calculating a student’s grade point average, but all units attempted and grades received shall remain part of the student’s permanent record. Any repeated course, except for one offered only on a Satisfactory/Unsatisfactory basis, must be taken for a letter grade (A, B, C, D, and F).

4 INCOMPLETES

The grade of incomplete shall be assigned only when the student’s work is of passing quality but incomplete for good cause as determined by the instructor. Students must remove the Incomplete grade before the end of the third succeeding quarter of academic residence. If not removed by the specified time, it will revert to an “F”.

5 COURSE GRADING AND GRADE POINT AVERAGE REQUIREMENTS

Students are required to take all courses to be applied towards a graduate degree on a letter grade basis (A, B, C, etc.), except for seminar, research and conference units (297, 290C, 299, 396).

A graduate student is required to maintain a grade point average of at least 3.0 in all courses taken after admission to graduate status. The MAE department expects its doctoral students to maintain an overall GPA of 3.5. Graduate credit is not allowed for courses in which a grade below “C” is received. Grades received in lower division undergraduate (numbered 1 to 99) courses are not counted in determining graduate grade-point averages. However, all upper-division undergraduate (100 series) course grades are included in graduate grade-point averages.

6 STUDENT PROGRESS ASSESSMENT

Each Spring Quarter, students and their major professors are required to fill out an online progress assessment together. Students and their major professors will receive an email when it is ready to begin. The assessment will review coursework taken, degree progress, accomplishments and expectations, career goals, and deficiencies and corrective action if needed.
1 WITHDRAWAL FROM THE UNIVERSITY

If a student has enrolled for classes but later decides not to attend UC Davis, the student must submit a Withdrawal Form which can be found on the Registrar’s Office website. Failure to withdraw may result in being held liable for fees according to the University Refund Policy and may result in an “F” grade given for each course in which the student is enrolled.

2 PLANNED EDUCATIONAL LEAVE PROGRAM (PELP)

The Planned Educational Leave Program is designed to allow students to suspend their programs of study for good cause to leave the campus, and to be guaranteed the right to return later to resume academic work with a minimum of procedural difficulty. Examples of good cause for PELP include illness, temporary departure from the University for employment, preparing for examinations if doing so at a distance from campus, financial hardship, or personal problems. PELP is recommended for those students who are certain of the quarter in which they plan to return and who plan to be away no longer than three quarters. If a student is not certain of the return date, withdrawal and then filing an Application for Readmission is suggested instead. Check the application deadline on the website of the Office of the Registrar.

The minimum Planned Educational Leave is one full quarter and the maximum is three quarters. Readmission is guaranteed assuming the student resumes regular academic work at the agreed-upon date and removes any holds that may have been placed on registration. Students who do not return at the agreed-upon date and who do not officially extend their leave will be automatically withdrawn from the University. International students should consult with SISS Office concerning VISA issues before pursuing PELP.

PELP applications are processed via email through the Graduate Program Coordinator. Once the Graduate Adviser for Continuing Students approves the petition, it will be forwarded to the Office of Graduate Studies for final approval. The e-mail chain will be sent to the Office of the Registrar and the student will be charged a fee. Applications for PELP should be filed before the first day of instruction for a full refund of any fees and tuition paid. Applications filed after the tenth day will not be approved. If a PELP application is filed on or after the first day of instruction, fees will be refunded on a pro-rated basis according to the Office of the University Registrar’s schedule.

Students are ineligible for PELP if they are using University facilities to perform their research. Students on PELP are not eligible to receive university services with the following exceptions:

- **Student Employment Services.** consult Student Employment Services while on leave.
- **Advising and Counseling.** limited advising and counseling services at the Counseling Center are available to assist the transition leaving and return to the university.
- **Library.** a library card from Shields Library can be purchased for $12.50 per quarter. Borrowing privileges and online access are limited.
- **Activities and Recreation Center (ARC).** Students who are participating in the Planned Educational Leave Program are eligible to purchase a membership to the ARC. The student must bring a photo ID, documentation of PELP status, and a university-issued photo ID card in order to purchase a membership to participate in programs and gain entrance into the facility. All registration forms must be completely signed and filled out. PELP students fall under the “other student” classification and pay fees associated with that membership type.

Students on PELP cannot hold employment on the Davis campus, enroll in courses, Advance to Candidacy (for either the M.S. or Ph.D.), take the Comprehensive Examination or file a thesis until they have returned from PELP to registered status.
3 FILING FEE STATUS

Normally, degree candidates will file a final approved copy of their thesis with the Office of Graduate Studies during their final quarter of residence on campus. Filing Fee status is designed for students who have completed all other requirements (such as coursework, laboratory work/research, preparation of the thesis, and have Advanced to Candidacy), and who may not require an additional quarter in residence to prepare and submit the final thesis or dissertation manuscript or complete their comprehensive exam. In this case, filing fee would replace regular registration. Students on filing fee are expected to make no demands upon faculty time other than the time involved in reading the thesis or dissertation or holding final examinations.

A student must have been in full-time residence for a minimum of 3 quarters to be eligible. A student will be allowed to stay on filing fee for a maximum of 1 quarter. Students on PELP cannot apply for Filing Fee. Please note that a student is expected to graduate once the filing fee period has elapsed. If they do not complete their degree by the end of that quarter, they must file a readmission application to become a registered student again. Students on Filing Fee will be allowed one quarter of employment in an academic title. While on Filing Fee, students are responsible for purchasing their own health insurance from Student Health Services (530) 752-6055 or insurance@shcs.ucdavis.edu.

Students on Filing Fee are not eligible for the privileges given to regularly enrolled students. In particular, students on Filing Fee:

- May not make use of University educational facilities (such as housing, libraries, laboratories) or possess keys to University space;
- May not conduct your thesis/dissertation research;
- May not receive fellowships or financial aids;
- May not take coursework of any kind;
- May not make use of faculty time except as noted above.

Filing Fee application

To apply for Filing Fee status, a student must submit the Filing Fee request form with the Major Professor's signature to the Graduate Program Coordinator. The student will need to take this form to the Cashier’s Office and pay a one-time fee prior to returning the form to the Graduate Program Coordinator. Accompanying this form must be the College of Engineering Supplemental Filing Fee form with signatures of all members of the committee stating that they have read a draft of the thesis or dissertation. The completed forms, with appropriate signatures and payment, must be submitted to the Office of Graduate Studies by no later than the first day of the quarter filing fee is to become effective.

4 PELP/FILING FEE & STUDENT HEALTH INSURANCE (UC SHIP)

Student Health and Counseling Services (SHCS) provides the Student Health Insurance Program (UC SHIP) to all students as part of their student fees (in-state or out-of-state) payment. Registered students may apply for a UC SHIP Waiver if they have access to an independent health insurance plan. Since students on PELP or Filing Fee do not pay fees and tuition, they are not automatically entitled to UC SHIP and are eligible to enroll in voluntary coverage (up to two quarters while on PELP and only one quarter on Filing Fee status).

Students on PELP or Filing Fee may elect to enroll in the UC SHIP Voluntary coverage. To review the SHCS full policy on PELP and Filing Fee, go to their web site at: https://shcs.ucdavis.edu/insurance/ship-benefits-information.

5 READMISSION

It is necessary for a student to submit an Application for Readmission to return to the MAE graduate program if any of the following occurs:

- The student has exceeded the filing fee limit and has failed to file the thesis or dissertation and must return to the MAE program.
• The student has NOT Advanced to Candidacy and registration is broken and has consequently lost student status. If a student HAS Advanced to Candidacy, is not on filing fee or PELP, and registration is broken, the student must file an Application for Admission with Graduate Studies in order to return to the MAE graduate program.

IX. EMPLOYMENT

1 EMPLOYMENT REGULATIONS

In order to be eligible for academic employment as a Teaching Assistant (TA), Graduate Student Researcher (GSR), and Reader, a student must maintain minimum GPA of 3.0 and be enrolled in full-time units (12 units) for the entire quarter. Also, a student on Filing Fee may be employed in any of these positions for one quarter only during the student’s academic career. See additional eligibility requirements below. These appointments do not require submission of time sheets, with the exception of GSRs funded by work-study grants. TAs, GSRs, and Readers are paid on the 1st day of the month following the period worked.

A student is expected to complete and sign all relevant employment forms. Employment paperwork is typically processed on or before the first day of the quarter. For change of name, address or citizenship status, a student should see the Payroll Administrator and complete a new Personal Data Form for tax purposes.

Students may work 15 academic quarters in teaching titles and 18 academic quarters in research titles.

2 FEE REMISSION POLICY

UC Davis policy provides for payment (from the funding source) of full in-state fees for GSRs appointed at 25% time or higher for the entire quarter. TAs and Readers who are appointed for at least 25% time for an entire quarter are eligible for partial remission of in-state fees, except for local campus fees which include GSA fees, Memorial Union fees, facility and campus enhancement fees, and student facilities fees. In any of these titles, the student must also be registered full-time (12 units minimum) in order for their employment paperwork to process. The 12-unit registration must be maintained for the entire quarter. For a current fee schedule and breakdown of fees: http://budget.ucdavis.edu/studentfees/.

IMPORTANT REMINDER: REGISTER FOR 12 UNITS AND SIGN EMPLOYMENT PAPERWORK ON or BEFORE the REGISTRATION FEE PAYMENT DEADLINE to be granted fee remission, including health insurance coverage and other applicable benefits.

3 TEACHING ASSISTANTSHIP (TA)

a Definition of Teaching Assistantship

A Teaching Assistant is a registered full-time graduate student chosen for excellent scholarship and for promise as a teacher, and serving as student teacher under the active tutelage and supervision of a regular faculty member.

b Eligibility for Appointments

A Teaching Assistant must be a registered graduate student in full-time residence. Each proposed appointment or reappointment is subject to certification by the MAE Department that the following conditions have been met:

• Student must be present and available in Davis for the entire quarter.
• Student must be enrolled in a minimum of 12 units.
• Student must maintain a minimum overall GPA of 3.0.
• Student must have received a grade of "B" or better in the course for which he/she is applying for a TAship.
• Student must be in full compliance with all equal opportunity, affirmative action policies and Union Contract rules.
• Students are required to meet the English Language Proficiency Requirement.

All new Teaching Assistants are expected to attend a campus-wide training orientation prior to beginning their duties at UC Davis. All students are required to attend this workshop at least once during their time as a TA. Students will receive additional information on the orientation schedule from the Center for Educational Effectiveness.
c Selection of Teaching Assistants
Teaching Assistants are selected by a committee that consists of the Department Chair, the Vice Chair, the Graduate Adviser for Continuing Students, and the Graduate Adviser for Admissions. Due to the limited TA budget and in an attempt to fund as many students as possible, TA positions will typically not be awarded to a student with a fellowship or GSR position for the quarter. Instructor input is also factored into the selection process. In general, the TA committee uses the following order of priority in the selection of TAs:

- PhD students who have advanced to candidacy
- PhD students who have not advanced to candidacy and have a GPA of at least 3.500
- MS students with a GPA of at least 3.500

Students must meet the English Language Proficiency Requirement in order to be eligible for a TA appointment: https://iae.ucdavis.edu/graduate/qualify.

d Terms of Appointment
- TAs are appointed quarterly; the appointment is self-terminating unless the appointee is otherwise notified.
- During the academic year, appointment to the title of Teaching Assistant (in sole or in combination with other University employment) may not exceed 50% time. Exception to this policy may be granted by the Office of Graduate Studies, in extenuating circumstances only.
- TAs employed 50% time are expected to devote 20 hours per week during instructional and examination periods to their TA duties. This includes time spent in preparation, classroom and laboratory teaching, office consultation and reading student papers. If appointed at 25% time, a total of 10 hours of work per week is expected. In the majority of cases, TA appointments are at 25% time.
- A TA commitment cannot be changed to another appointment the two weeks prior to the beginning of the quarter. If a student cannot accept a TA offer, the student is expected to inform the department at least two weeks before the beginning of the academic quarter.
- The TA position does not accrue vacation.

e General Duties of Teaching Assistant
Teaching Assistants are not responsible for the instructional content of a course, for selection of student assignments, for the planning of examinations, or for determining the term grade for students. The Teaching Assistant is responsible for the conduct of recitation, laboratory, or quiz discussion sections as well as grading. The Teaching Assistant performs these duties under the active direction and supervision of the regular member of the faculty to whom final responsibility for the course's entire instruction, including the performance of Teaching Assistants, has been assigned.

f Teaching Assistant Applications
Applications for TA positions are normally submitted two to three months prior to the beginning of the quarter. Preference will be given to those students who apply by the deadline. An electronic call for TA application will be circulated to all new and incoming students twice a year: mid-July for Fall TA applications and mid-October for Winter and Spring TA applications. TA applications may be obtained from the MAE graduate program coordinator.

Other TA employment listings are posted on the Office of Graduate Studies webpage (https://grad.ucdavis.edu/resources-services/student-employment/job-listings).

4 Graduate Student Researcher (GSR)
a Definition of a Graduate Student Researcher
A Graduate Student Researcher (GSR) is a graduate student who performs research in an academic department or research unit under the direction of a faculty member or authorized Principal Investigator.

GSR positions are typically funded through grants or contracts. The GSR duties are typically closely related to the student's research within the degree program. Hiring of a GSR is primarily within the purview of individual Principal Investigators.

b Eligibility for Appointments
Hiring departments are responsible for certifying that appropriate conditions relating to student status have been met before graduate students are appointed to academic positions.
• Appointee must be a registered, full-time (minimum of 12 units) graduate student during the period of appointment.
• The minimum overall GPA for graduate student academic appointees is 3.0.
• Students on Filing Fee status may be appointed for only one quarter while in that status. Otherwise, graduate students holding academic titles must be registered full-time.

c TERMS OF APPOINTMENTS
In compliance with the MAE GSR compensation plan, appointment to the title of a GSR (in sole or in combination with other University employment) may not typically exceed 50% time per quarter during the academic year but may be appointed up to 100% during the summer or inter-session breaks. Exception to this policy may be granted by the Office of Graduate Studies in extenuating circumstances only. Only GSRs with a 50% appointment for 12 consecutive months accrue vacation.

5 READER
a DEFINITION OF A READER
Readers are employed to provide diverse services as course assistants; most commonly, involved in grading of student assignments. Customary responsibilities of a Teaching Assistant will not be assigned to a Reader. Only specific courses, determined by the TA committee, require Readers.

Reader positions are typically assigned to graduate students; however, undergraduate students who are in good academic standing may be hired in exceptional cases.

b ELIGIBILITY FOR APPOINTMENTS
Minimum qualifications for being employed as a Reader are:
• Full-time registered student in good academic standing (minimum overall GPA of 3.00)
• Student must have received a grade of B or better in the course for which they apply.
• Student may not serve as a Reader in a course in which he/she is enrolled.

c SELECTION OF READERS
Readers are selected from the TA application pool as needed. Readers are appointed by the TA committee.

d TERMS OF APPOINTMENTS
Appointment to the title of Reader (in sole or in combination with other University employment) may typically not exceed 50% time per quarter during the academic year. Exception to this policy may be granted by the Office of Graduate Studies, in extenuating circumstances only.

6 ENGLISH LANGUAGE PROFICIENCY REQUIREMENT
The Office of Graduate Studies requires all graduate students, except those with an undergraduate degree from an institution where English is the sole language of instruction (according to the World Higher Education Database or the Office of Graduate Studies), to demonstrate oral English proficiency before they are appointed to Teaching Assistant (TA) or Associate Instructor (AI) positions. You can see the official policy here.

Oral proficiency in English must be demonstrated by meeting one or more of the following requirements:
• Achieving a minimum score of 26 on the speaking subset of the TOEFL iBT
• Achieving a minimum score of 8 on the speaking subset of the IELTS
• Achieving a “Pass” on the TOEP
• Achieving a minimum score of 50 on the SPEAK (The SPEAK is in the process of being phased out on campus; no future test dates are scheduled.)
X. USE OF DEPARTMENT FACILITIES

1 GRADUATE STUDENT MAILBOXES AND DEPARTMENT CORRESPONDENCE
Graduate student mail slots are available in 2015A Bainer Hall. This mailroom is open 24 hours a day. Every student will be assigned a mailbox that should be used exclusively for school-related matters. Campus mail service cannot be used for personal business. Check your mailbox daily for departmental notices, messages, etc. FAX messages may be picked up in the MAE Business Office, 2132 Bainer Hall. Like the campus mail service, the department FAX machine is also for official university business only.

General notifications from MAE are typically sent by e-mail and graduate students are expected to check their e-mail regularly. Occasionally, mail may be sent to a student’s home address. Submit home address changes through SISWEB. In addition, please notify the Graduate Program Coordinator of any address or phone number changes for departmental records.

2 KEYS
Keys to appropriate laboratories will be issued by the department to graduate students, with the recommendation and approval of a Faculty Supervisor (research adviser/principal investigator). See Jennifer Young in 2132 Bainer Hall for permission slips and key issue. A $10.00 cash deposit is required for each key issued. Keys must be returned to the departmental office when work in the department is complete before filing for Planned Educational Leave or Filing Fee or when a student’s employment ends. Key deposit will be refunded upon key return (via mailed check). Keys to the outer doors of Bainer Hall are also available for graduate students with the required $10.00 cash deposit.

3 TELEPHONES
Department telephones must be used for official university business only. A student may arrange with his/her Faculty Supervisor (research adviser/principal investigator) to obtain an authorization code for placing business-related telephone calls (long distance or local). These calls should be placed from the Faculty Supervisor’s office or laboratory phone.

4 OFFICE SUPPLIES
Office services associated with a student’s research and project should be arranged through the student’s Faculty Supervisor (research adviser/principal investigator). Costs for office supplies (paper, envelopes, laboratory notebooks, etc.) for research activities are charged to the faculty’s appropriate research account. See Jennifer Young in 2132 Bainer Hall.

5 COPY MACHINES
Two copiers located in Room 2151 Bainer Hall are available to students for research, teaching or other official departmental business only. **No personal copying is permitted.** If use of the copier is for research, obtain a copy card from 2132 Bainer Hall. Teaching Assistants who must copy homework assignments or other class materials should check out the copy card from the MAE main office in 2132 Bainer Hall. A card user must list on the log sheet his/her name, the course number and the number of copies made. For personal copying, self-service copier machines are available in any campus library.

6 VIEWGRAPH POLICY
Transparency supplies used for research will be charged to a faculty’s funded grant or contract. Transparencies for teaching may be obtained directly from the course instructor. If transparencies are unavailable from the instructor, see the receptionist in the main office and provide the course # for which transparencies will be used. The Department does not supply students with transparencies for their own personal use; e.g., class work or thesis presentation.
XI. PURCHASING OF LABORATORY SUPPLIES & MATERIALS

1 PROCEDURE FOR PURCHASING SUPPLIES AND MATERIALS

Purchase of materials, supplies and equipment for research must be authorized by the faculty supervisor. Please follow the purchasing guidelines below:

1. Obtain an OPS (Online Purchasing System) account from the business office staff in 2132 Bainer Hall.
2. Complete the purchase request, including initiators contact information (phone number and email address); the vendor’s address, phone and fax numbers, and any contact person; item(s) description; catalog number(s); current price(s); date needed and applicable shipping requirements; attach any quotes associated with the order.
3. Indicate a valid account number to be charged, which you will receive from your Faculty Supervisor.
4. Submit the form, forwarding it to the Faculty Supervisor for approval.
5. The order will go to the College of Engineering’s Shared Service Center for processing. Orders are placed on a first come, first served basis. Plan ahead when ordering lab supplies to avoid unnecessary shipping charges.
6. For equipment and large orders costing more than $5,000, ALLOW AT LEAST THREE WEEKS for processing and delivery. These orders are processed through the Campus Purchasing Office that is responsible for final review, approval and order placement.
7. The Campus Purchasing Office discourages out-of-pocket purchases, unless strongly justified.

XII. TRAVEL AND OTHER OUT-OF-POCKET EXPENSES

1 TRAVEL

All official travel must be pre-authorized by a Faculty Supervisor. Typical travel expenses include transportation (air, car rental), lodging, meals, conference/meeting registration fees, and tolls. Any unusual expenses (e.g., repair/damage costs) require proper justification and approval by the supervisor.

Travel advances may be requested with Faculty Supervisor’s approval. Students should obtain a valid billing ID or account number from their supervisor. Any excess travel advance must be returned to the University, with a check payable to the UC Regents. See Jennifer Young in 2132 Bainer Hall for assistance. Refer to the following website for travel details: http://afs.ucdavis.edu/systems/aggie-travel/index.html

UCD travelers must submit travel expenses within 21 days of the end of the trip. To get reimbursed, keep all original receipts, including electronic receipts. Particularly for ticketless airfare provide one of the following documents: An invoice or itinerary showing the cost and form of payment; a written receipt (requested by the traveler at the airport); or a passenger receipt coupon (requested by the traveler when making reservations). To request for reimbursement, please follow these guidelines:

1. Complete a Travel Reimbursement form (available in the business office - 2132 Bainer Hall).
2. Itemize daily expenses on a sheet of paper and attach all original receipts. For lost receipts, complete a "Declaration of Lost Receipt" form which can be downloaded from the following website: http://afs.ucdavis.edu/our_services/account_payable/forms/index.html.
3. Obtain Faculty Supervisor’s approval and a valid billing ID or account number.
4. Submit these documents to the business office for processing.

Processing of travel reimbursements may take up to three weeks, depending on the campus Accounting Office’s backlog. Pick up reimbursement check(s) from the main office.

OTHER OUT-OF-POCKET REIMBURSEMENTS

Out-of-pocket reimbursements for University business (teaching or research) must be pre-authorized by a Faculty Supervisor. Typical out-of-pocket expenses may include purchase of miscellaneous project supplies, computer supplies, hardware, lumber, and copying (e.g., Kinko’s). Although extenuating circumstances may justify or necessitate the purchase of supplies and materials, obtain pre-approval from Faculty Supervisor. Out-of-pocket purchases for supplies, including emergency purchases made over the weekend, must not exceed $499 on a single receipt. The University strictly enforces this policy on out-of-pocket expenses and may disallow reimbursement of any expense(s) over the limit.

To request reimbursement:

1) Complete a “Request for Reimbursement” form (pink form) which is available at the website; http://mae.ucdavis.edu/general/internal/forms/reimbursementcheckrequest.pdf
2) Obtain Faculty Supervisor’s approval and a valid billing ID or account #;
3) Attach all original receipts and submit relevant documents to Jennifer Young in 2132 Bainer Hall.

REMINDER: INDIVIDUALS WILL BE HELD PERSONALLY LIABLE FOR UNAUTHORIZED PURCHASES OR EXPENSES.

XIII. TECHNICAL SERVICES

1 COLLEGE OF ENGINEERING, ENGINEERING FABRICATION LABORATORY

The College of Engineering’s (COE) Engineering Student Design Center (ESDC) has a machine shop in 1220 Bainer Hall (known as the Student Shop) available for "hands-on" usage by students and faculty under the supervision the ESDC staff. In addition a student project area in 1230 Bainer Hall is available and used primarily for extra-curricular team competition projects. The ESDC is a supervised facility that provides students with opportunities for hands-on manufacturing and fabrication in a safe environment. They offer instructional support to students, faculty and staff of the College of Engineering as they work on projects for classes, independent study, research, and student design competition clubs. The ESDC website (http://engineering.ucdavis.edu/esdc/) has information on their safety policy, schedule for orientation classes, etc.

2 BIOLOGICAL AND AGRICULTURAL ENGINEERING SHOP

Biological and Agricultural Engineering (BAE) has a well-equipped machine shop in 1329 Bainer Hall staffed by professional machinists working under the supervision of Tom Bell, 530-752-2737, twbell@ucdavis.edu. This is a recharge facility. Graduate students and faculty are not allowed to use these facilities in a "hands-on" fashion but may have work done there by the staff if funded by a research grant. With appropriate qualifications and under special circumstances, the shop will allow "hands-on" usage to accommodate certain project needs; however, this is very unusual. Visit the BAE Shop web page for more information (http://bae.engineering.ucdavis.edu/BAE-SHOP). A service request (form available online at above website) accompanied by appropriate specifications (usually engineering drawings or sketches) is required. The Department Chair, the Department Manager, or the Principal Investigator must approve all service requests. Shop costs will be recharged to a research grant. Do not expect the shop to have all the necessary materials needed for a particular project. If research funding is not available, the shop services cannot be used. Any exception to this rule must have the Chair’s approval and must be arranged through a faculty member. If the work is required as part of your role as a Teaching Assistant for a course, approval must be obtained from the department’s Academic Administrator through the instructor of record.
XIV. DEPARTMENTAL SAFETY INFORMATION

High priority should be given by all personnel to maintaining maximum safety in laboratories and all other departmental facilities. Any concerns should be brought to the attention of at least one of the following: the Principle Investigator, the Major Professor, the Lab Manager, the Department Safety Coordinator, Krasen Kovachev, kdkovachev@ucdavis.edu, or the Department Office.

For emergencies requiring immediate action (e.g., fire or severe personal injury), call 911 or 530-752-1230 to contact on-campus emergency services.

- Students will be notified by their Major Professor of safety training courses that are required before beginning any work in a laboratory. California law and campus policy requires this safety training for every graduate student before work can begin.

At a minimum, all new graduate students must attend the MAE Safety Orientation offered in September. If you will be working in a wet chemistry lab or an industrial lab, you must attend the UC Laboratory Safety Fundamentals in addition to the Site-Specific Safety Orientation and Training at your work site(s). Other training is provided either by your Principle Investigator or our campus EH&S unit. Visit http://safetyservices.ucdavis.edu/training.

Students must also read a copy of the department's Injury and Illness Prevention Program (IIPP) that explains the health and safety policies in detail. In addition, the Emergency Action Plan (EAP) describes the building emergency notification methods and the evacuation procedures. Visit http://mae.ucdavis.edu/resources/safety-information/ for more information. Students using chemicals or hazardous materials in their research need to be trained on Chemical Hygiene Plan or Hazard Communication Program. Students, who will work with shop tools, will need training prior to using these tools.

1 DEPARTMENTAL SAFETY RULES

1. Long pants and closed-toe shoes must be worn at all times in the research and teaching laboratories.
2. Ear protection must be used when appropriate.
3. Appropriate eye protection must be used for all machining operations, chemical use in laboratories, and working with laser sources.
4. Prior to getting unescorted access to a laboratory, you must take the UC Laboratory Safety Fundamentals (Initial) course (http://safetyservices.ucdavis.edu/training/uc-laboratory-safety-fundamentals). The refresher course is required every three years thereafter (http://safetyservices.ucdavis.edu/training/uc-laboratory-safety-refresher).
5. Annual refresher on Chemical Hygiene Plan or Hazard Communication Program including chemical spill control, IIPP and EAP is mandatory.
6. Report any hazardous chemical spills immediately to EH&S at 752-1493 or 911, your Principle Investigator and the Department Safety Officer as soon as possible.
7. Wearing in-line roller skates or riding bicycles and/or skateboards in the hallways is not permitted at any time.
8. UC Davis is a 100% smoke and tobacco free campus. (PPM 290-10)
9. Orientation training by Environmental Health and Safety is required for students who will be working with radiation equipment.

Should an injury occur, notify your Principle Investigator/supervisor immediately to get assistance and to have an injury report completed as needed. A student who is a University employee can receive treatment at the Occupational Health Clinic. A student, who is not employed, can receive treatment at the Student Health and Wellness Center. Note that serious injuries must be reported immediately by the Principle Investigator/supervisor and/or the Department Safety Coordinator to EH&S. During normal business hours immediately contact EH&S at (530)752-1493. Outside of normal business hours immediately call the UC
Police/Fire Dispatch Center at (530)752-1230 who will in-turn contact an Environmental Health & Safety on-call staff.

2 DEPARTMENTAL SAFETY WEB SITE
The department maintains a safety web page that has up-to-date information on safety-related matters. It can be found at http://mae.ucdavis.edu/resources/safety-information/.

XV. COMPUTER RESOURCES

DEPARTMENTAL COMPUTER RESOURCES
Graduate computer facilities are located primarily in 2121B Bainer Hall. Operating systems include Microsoft Windows and Linux. These workstations are maintained with engineering programs, compilers, and general use applications. A Computational Fluid Dynamics computer lab is located in Academic Surge Building room 2120. Additional workstations are also typically available in faculty labs once students are working on projects with an advising professor.

Virtual Computer Labs are hosted by the college at https://labs.engr.ucdavis.edu/. These labs are available 24/7 but they do have limited seats.

As well, there is undergraduate computer space located in 2071 and 2121A Bainer Hall, a Labview Measurement and Instrumentation Lab in 1071 Bainer, and additional facilities are available in the College of Engineering laboratories.

Jim Vanderveen handles the department's IT needs. Applications for MAE computer accounts, as well as suggestions for new software or hardware should be directed to him (mae-it@ucdavis.edu) or 752-1834.

The Department strictly adheres to University computer policy and software licensing. We generally do not have any "site-licensed" software available for students to put on their own personal computers, although some packages can be run remotely, or may be available for use in your advising professor's lab. Obviously, copying applications to or from any Department computers is prohibited. See my.ucdavis.edu/software and the department web pages for more on software availability.