June 2, 2023

Paul Erickson
Chair, Mechanical and Aerospace Engineering

RE: Mechanical and Aerospace Engineering Degree Requirements

Enclosed is a copy of the Mechanical and Aerospace Engineering degree requirements as approved by Graduate Council on June 2, 2023. These degree requirements are now the revised, official document for the Mechanical and Aerospace Engineering and will be posted to the Office of Graduate Studies program webpage: https://grad.ucdavis.edu/programs/gmae.

Thank you for your efforts on behalf of graduate education.

Sincerely,

Jeffrey Schank
Chair, Graduate Council

c: Jasmine Bonite, Director of Policy and Programs, Graduate Studies
Will Angel, Project Policy Analyst, Graduate Studies
Duncan Temple Lang, Associate Dean for Graduate Programs, Graduate Studies
Melany Miners, Graduate Program Coordinator, Mechanical and Aerospace Engineering

Graduate Program in Mechanical and Aerospace Engineering

MS and PhD DEGREE REQUIREMENTS

Revised: April 11, 2023
Graduate Council Approval: June 2, 2023

MASTER OF SCIENCE DEGREE REQUIREMENTS

1 ADMISSIONS REQUIREMENTS

Consideration for program admission requires a bachelor's degree, three letters of recommendation, official transcripts, GRE scores, TOEFL or IELTS score (if applicable) and Office of Graduate Studies application with fee by the stated admission deadline. A minimum GPA of 3.0 is required. Applicants to the MS program should also have a GRE Verbal percentage of at least 60%, a GRE Quantitative percentage of 80% and an Analytical Writing percentage of at least 50%. However, admissions decisions are made on a case-by case basis. Meeting some or all of these criteria does not guarantee admission, but is merely for eligibility.

The decision to recommend admission to the Dean of Graduate Studies will be made by the Program Admissions Committee on the basis of available space and the competitiveness of applicants compared to the eligible pool.

a PREREQUISITES:

There are no formal prerequisites for admission. However, applicants not holding a B.S. in Mechanical and/or Aerospace Engineering (MAE) are required to work with their Major Professor to determine appropriate undergraduate courses to complete to ensure proficiency in Engineering Analysis and other fundamental engineering topics relevant to their research. A list of topics and associated courses offered at UC Davis can be found in the table:

Topic	Coursework
Engineering Analysis	MAT 21ABCD – Calculus MAT 22A – Linear Algebra MAT 22B – Differential Equations
Dynamics	ENG 102 - Dynamics
Fluid Mechanics	ENG 103- Fluid Mechanics EME 106 – Thermo-Fluid Mechanics
Heat Transfer	EME 165 – Introduction to Heat Transfer
Strength of Materials	ENG 104 – Mechanics of Materials EME 150A – Mechanical Design EAE 135 – Aerospace Structures
System Dynamics and Control	EME 171 – Analysis, Simulation & Design of Mechatronic Systems EME 172 – Automatic Control of Engineering Systems
Thermodynamics	ENG 105 – Thermodynamics EME 106 – Thermo-Fluid Dynamics

b DEFICIENCIES:

Course deficiencies should be made up by the end of the first year of enrollment by earning a letter grade of "B" or better. None of these prerequisite courses may be counted towards the graduate program requirements.

2 DEGREES OFFERED

The Program offers the following degrees:

- Master of Science, with thesis (Plan I)
- Master of Science, with capstone Project (Plan II) or with capstone Literature Synthesis (Plan II)

Students must develop their plan of study in consultation with their major professor (Plan I, or Plan II with Project option) or coursework advisor (Plan II with Literature Synthesis option).

No course that was required for, or used towards completion of another degree (BS/MS, etc.) at UC Davis or another institution, can be used towards the requirements for this degree.

3 COURSE REQUIREMENTS

Students must enroll in a minimum of 12 units per quarter to be considered in full-time status. Two six-week summer sessions may be counted as the equivalent of one regular quarter for purposes of satisfying the residency requirement if a minimum of two units are taken in each summer session. The 12 units can be made up of required coursework, seminar (MAE 297), and research units (MAE 290C and 299). Per UC regulations, students should not ordinarily enroll in more than 12 units of graduate level courses (200) or more than 16 units of combined undergraduate and graduate level (100, 200, 300) courses per quarter.

The distribution of course credits for the three MS options is summarized in the table below.

Course credit distribution for the MS options

Options	MS Plan I	MS Plan II- Project	MS Plan II- Literature Synthesis
Total Letter-graded coursework	24	32	36
Minimum letter-graded g*raduate* level coursework	20	28	32
Minimum MAE course credits	12	20	20
Minimum College of Engineering (COE) course credits	20	28	28
MAE297 seminar	2	2	1
MAE 299 research credits	9	3	0
MAE 290C	3	1	1
Total credits	38	38	38

a MASTER OF SCIENCE WITH THESIS (PLAN I):

This plan requires a minimum of 38 credit units, which are divided into letter-graded course credits, and thesis research and seminar credits. This Plan requires more units than the UC Davis minimum, which are: 30 units of graduate and upper division courses (the 100 and 200 series only), at least 12 of which must be graduate work in the major field.

At least 24 credits should come from letter-graded coursework. Out of the 24 credits of coursework, a minimum of 20 units should be at the graduate level. The remaining 4 units of required letter-graded coursework may be satisfied with graduate or upper division undergraduate coursework in engineering or any other field that is relevant to the student's research (e.g. mathematics, biology, etc.). A minimum of 12 units must be letter-graded graduate courses in MAE, and a minimum of 20 units should be taken within the College of Engineering.

In addition to letter-graded course credits, an individual thesis is required. Students need to be enrolled in a minimum of 3 MAE 290C graduate research conference units and 9 MAE 299C research units under their thesis advisor's section. Requirements associated with the thesis are described in section 7. Students are also required to take a minimum of 2 MAE297 seminar credits.

b MASTER OF SCIENCE WITH CAPSTONE PROJECT (PLAN II):

This plan requires a minimum of 38 credit units, which are divided into letter-graded course credits, and project research and seminar credits. This plan requires more units than the UC Davis minimum, which are: 36 units of graduate and upper division courses (the 100 and 200 series only), at least 12 of which must be graduate work in the major field.

At least 32 credits should come from letter-graded coursework. Out of the 32 credits of coursework, a minimum of 28 units should be at the graduate level. The remaining 4 units of required letter-graded coursework may be satisfied with graduate or upper division undergraduate coursework in engineering or any other field that is relevant to the student's research (e.g. mathematics, biology, etc.). If a course was used towards a BS degree from any institution, it cannot be counted towards the remaining 4 units. A minimum of 20 credit units must be letter-graded graduate courses in MAE, and a minimum of 28 units should be taken within the College of Engineering.

In addition to letter-graded course credits, an individual capstone project is required. Students need enroll in a minimum of 1 MAE 290C graduate research conference unit and 3 MAE 299C research units under their project advisor's section. Requirements associated with the project are described in section 7. Students are also required to take a minimum of 2 MAE297 seminar credits.

c MASTER OF SCIENCE WITH CAPSTONE LITERATURE SYNTHESIS (PLAN II):

This plan requires a minimum of 38 credit units, which are divided into letter-graded course credits and seminar credits. This plan requires more units than the UC Davis minimum, which are: 36 units of graduate and upper division courses (the 100 and 200 series only), at least 12 of which must be graduate work in the major field.

At least 36 credits should come from letter-graded coursework. Out of the 36 credits of coursework, a minimum of 32 units should be at the graduate level. The remaining 4 units of required letter-graded coursework may be satisfied with graduate or upper division undergraduate coursework in engineering or any other field that is relevant to the student's research (e.g. mathematics, biology, etc.). If a course was used towards a BS degree from any institution, it cannot be counted towards the remaining 4 units. A minimum of 20 credit units must be letter-graded graduate courses in MAE, and a minimum of 28 units should be taken within the College of Engineering.

In addition to letter-graded course credits, an individual capstone literature synthesis is required. Students need to be enrolled in a minimum of 1 MAE 290C graduate research conference credit

under their advisor's section during the quarter when they complete the literature synthesis. Requirements associated with the literature synthesis are described in section 7. Students are also required to take a minimum of 1 MAE297 seminar credit.

English language requirement: Students who have not obtained a previous degree at an approved English-medium institution or demonstrated English-language proficiency through an appropriate exam (e.g. TOEFL) are required to complete appropriate English-language courses, as described in the policy Graduate Student Course Requirements – English as Second Language (GC2018-02). Courses taken in satisfaction of this requirement do not count towards the units required for graduation.

4 COMMITTEES

a GRADUATE STUDIES ADMISSIONS COMMITTEE:

Once the completed application package, including all supporting materials and the application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee consists of the Graduate Advisor for Admissions (Chair of the Committee) and two Graduate Program members who are appointed by the Program Chair.

The role of the Admissions Committee is to review each entire application and to make a recommendation to accept or decline an applicant's request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval. Notifications of admission decisions are sent to the applicants by the Office of Graduate Studies. The priority admission deadline is typically December 15 of the previous calendar year for the next Fall entering class. No applications are accepted after the final admission deadline. Prospective applicants are advised to consult the website of the Office of Graduate Studies (gradstudies.ucdavis.edu) for current application deadlines.

b GRADUATE STUDIES COMMITTEE:

The Graduate Studies Committee (GSC) comprises the Chair of the MAE Graduate Program/Department (Chair of the committee), the Graduate Advisor for Continuing Students, the Graduate Advisor for Admissions, and at least two Graduate Program faculty members who are appointed by the Program Chair, and a student representative. The Graduate Program coordinator is a member of the committee. The Graduate Program Coordinator and student representative are non-voting members.

The Graduate Studies Committee provides guidance to the MAE Graduate Program faculty on curricular and student matters. Specifically, the MAE GSC performs the following functions:

1. Steers the Program by ensuring a robust and consistent offering of graduate level courses. The Committee
    a. advises faculty on development of new courses or reconstitution of existing courses
    b. provides a structure/process by which new graduate course offerings or existing graduate course offerings are evaluated
    c. makes recommendations regarding degree requirements and drafts changes to the degree requirements and by-laws for consideration of the Program faculty
2. Evaluates current size of the Program and develops recommendations to Program faculty on potential programmatic changes to accommodate growth plans
3. Reviews graduate student petitions
4. Appoints standing and ad-hoc committees as necessary to properly administer the activities of the Program

c COURSE GUIDANCE COMMITTEE:

Although there is no guidance committee for the MS degree, students are expected to develop their

plan of study through the advisement of the major professor (for MS Plan I and MS Plan II Capstone Project) or coursework advisor (MS Plan II- Capstone Literature Synthesis) and the Graduate Advisor for Continuing Students who approves it by signing the MS Advancement to Candidacy form. Master's students must file an Application for Advancement to Candidacy with the Office of Graduate Studies after completion of at least one-half of the degree requirements and at least one quarter before completion of all requirements. For students with an overall GPA below 3.0 at the time of application for advancement to candidacy, the application may only be submitted if the GPA is close enough to 3.0 that successful completion of coursework at the end of the quarter during which the application is filed will bring the student above the required GPA minimum of 3.0.

d PLAN I THESIS COMMITTEE:

In consultation with their major professor and graduate advisor, students identify three faculty members to serve on their Thesis Committee (Plan I). The major professor is the Chair of the committee and must be a member of the MAE Graduate Program. The other two committee members may come from any Engineering Graduate Program, and one member may come from outside Engineering if this individual has a special interest and expertise in the thesis topic. It is possible, under some circumstances, to suggest a committee member from outside UC Davis. Typically, this individual would have special expertise and/or qualifications that cannot be duplicated on campus. In this case, an External Committee Membership form must be submitted for approval. These nominations are submitted to the Office of Graduate Studies for formal appointment in accordance with Graduate Council policy (GC1998-01).

The role of the Thesis Committee is to advise the student on the research topic and methods, and then to review the final completed thesis for acceptance. Students are expected to meet with the Chair of their thesis committee regularly. Thesis committee members are expected to read and comment on a thesis within four weeks from its submission. This time limit policy does not apply to summer periods for faculty holding nine-month appointments. The student and faculty will coordinate a timeline for the student to present the thesis to the thesis committee.
This timeline must allow all thesis committee members enough time to fulfill their responsibilities within the four-week deadline.

e PLAN II CAPSTONE PROJECT COMMITTEE:

The Plan II-Capstone Project Committee consists of three faculty members in the MAE Graduate Program, including the student's Major Professor or Advisor for Coursework. The major professor (or Advisor for Coursework) is the Chair of the project committee. There is a provision where one of the three Program faculty members of the committee can be replaced by an external member. Such external committee members can be substituted with approval of the Chair of the Graduate Program. Only one of the committee members may be from outside the MAE Graduate Program, and should be from another Engineering Graduate Program. It is possible, under some circumstances, to suggest a committee member from outside UC Davis. Typically, this individual would have special expertise and/or qualifications that cannot be duplicated on campus. In this case, an External Committee Membership form must be submitted for approval.

The role of the Plan II-Capstone Project Committee is to review the capstone project report, and provide a recommendation of whether the student earned a passing score on the capstone report, as described in Section 7b.

5 ADVISING STRUCTURE AND MENTORING

The **Graduate Advisor for Continuing Students** is a resource for all graduate students in the Program to provide information and advising on academic requirements, policies and procedures. The Graduate Advisor'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 Advisor for Continuing Students is responsible for the following: a) serves on the MAE

Graduate Study Committee & TA Selection Committee; b) handles all Office of Graduate Studies and MAE program forms; c) performs periodic review of student progress toward degree objectives; d) enforces MAE Graduate Procedures and Requirements; e) has responsibility for the content of MAE Graduate Program Web Pages; and f) assists the Graduate Advisor for Admissions in Block Grant allocation decisions. The Graduate Advisor for Continuing Students is available for consultation by direct appointment.

Graduate Advisor for Admissions (Admissions chair):The Graduate Advisor for Admissions a) chairs the MAE Graduate Admissions Committee;
b) serves on the MAE Graduate Study Committee & TA Selection Committee; c) is responsible for new student recruitment; d) is responsible for allocating Graduate Program Fellowship funds, in consultation with the Graduate Advisor for Continuing Students; and e) approves change of major, change of degree objective and readmission applications.

Initial faculty advisor: The initial faculty advisor serves as a temporary advisor to the student until the student finds a permanent Major Professor (faculty advisor). Each student is assigned, upon admission, an initial faculty contact by the Graduate Advisor for Admissions. The initial advisor advises the student on coursework and guides the student in finding a permanent Major Professor. The Graduate Program Coordinator must be notified if the student finds a permanent Major Professor who is different from the initial faculty contact. Note that the permanent Major Professor should agree to mentor the student.

Major Professor (faculty advisor): The Major Professor is the faculty member who assists the student in preparing a detailed study program and who supervises the research that forms the basis for the thesis or dissertation. The Major Professor's responsibilities include to: a) assist the student with preparation of program of study; b) supervise student thesis or dissertation research; c) assign a grade for MAE-299 (research) and MAE-290C (research conference) units; d) serve as the chairperson of the thesis or dissertation committee; and e) provide a formal assessment of the student's progress toward degree requirements on an annual basis. One of the most critical decisions in a graduate student's career is the selection of a Major Professor (Thesis Advisor). 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 and often defines the future career directions of the student. Each student is assigned an initial faculty contact upon admission. The Graduate Program Coordinator must be notified if the student decides on a Major Professor who is different from the initial faculty contact. The Major Professor must be a member of the MAE Graduate Program.

The Mechanical & Aerospace Engineering Graduate Program has adopted the UC Davis Graduate Council **Mentoring Guidelines** and has posted them on the website (https://academicsenate.ucdavis.edu/sites/g/files/dgvnsk3876/files/inline-files/mentoring_guidelines.pdf).

6 ADVANCEMENT TO CANDIDACY

Every student must file an official application for Candidacy for the Master's Degree and pay the candidacy fee after completing one-half of their course requirements and at least one quarter before completing all degree requirements. The Candidacy for the Degree of Master form can be found online at: http://www.gradstudies.ucdavis.edu/forms/. A completed form includes a list of courses the student will take to complete degree requirements. If changes must be made to the student's course plan after advancement to candidacy, the Graduate Advisor must recommend these changes to the Office of Graduate Studies. Students must have their Graduate Advisor and thesis committee Chair sign the candidacy form before it can be submitted to the Office of Graduate Studies. If the candidacy is approved, the Office of Graduate Studies will send a copy to the Thesis Committee Chair, the appropriate graduate staff person, and the student. If the Office of Graduate

Studies determines that a student is not eligible for advancement, the graduate program and the student will be told the reasons for the application's deferral. Examples of reasons for deferring an application include: grade point average below 3.0, outstanding "I" grades in required courses, or insufficient units.

Students in the MS program are expected to advance to candidacy in their 3rd quarter. Students having to make-up deficiencies are expected to advance to candidacy in their 4th quarter.

7 COMPREHENSIVE EXAMINATION AND THESIS REQUIREMENTS

a THESIS REQUIREMENTS (PLAN I):

The candidate and major professor should meet with the other members of the thesis committee to discuss progress and any changes in research objectives, as needed.

Research for the thesis is to be carried out under the supervision of a faculty member of the program and should represent an original contribution to knowledge in the field. The thesis research must be conducted while the student is enrolled in the program. The student, in consultation with and final approval by the thesis committee decides the thesis topic, length, format, scope requirements and research breadth. While it is expected that the thesis will include high-quality research that can be published in articles, there is no minimum number of articles that are required to be published before the thesis is completed. The thesis is submitted to the thesis committee at least one month before the student plans to make requested revisions. All committee members have four weeks to review the thesis (GC1998-01). All committee members must approve the thesis and sign the title page before the thesis is submitted to Graduate Studies for final approval. Should the committee determine that the thesis is unacceptable, even with substantial revisions, the program may recommend to the Dean of Graduate Studies that the student be disqualified from the program.

The deadlines for completing this requirement are listed each quarter in the campus General Catalog (available online at the website of the Office of the Registrar or from the Bookstore). A candidate must be a registered student or in Filing Fee status at the time of filing a thesis, with the exception of the summer period between the end of the Spring Quarter and the beginning of Fall Quarter.

The MAE Graduate Program adheres to the regulations instituted by the Office of Graduate Studies http://gradstudies.ucdavis.edu/students/filing.html.

b CAPSTONE PROJECT (PLAN II):

Fulfillment of the Capstone Project is the last requirement of the M.S. Plan II. The Capstone Technical Project and Report Option or Capstone Literature Synthesis Option must be selected by the student.

Capstone Technical Project and Report Option

The student's major professor and the other members of the exam committee will decide on what constitutes an appropriate topic for this project and report. The technical project and report examines the application of the concepts and methods from various courses taken by the student during their MS Plan II program. The project and technical report is to be designed and written under the direction of the major professor who must be a member of the graduate program. This project differs from a Plan 1 project in that it is more limited in length and scope, and may or may not include original research. This short technical project, generally not requiring more than one quarter of work serves as a basis for the technical report.

Capstone Literature Synthesis Option

The Major Professor or the Initial Advisor will serve as the student's advisor for coursework. Fulfillment of the Literature Synthesis is the last requirement of the M.S. Plan II Capstone-Literature Synthesis option. The student will work independently on the synthesis based on the guidelines set by the program over a period of three or more weeks, but not exceeding one quarter.

The capstone literature synthesis option examines the application of the concepts and methods from various courses taken by the student during their MS Plan II program. Literature synthesis consists of a cohesive summary and discussion of a minimum of 3 archival papers in the chosen field. Sections should include an abstract, introduction and background, methods, results and discussion, and conclusions. Clear integration of results amongst the papers, discussion of the results, and identifying gaps for areas of new research are key aspects of the synthesis. The length should be no more than 15 pages, including figures, with a minimum length of 10 pages (single spaced, 1 inch margins, 12 point font).

The student's exam committee will review the report (project report or literature synthesis) within 4 weeks and provide a recommendation of whether the student earned a passing score. The Exam committee's unanimous vote is required to pass a student on the project report. If the exam committee's vote is not unanimous it will be forwarded to the Graduate Advisor for Continuing Students for review and a decision on the result. If a student does not pass, the committee may recommend that the student submit an amended version of the report. The amended report must be submitted within one quarter of the first report. The report may not be amended more than once. A student who does not pass on the second attempt is subject to disqualification from further graduate work in the program. Disqualification recommendations are reviewed by the Program's Graduate Studies Committee and must be approved, when a quorum is established, by a simple majority vote of the program faculty members which may lead to a recommendation to the Dean of Graduate Studies that the student be disqualified from the MAE MS program.

Once passed, the Master's Report form is signed by the Program Graduate Advisor and then forwarded to the Office of Graduate Studies. The deadlines for completing this requirement are listed each quarter in the campus General Catalog (available online at the website of the Office of the Registrar). A candidate must be a registered student or in Filing Fee status at the time the program submits the form, with the exception of the summer period between the end of the Spring Quarter and the beginning of Fall Quarter. The program must file the report with Graduate Studies within one week of the end of the quarter in which the student's degree will be conferred.

8 NORMATIVE TIME TO DEGREE

Normative Time is the elapsed time, calculated to the nearest quarter, that students would need to complete all requirements for the degree, assuming that they are engaged in full-time study and making adequate progress. There are two parts to Normative Time: Normative Time to Advancement to Candidacy and Normative Time in Candidacy. For Plan I, Normative Time in Candidacy represents the number of quarters that are recommended for completion of the thesis. Students who enter without a BS degree in Mechanical and/or Aerospace Science and Engineering may need additional time.

a MASTER OF SCIENCE WITH THESIS (PLAN I):

Normative Time to Advancement to Candidacy: 3 quarters
Normative Time to Degree: 6 quarters

b MASTER OF SCIENCE WITH CAPSTONE PROJECT (PLAN II):

Normative Time to Advancement to Candidacy: 3 quarters
Normative Time to Degree: 4 quarters

9 TIMELINE AND SEQUENCE OF EVENTS

Full-time students in the M.S. program are expected to broadly adhere to the following timeline. The numbers indicate the consecutive quarter of enrollment:

	MS Plan I	**MS Plan II-Capstone**
Take coursework	1, 2, 3, 4	1, 2, 3, 4
Select Faculty Research Advisor or Project Mentor (if different than assigned advisor)	2	2
Select a Master's Thesis committee (Plan I)	2	n/a
File an Application for Candidacy which includes a plan of study	3	3
Submit the Plan II project (Plan II)	n/a	4
File a Master's Exam Report Form – Plan II	n/a	4
Complete the thesis, gain approval from the committee and submit to the Office of Graduate Studies (Plan I)	6	n/a

10 SOURCES OF FUNDING

Funding is provided in the following forms: Departmental Fellowships, Graduate Student Research Assistantships (GSR), Teaching Assistantships (TA), Reader positions.

11 PELP, IN ABSENTIA, AND FILING FEE STATUS

a 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 or research away from campus, preparing for examinations if doing so at a distance from campus, under financial hardship, or with otherwise prohibitive personal problems. PELP is recommended for those students who are certain of the quarter in which they plan to return and who are intending to be away no longer than three quarters. If a student is not certain of the return date, filing an Application for Readmission is suggested instead.

Students on PELP cannot 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.

More information about PELP can be found in the Graduate Student Guide: http://www.gradstudies.ucdavis.edu/publications/

b IN ABSTENTIA STATUS:

Information about In Absentia status (reduced fees when researching out of state) can be found in the Graduate Student Guide: http://www.gradstudies.ucdavis.edu/publications/

c FILING FEE STATUS:

Normally, candidates for the MS Plan I degree will file a final approved copy of their thesis with the Office of Graduate Studies during their final quarter of residence on campus, and candidates for the MS Plan II degree will submit a final comprehensive exam to their comprehensive exam committee during their final quarter of residence on campus. Filing Fee status is designed for MS 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 the final thesis or dissertation manuscript. 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 grading the comprehensive examination.

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. An extension of an additional quarter is possible under unusual and compelling circumstances, but is rarely approved by Graduate Studies. In order to be a registered student again after being on filing fee status, it will be necessary to file a Readmission application. Please note that a student is expected to graduate once the filing fee period has elapsed. Students in non-registered status, such as Filing Fee, will be allowed one quarter of employment without request for exception.
Exceptions beyond this one-quarter period are rarely granted.

More information about Filing Fee status can be found in the Graduate Student Guide: http://www.gradstudies.ucdavis.edu/publications/

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. Accompanying this form must be the College of Engineering Supplemental Filing Fee signature form with signatures of all members of the committee stating that they have read a draft of the thesis or dissertation. The student will be charged a one-time fee. The completed form, 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.

DOCTOR OF PHILOSOPHY DEGREE REQUIREMENTS

1 ADMISSIONS REQUIREMENTS

Consideration for program admission requires a bachelor's degree, three letters of recommendation, official transcripts, GRE scores, TOEFL or IELTS score (if applicable) and Office of Graduate Studies application with fee by the stated admission deadline. Admission to graduate standing normally requires a minimum of 3.5 (out of 4.0) GPA including a minimum of 3.5 (out of 4.0) for all coursework taken in a completed master's program. The applicant should also have a GRE Verbal percentage of at least 60%, a GRE Quantitative percentage of 80% and an Analytical Writing percentage of at least 50%. However, admissions decisions are made on a case-by case basis. Meeting some or all of these criteria does not guarantee admission, but is merely for eligibility. The decision to recommend admission to the Dean of Graduate Studies will be made by the Program Admissions Committee on the basis of available space and the competitiveness of applicants compared to the eligible pool. A master's degree is not required as a prerequisite for the doctoral degree. For current MAE master's students, completion of the M.S. requirements does not guarantee admission to the Ph.D. program; a change of degree objective form must be submitted for consideration.

a PREREQUISITES:

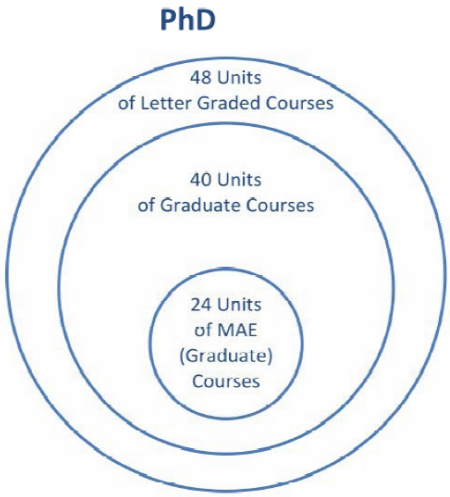
There are no formal prerequisites for admission. However, applicants not holding a B.S. in Mechanical and/or Aerospace Engineering (MAE) are required to work with their major professor to determine appropriate undergraduate courses to complete to ensure proficiency in Engineering Analysis and two other fundamental engineering topics relevant to their dissertation research and preliminary exams. A list of topics and associated courses offered at UC Davis can be found in the table:

Topic	Coursework
Engineering Analysis	MAT 21ABCD – Calculus MAT 22A – Linear Algebra MAT 22B – Differential Equations
Dynamics	ENG 102 - Dynamics
Fluid Mechanics	ENG 103- Fluid Mechanics EME 106 – Thermo-Fluid Mechanics
Heat Transfer	EME 165 – Introduction to Heat Transfer
Strength of Materials	ENG 104 – Mechanics of Materials EME 150A – Mechanical Design EAE 135 – Aerospace Structures
System Dynamics and Control	EME 171 – Analysis, Simulation & Design of Mechatronic Systems EME 172 – Automatic Control of Engineering Systems
Thermodynamics	ENG 105 – Thermodynamics EME 106 – Thermo-Fluid Dynamics

Course deficiencies should be made up by the time an applicant takes the preliminary exams by auditing the course or earning a letter grade of "B" or better. Proficiency will be demonstrated by the student when they pass their preliminary exams. None of these prerequisite courses may be counted towards the graduate program requirements.

2 DISSERTATION PLAN

The only dissertation plan offered is Plan B as described under Section 520 of the Davis Division Academic Senate Regulations. It includes a required three-member (minimum) dissertation committee, an optional final oral examination (made on an individual student basis by the dissertation committee), and a required exit seminar.



3 COURSE REQUIREMENTS (51-53 UNITS)

** No course that was required for, or used towards completion of an undergraduate degree or another Doctoral degree at UC Davis or another institution, can be used towards the requirements for this degree.

a) Primary and Secondary Areas Coursework
b) A Doctoral Program of Study must contain a minimum of 48 units of coursework taken on a letter grade basis for students entering the program. Of these 48 units at least 24 must be graduate courses (200 level) taken at UC Davis in MAE. At least 40 units must be earned in graduate level courses. Letter-graded courses taken during a Master's program, either at UCD or elsewhere can be part of the 48 unit total if these courses fit the proposed program of study. A minimum of 3 units of MAE 297 Seminar is required after completion of the Master's degree from any institution and before advancing to candidacy. Students admitted directly into the doctoral program after the B.S. degree are required to complete at least 5 units of MAE 297. Students with a Master's degree from a different institution are required to complete 3 units of MAE 297.

Minimum Coursework Requirements for PhD Students

	PhD without prior MS	PhD with prior MS
Total Letter-graded coursework	48	48
Minimum letter-graded g*raduate* level coursework	40	40
Minimum MAE course credits	24	24
MAE297 seminar	5	3
MAE 299 research credits	As needed	As needed
MAE 290C	As needed	As needed
Total Minimum credits	53	51

The 48 units of required coursework are divided between a 24-unit primary area of study and two complementary 12-unit secondary areas of study, or alternatively, between a 32-unit primary area of study and with one complementary 16-unit secondary area of study. These units are exclusive of seminar and research units. Each student selects a primary field of study and either one or two secondary fields of study. Primary and secondary fields should be selected from the following tracks: Aerospace; Biomechanical Engineering; Computational Fluid Dynamics; Controls and Mechatronics; Design, Manufacturing, and Materials; Dynamics and Design of Mechanical Systems; Energy Systems; Micro and Nanotechnology; and Thermo/Fluids. However, in order to provide some flexibility in tailoring doctoral programs that meet interdisciplinary objectives, it is possible, on an exceptional basis, for students to define, in concert with their guidance committee, primary and secondary fields of study outside this list.

These defined primary and secondary fields of study are subject to the approval of the Program's Advisor for Continuing Students. The Program of Study may not be approved if the primary and secondary fields are too closely related or if some fields are so loosely defined that the courses lack cohesiveness. Students must develop their plan of study in consultation with their course guidance committee (Section 5c).

Students must enroll in a minimum of 12 units per quarter to be considered as in full-time status. Two six-week summer sessions may collectively be counted as the equivalent of one regular quarter for purpose of satisfying the residency requirement if a minimum of two units are taken in each summer session. Residence for the MS degree at UC Davis can be used to satisfy the residency requirements for a doctoral degree.

4 ENGLIGH LANGUAGE REQUIREMENT

Students must meet the English as Second Language requirement, if applicable. This policy can be found on the UC Davis Graduate Studies website. Coursework taken for English as Second Language requirements cannot be used toward the degrees.

5 COMMITTEES

a GRADUATE PROGRAM ADMISSIONS COMMITTEE:

Once the completed application package, including all supporting material, and the application fee have been received, the application will be submitted to the Admissions Committee. The Admissions Committee consists of the Graduate Advisor for Admissions (Chair of the Committee) and two

Graduate Program members who are appointed by the Program Chair.

The role of the Admissions Committee is to review each entire application and to make a recommendation to accept or decline an applicant's request for admission. That recommendation is forwarded to the Dean of Graduate Studies for final approval. Notifications of admission decisions are sent to the applicants by the Office of Graduate Studies. The priority admission deadline is typically December 15 of the previous year for the next Fall entering class. No applications are accepted after the final admission deadline which is April 1. Prospective applicants are advised to consult the website of the Office of Graduate Studies (gradstudies.ucdavis.edu) for other application deadlines.

b GRADUATE STUDIES COMMITTEE:

The Graduate Studies Committee (GSC) comprises the Chair of the MAE Graduate Program (Chair of the committee), the Graduate Advisor for Continuing Students, the Graduate Advisor for Admissions, and at least two Graduate Program faculty members who are appointed by the Program Chair, and a student representative. The Graduate Program coordinator is a member of the committee. The Graduate Program Coordinator and student representative are non-voting members.

The Graduate Studies Committee provides guidance to the MAE Graduate Program faculty on curricular and student matters. Specifically, the MAE GSC performs the following functions:

1. Steers the Program by ensuring a robust and consistent offering of graduate level courses. The Committee
    a. advises faculty on development of new courses or reconstitution of existing courses
    b. provides a structure/process by which new graduate course offerings or existing graduate course offerings are evaluated
    c. makes recommendations regarding degree requirements and drafts changes to the degree requirements and by-laws for consideration of the Program faculty
2. Evaluates current size of the Program and develops recommendations to Program faculty on potential programmatic changes to accommodate growth plans
3. Reviews graduate student petitions
4. Appoints standing and ad-hoc committees as necessary to properly administer the activities of the Program

c COURSE GUIDANCE COMMITTEE:

A doctoral student must declare the Ph.D. Guidance Committee within one quarter after passing the Ph.D. Preliminary Examination. This committee is chaired by the Major Professor and is made up of at least two other members. The majority of this committee must be members of the MAE Graduate Program. These may be, and usually are, the same faculty members who eventually become members of the student's Dissertation Committee. All faculty who are members of the UC Davis Academic Senate are automatically eligible to serve on doctoral guidance committees. Eligibility of non-members of the UC Davis Academic Senate for service on a Doctoral Guidance Committee, and all committees herein, is subject to the Graduate Council Policy on Service on Advanced Degree Committees (GC1998-01). If eligible, the appointment of these individuals must also be approved by the Graduate Advisor for Continuing Students

The responsibility of this committee is to guide the student through their program of study until the PhD Qualifying Examination is taken. These members sign their approval of the coursework on the Ph.D. Program of Study form within one quarter of passing the Ph.D. Preliminary Examination.

d PH.D. PRELIMINARY EXAMINATION COMMITTEE:

Each subject of the PhD Preliminary Exam is written by a committee of three faculty members, each with a selected Chair. These committees are selected by the Graduate Advisor for Continuing Students. (See Section 8a for detailed information on the PhD Preliminary Examination).

e QUALIFYING EXAMINATION COMMITTEE:

In consultation with their major professor and graduate advisor, students identify faculty members to serve on the Examination Committee. The committee consists of five members, with the majority being members of the MAE Graduate Program. One member external to MAE is required. The doctoral student's Major Professor (Research Advisor) may not be a member of the Qualifying Examination committee. These nominations are submitted to the Office of Graduate Studies by the Graduate Advisor for formal appointment in accordance with Graduate Council policy (DDB 80.Graduate Council, B.1.).

f DISSERTATION COMMITTEE:

The Dissertation Committee is a three-member committee selected by the student, in consultation with the Major Professor. The majority of the committee should be from MAE. The composition of the dissertation committee is entered on the Advancement to Candidacy Form, which is submitted to Graduate Studies. The Dissertation Committee is appointed by Graduate Studies in accordance with policies of the Graduate Council.

The role of the Dissertation Committee is to advise the doctoral student on the research topic and methods, and then to review the final completed dissertation for acceptance. The Committee Chairperson (usually the Major Professor) should determine the desires of the individual members regarding assistance with the research and dissertation review at the time the dissertation committee is constituted. Students are expected to meet with the Chair of their dissertation committee regularly. Dissertation committee members are expected to read and comment on a dissertation within four weeks from its submission. This time limit policy does not apply to summer periods for faculty holding nine-month appointments. The student and faculty will coordinate a timeline for the student to present the thesis to the dissertation committee. This timeline must allow all dissertation committee members enough time to fulfill their responsibilities within the four-week deadline.

6 ADVISING STRUCTURE AND MENTORING

Graduate Advisor for Continuing Students: The Graduate Advisor for Continuing Students is a resource for all graduate students in the Program to provide information and advising on academic requirements, policies and procedures. The Graduate Advisor'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 Advisor for Continuing Students is responsible for the following; a) serving on the MAE Graduate Study Committee & TA Selection Committee; b) handling all Office of Graduate Studies and MAE Program forms; c) performing periodic review of student progress toward degree objectives; d) enforcing MAE Graduate Procedures and Requirements; e) maintaining the content of MAE Graduate Program Web Pages and f) assisting the Graduate Advisor for Admissions in Block Grant allocation decisions. The Graduate Advisor for Continuing Students is available for consultation by direct appointment.

Graduate Advisor for Admissions (Admissions Chair): The Graduate Advisor for Admissions a) chairs the MAE Graduate Admissions Committee;
b) serves on the MAE Graduate Study Committee & TA Selection Committee; c) is responsible for new student recruitment; d) allocates Graduate Program Fellowship funds; and e) approves change of major, change of degree objective and readmission applications.

Initial faculty advisor: The initial faculty advisor serves as a temporary advisor to the student until the student finds a permanent Major Professor (faculty advisor). Each student is assigned an initial faculty contact upon admission by the Graduate Advisor for Admissions. The initial advisor advises the student on coursework and guides the student in finding a permanent Major Professor. The

Graduate Program Coordinator must be notified if the student finds a permanent Major Professor who is different from the initial faculty contact. Note that the permanent Major Professor should agree to mentor the student.

Major Professor (faculty advisor): The Major Professor (faculty advisor) is the faculty member who assists the student in preparing a detailed study program and who supervises the research that forms the basis for the thesis or dissertation. The major professor is responsible for a) assisting the student with preparation of Program of Study; b) supervising student thesis or dissertation research; c) assigning a grade for MAE-299 (research) and MAE-290C (research conference) units; d) serving as the chairperson of the thesis or dissertation committee; and e) providing a formal assessment of the student's progress toward degree requirements on an annual basis. One of the most critical decisions in a graduate student's career is the selection of a Major Professor (Dissertation Advisor). 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 and often defines the future career directions of the student. Each student is assigned an initial faculty contact upon admission. The Graduate Program Coordinator must be notified if the student decides on a Major Professor who is different from the initial faculty contact. The Major Professor must be a member of the MAE Graduate Program.

The Mechanical & Aerospace Engineering Graduate Program has adopted the UC Davis Graduate Council **Mentoring Guidelines** and has posted them on the website (https://academicsenate.ucdavis.edu/sites/g/files/dgvnsk3876/files/inline-files/mentoring_guidelines.pdf).

7 ADVANCEMENT TO CANDIDACY

The student is eligible for Advancement to Candidacy after successful completion of all graduate program degree requirements and after passing the Qualifying Examination. The student must file the appropriate paperwork with the Office of Graduate Studies and pay the candidacy fee in order to be officially promoted to Ph.D. Candidacy. A student on academic probation is not eligible to advance to candidacy. Students entering the doctoral program with a BS only are expected to advance to candidacy in their 8th quarter. Students entering the doctoral program with a MS with Thesis (Plan I) are expected to advance to candidacy in their 6th quarter. Students entering the doctoral program with a MS with Thesis (Plan II) are expected to advance to candidacy in their 7th quarter.

8 DISSERTATION REQUIREMENTS

a PH.D. PRELIMINARY EXAMINATION REQUIREMENTS:

The Preliminary Examination is the first evaluation of doctoral students by the graduate program membership. The objectives of this evaluation are to determine the probability of a student successfully completing the doctoral program and to test the student's understanding of fundamental concepts in Mechanical and Aerospace Engineering at the upper division undergraduate level. All doctoral students in Mechanical and Aerospace Engineering are required to take the Preliminary Examination.

Students who have passed the Mechanical Engineering-specific Fundamentals of Engineering (FE-Mechanical Engineering) Exam administered by the National Council of Examiners for Engineering and Surveying (NCEES) (https://ncees.org/engineering/fe/) are exempt from taking the preliminary examination. If opting for this exemption, proof of successful completion of the must be submitted to the Graduate Program before the first offering of the preliminary exam. Beyond those administered by NCEES, there are no limitations regarding attempts or timing for exercising this exemption.

One session of the PhD Preliminary Examination is offered each year in the Spring quarter. All students entering the doctoral program are required to take the exam at the first opportunity.

Candidates must take three subject exams. Engineering analysis is required of all, and candidates must choose two other subjects from the following: Dynamics, Fluid Mechanics, Heat Transfer, Strength of Materials, System Dynamics and Controls, and Thermodynamics. The examination is based on material normally covered in these subject areas in upper division undergraduate courses. Outlines of material and past exam questions are available. Each subject exam is administered by a committee consisting of three faculty members of the Graduate program and comprises a mandatory written component and an optional oral catch-up component.

In order to pass the PhD Preliminary Examination, candidates must obtain a passing grade in each subject. Candidates who pass all three written subject exams on their first attempt have passed the PhD Preliminary Examination. If a candidate fails in the written exam in their first attempt at the preliminary exam, the candidate may or may not be invited for an oral examination. The failure threshold for the written problems and invitation to the oral exam will be decided by the faculty in the preliminary exam committee. If the candidate fails in the written exam in their second attempt at the preliminary exam, the candidate will be given a chance to take the oral examination.
Failure to obtain a passing grade in all three subjects after the second attempt will lead to a recommendation to the Dean of Graduate Studies that the student be disqualified from the MAE doctoral program. Disqualification recommendations are reviewed by the Program Graduate Studies committee and must be approved by a vote of the program faculty members.

Candidates must be registered during the quarter taking the preliminary exam. Master's students who are contemplating doctoral work may also take the preliminary examination before completing the Master's program. It is advisable to discuss taking the examination with both the Major Professor and the Graduate Advisor for Continuing Students. Passing the preliminary examination does not guarantee admission to the doctoral program.

b DOCTORAL QUALIFYING EXAMINATION REQUIREMENTS:

- Successful completion of the Preliminary Examination (or an FE exam exemption) and an approved Ph.D. Program of Study are prerequisites for taking the Qualifying Examination.
- The student must have completed all coursework with a 3.5 GPA and removed all academic deficiencies before taking the exam.
- The qualifying exam may be scheduled during a quarter in which the student is taking the final 1 or 2 courses in his or her program of study. If that is the case, the student will not be allowed to advance to candidacy until it can be verified that the student has passed the courses and thereby satisfied all program requirements.
- The Qualifying Examination will consist of written and oral examinations.
- A student on academic probation may not take the Qualifying Examination.
- Student must be registered the quarter in which they take the exam.
- The written research proposal should be provided to members of the committee at least two weeks prior to the exam. The exam should be taken by the 6th quarter and no later than the end of the 9th quarter after admission to the Ph.D. program.
- Passing this exam makes the student eligible for advancement to candidacy.

(i) Written Component of the Doctoral Qualifying Examination:

The Doctoral Qualifying Examination is essentially a critical review by a committee of examiners of a student's research proposal as well as an evaluation of how well the student is prepared to carry out the proposed research. Sufficient progress on the dissertation to allow the formulation and defense of a viable research proposal is also required.

The written portion of the exam consists of the research proposal including, but not restricted to, an independently prepared proposal of up to 15 pages describing the student's dissertation- specific research aims, background information and bibliography on the research the student is proposing to conduct, research objectives, some preliminary results and a plan and preliminary timeline indicating how and when the research objectives will be met. Furthermore, the research proposal will provide information that may be discussed during the oral exam. The Research Proposal must include the signature of the Major Professor (Research Advisor) indicating approval of the Research Proposal.

(ii) Oral Component of the Doctoral Qualifying Examination:

The research proposal is the object of a detailed oral presentation by the candidate to the Qualifying Exam Committee. This presentation is followed by questions and comments by the members of the examination committee. The oral portion of the qualifying exam is intended to demonstrate the student's critical thinking ability, powers of imagination and synthesis, and broad knowledge of the field of study.

(iii) QE Outcomes

Regardless of the outcome, the QE committee chair shall provide the QE report to Graduate Studies within 72 hours. The QE committee, having reached a unanimous decision, shall inform the student of its decision as "Pass" (no conditions may be appended to this decision), "Not Pass" (the Chair's report should specify whether the student is required to retake all or part of the examination, list any additional requirements, and state the exact timeline for completion of requirements to achieve a "Pass") or "Fail". If a unanimous decision takes the form of "Not Pass" or "Fail", the Chair of the QE committee must include in the report a specific statement, agreed to by all members of the committee, explaining its decision and must inform the student of its decision. Having received a "Not Pass", the student may attempt the QE one additional time. After a second examination, a vote of "Not Pass" is unacceptable; only "Pass" or "Fail" is recognized. Only one retake of the qualifying examination is allowed. If the committee is unable to reach a unanimous decision, the Chair's report to Graduate Studies (within 72 hours) shall include brief statements of the majority and minority opinions of the committee.

c DISSERTATION REQUIREMENTS:

Filing of a Ph.D. dissertation with the Office of Graduate Studies is normally the last requirement satisfied by the candidate. The deadlines for completing this requirement are listed each quarter in the campus General Catalog (available online at the website of the Office of the Registrar or from the Bookstore). A candidate must be a registered student or in Filing Fee status at the time of filing a dissertation, with the exception of the summer period between the end of the Spring Quarter and the beginning of Fall Quarter. The student, in consultation with, and final approval by the dissertation guidance committee decides the dissertation topic, length, format, scope requirements, and research depth and breadth. While it is expected that the dissertation will include high-quality research that can be published in articles, there is no minimum number of articles that are required to be published before the dissertation is completed.

The PhD. Dissertation will be prepared, submitted and filed according to regulations instituted by the Office of Graduate Studies http://gradstudies.ucdavis.edu/students/filing.html.
Satisfaction of this requirement must be verified by the Dissertation Committee Chair.

An exit seminar is required of each candidate. This is a formal public presentation of the student's research before the program faculty and students. It is recommended that this presentation take place during the MAE 297 seminar. The Dissertation Committee will not sign the Dissertation until after the exit seminar has taken place. Adequate scheduling of the exit seminar is the responsibility of the student.

9 NORMATIVE TIME TO DEGREE

Normative Time is the elapsed time, calculated to the nearest quarter, that students would need to complete all requirements for the degree, assuming that they are engaged in full-time study and making adequate progress. There are two parts to Normative Time: Normative Time to Advancement to Candidacy and Normative Time in Candidacy. The first represents the number of quarters needed to complete all of course requirements and pass any required Preliminary and/or Qualifying Exams. The second represents the remaining quarters that are recommended for completion of your dissertation.

a STUDENTS ENTERING THE PHD PROGRAM WITH A BS (ONLY):

Normative Time to Advancement to Candidacy: 8 quarters
Normative Time to Degree: 15 quarters

b STUDENTS ENTERING THE PHD PROGRAM WITH A MS PLAN I:

Normative Time to Advancement to Candidacy: 6 quarters
Normative Time to Degree: 12 quarters

c STUDENTS ENTERING THE PHD PROGRAM WITH A MS PLAN II:

Normative Time to Advancement to Candidacy: 7 quarters
Normative Time to Degree: 13 quarters

10 TIMELINE AND SEQUENCE OF EVENTS

The expectation is that full-time students in the Ph.D. program will broadly adhere to the following timeline. If students enter without a BS in Mechanical and/or Aerospace Science and Engineering, this timeline may be longer. The number is the consecutive quarter of enrollment:

	Entering with BS	Entering with MS I	Entering with MS II
Select Faculty Research Advisor (if different from assigned advisor)	2	2	2
Complete the Ph.D. Preliminary Examination	2	2	2
Select a Doctoral Guidance Committee	3	3	3
Develop a Ph.D. Program of Study with Doctoral Guidance Committee (within one quarter of passing Ph.D. Preliminary Examination)	3	3	3
Select a Qualifying Examination Committee	7	5	6
Submit a research proposal to the Qualifying Examination Committee and an application for the exam to the Graduate Program Coordinator; take the qualifying exam	8	6	7
Select a Dissertation Committee	8	6	7
File an Application to Advance to Candidacy after passing the Qualifying Examination	8	6	7
Complete the dissertation, receive approval from the committee and submit to the Office of Graduate Studies	13	11	12
Schedule an Exit Seminar	14	12	13

11 SOURCES OF FUNDING

Funding is provided in the following forms: Departmental Fellowships, Graduate Student Research Assistantships (GSR), Teaching Assistantships (TA), Readership positions.

12 PELP, IN ABSENTIA, AND FILING FEE STATUS

a 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 guarantee 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 or research away from campus, preparing for examinations if doing so at a distance from campus, under financial hardship, or with otherwise prohibitive personal problems. PELP is recommended for those students who are certain of the quarter in which they plan to return and who intend to be away no longer than three quarters. If a student is not certain of the return date, filing an Application for Readmission is suggested instead.

Students on PELP cannot Advance to Candidacy (for either the M.S. or Ph.D.), may not take the Preliminary or Qualifying Examinations or file a dissertation until they have returned from PELP to registered status. Time spent on PELP is counted towards the three-year limit for Non- Resident Tuition remission after advancing to candidacy.

More information about PELP can be found in the Graduate Student Guide: http://www.gradstudies.ucdavis.edu/publications/

b IN ABSENTIA STATUS

Information about In Absentia status (reduced fees when researching out of state) can be found in the Graduate Student Guide: http://www.gradstudies.ucdavis.edu/publications/

c FILING FEE STATUS:

Normally, candidates for the Ph.D. degree will file a final approved copy of their dissertation 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 (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 the final thesis or dissertation manuscript. In this case, filing fee would replace regular registration. It is expected that students on filing fee will make no demands upon faculty time other than the time involved in reading the thesis.

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. An extension of an additional quarter is possible. In order to be a registered student again after being on filing fee status, it will be necessary to file a Readmission application. Please note that it is expected that a student will graduate once the filing fee period has elapsed. Students in non-registered status, such as Filing Fee, will be allowed one quarter of employment without request for exception. Exceptions beyond this one-quarter period are rarely granted.

More information about Filing Fee status can be found in the Graduate Student Guide: http://www.gradstudies.ucdavis.edu/publications/

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. Accompanying this form must be the College of Engineering Supplemental Filing Fee signature form with signatures of all members of the committee stating that they have read a draft of the thesis or dissertation. The student will be charged a one-time fee. The completed form, 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. A student who has not enrolled in any coursework or has not in any way incurred registration fees has until the last day of late registration to submit the filing fee application.

13 LEAVING THE PROGRAM PRIOR TO COMPLETION OF THE PHD REQUIREMENTS

Should a student leave the program prior to completing the requirements for the PhD, they may still be eligible to receive the Masters if they have fulfilled all the requirements and not previously obtained an MS in the same subject (see Masters section). Students can use the Change of Degree Objective form available from the Registrar's Office:
http://registrar.ucdavis.edu/PDFFiles/D065PetitionForChangeOfGraduateMajor.pdf

14 DEGREE REQUIREMENTS EXCEPTION POLICY

The Mechanical and Aerospace Engineering Department recognizes that PhD and MS students may request an exception to the Degree Requirements, in consultation with their major advisor, in order to tailor their program of study to best suit the needs of their studies.

In such circumstances, the student and their major advisor much submit to the Mechanical and Aerospace Engineering's Graduate Study Committee (GSC):

1) A program of study that includes the proposed coursework. The Course Guidance Committee and major professor do not have to sign off on the program of study before being submitted to GSC.
2) A letter of support from the major advisor explaining why the student is requesting an exception and why they support this request.

Both of these items will be reviewed by GSC. On a case-by-case basis, GSC may request that the major advisor attend a GSC meeting to present and explain the exception.