Materials Engineering Graduate Student Handbook

Zachry Department of Civil Engineering

2009-2010
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Overview
Program Overview

The materials engineering program applies materials science to engineer improved construction materials to build our infrastructure. These materials traditionally include asphalt concrete, Portland cement concrete, steel and fiber reinforced concrete, unbound and chemically bound aggregates, and chemically treated and stabilized soils.

The civil engineering curriculum at Texas A&M covers a wide spectrum of topics in materials engineering, including materials science, general construction materials, pavement design, pavement management, micromechanics, and microstructure characterization and modeling. These courses provide undergraduate students with the scientific concepts and practical considerations underlying the selection, specification, and quality control of civil engineering materials. In addition, graduate students are provided with the knowledge necessary to advance in the practice and art of materials engineering.

During the past decade, the needs of the nation and the world have required civil engineers to also focus on the reuse of valuable materials and resources, which in turn has created exciting challenges in understanding how to chemically and mechanically stabilize these materials for reuse. Current challenges require the application of micromechanics, computer-assisted visualization tools, thermodynamics, kinetics, and an appreciation of construction processes to solve problems. Civil engineers have adapted and applied multidisciplinary principles to solve problems and have used similar approaches to those used in solid rocket propellants, adhesives, metals, and ceramics.

In our materials research program, we interact with and share the resources of the Texas Engineering Experiment Station, the Texas Transportation Institute, and several university-based national centers of expertise, including the International Center for Aggregates Research, the South Central Superpave Center, and the Center for Asphalt Materials and Chemistry. These centers offer the opportunity to provide funding for outstanding students and to demonstrate the application of engineering principles and research on a field scale.
Faculty Members

Administration

Interim Department Head: John Niedzwecki
Assoc. Dept. Heads: Jose Roesset, Roger Smith
Division Head: Gene Hawkins

Materials Engineering Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epps Martin, Amy</td>
<td>979-862-1750</td>
<td><a href="mailto:a-eppsmartin@tamu.edu">a-eppsmartin@tamu.edu</a></td>
</tr>
<tr>
<td>Gharaibeh, Nasir</td>
<td>979-845-3362</td>
<td><a href="mailto:ngharaibeh@civil.tamu.edu">ngharaibeh@civil.tamu.edu</a></td>
</tr>
<tr>
<td>Grasley, Zachary</td>
<td>979-845-9961</td>
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</tr>
<tr>
<td>Little, Dallas</td>
<td>979-845-9847</td>
<td><a href="mailto:d-little@tamu.edu">d-little@tamu.edu</a></td>
</tr>
<tr>
<td>Lytton, Robert</td>
<td>979-845-9964</td>
<td><a href="mailto:r-lytton@civil.tamu.edu">r-lytton@civil.tamu.edu</a></td>
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<tr>
<td>Masad, Eyad</td>
<td>979-845-8308</td>
<td><a href="mailto:emasad@civil.tamu.edu">emasad@civil.tamu.edu</a></td>
</tr>
<tr>
<td>Smith, Roger</td>
<td>979-845-0875</td>
<td><a href="mailto:roger-smith@tamu.edu">roger-smith@tamu.edu</a></td>
</tr>
<tr>
<td>Zollinger, Dan</td>
<td>979-845-9918</td>
<td><a href="mailto:d-zollinger@tamu.edu">d-zollinger@tamu.edu</a></td>
</tr>
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Degree Programs
Degree of Master of Engineering
The Master of Engineering (M.E.) degree requires 30 credit hours of coursework. This non-thesis degree also requires a professional report whose content is determined by the advisory committee. This report can include results of research conducted by the student, or it can be a report written for a specific course or as part of CVEN/OCEN 685 - Directed Studies. You must provide a minimum of 2 weeks for the review of the report and for the form to be signed. It is your responsibility to ensure enough time is provided in order to meet the deadlines by the university’s Office of Graduate Studies (http://ogs.tamu.edu/). In addition to fulfilling the University requirements for the Master of Engineering (M.E.) degree, a student enrolled in the Civil Engineering graduate program in the area of Materials Engineering must satisfy the following department requirements:

Advising Committee
Degree Plan: An advisory committee must be formed and a Degree Plan must be submitted and approved by the advisory committee by the end of the first semester of study.

Coursework
- No more than 3 hours of CVEN 685 (within the 6 hours allowed for CVEN 684 / CVEN 685).
- No more than 3 hours of CVEN 685 (within the 6 hours allowed for CVEN 684 / CVEN 685).
- A minimum of 15 hours must be CVEN/OCEN/MEMA coursework (exclusive of CVEN 681, CVEN 684, and CVEN 685).
- A minimum of 24\(^1\) hours must be taken from course offerings of the following colleges: Engineering\(^2\), Geosciences, and Science.
- A maximum of 9 hours of advanced undergraduate coursework (must be 400-level if CVEN/OCEN/MEMA courses).
- A minimum of 18 hours of graduate level coursework taken at Texas A&M University (excluding CVEN 684 and CVEN 685).
- The combination of CVEN 684, CVEN 685, transfer credit, and permissible undergraduate coursework may not exceed the greater of 12 hours or one-third (1/3) of the total hours on the degree plan.

\(^1\) 3 of these 24 hours may be outside of colleges of Engineering, Geosciences, and Science if selected from a list of courses approved by the student’s specialty area as outlined by the specialty area’s documented course work requirements.

\(^2\) Certain courses within the College of Engineering are prohibited from use on the degree plan unless written justification is made by the student’s advisor and approved by the Departmental Graduate Advisor prior to enrolling in the course. Please see Departmental Graduate Advisor for listing of prohibited courses.
And the following area requirements and/or recommendations:³

- Required Coursework: CVEN 681 Seminar in Materials and 3 of following 4 Courses:
  CVEN 622 Properties of Concrete
  CVEN 653 Bituminous Materials
  CVEN 615 Structural Design of Pavements
  CVEN 616 Systems Design of Pavements
- Recommended Coursework:
  CVEN 624 Infrastructure Engineering
  CVEN 614 Stabilization of Soil-Aggregate Systems
  CVEN 637 Rigid Pavement Analysis and Design
  CVEN 613 Micromechanics of Civil Materials
  CVEN 689 Aggregates in Civil Engineering
  CVEN 689 Advanced Constitutive Properties of Cementitious Materials
  STAT 601 Statistical Analysis
  STAT 602 Statistical Methods of Regression Analysis

Relevant CVEN, MEMA, and other Graduate Courses per recommendations of the advisory committee and department requirements

- Completion of Professional Report: A draft Professional Report must be submitted to the advisory committee chair at least 2 weeks (10 working days) prior to revision and subsequent submittal to other members of advisory committee. These other members of the advisory committee will be provided at least 2 weeks (10 working days) to review the revised draft Professional Report prior to the Final Presentation. Thus, the draft Professional Report must be submitted to the advisory committee chair at least 4 weeks (20 working days) prior to the Final Presentation.

- Final Presentation: A Final Presentation consisting of an oral examination will be scheduled with all of the advisory committee members. At this examination, the student will give a presentation of the content of the Professional Report completed for the degree.

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³ All coursework should be discussed with advisory committee chair before enrolling in course. All coursework must be consistent with the student’s chosen field of study and commensurate with graduate study.
Degree of Master of Science
A minimum of 32 semester credit hours of approved courses is required for the Master of Science degree (MS). At least 25 semester credit hours must be coursework. The university places limitations on these credit hours in addition to the requirements of the structural engineering program that are listed below. A complete discussion of all university requirements is found in the current Texas A&M University Graduate Catalog (available on the Internet at http://www.tamu.edu/admissions/catalogs/) under the heading “The Degree of Master of Engineering For example, university requirements include a final examination and submission of a thesis to the university.

A. Degree Plan
The student must identify their research supervisor before the start of their second semester of study, at which point an advisory committee will be formed. The student’s advisory committee, in consultation with the student, will develop the proposed degree plan. The proposed degree plan must be typed on the official form as it appears on the Internet at http://ogs.tamu.edu/ and submitted electronically to your graduate advisor and advisory committee for their electronic endorsement. The office of graduate studies blocks students from further registration if a degree plan is not filed before the end of their second semester of study. If you are blocked, you are not considered a full time student and become ineligible to receive any assistantship.

B. Research Proposal
A draft Research Proposal must be submitted to the advisory committee chair at least 2 weeks (10 working days) prior to revision and subsequent submittal to other members of advisory committee. These other members of the advisory committee will be provided at least 2 weeks (10 working days) to review the revised draft Research Proposal prior to the end of the second semester of study. Thus, the draft Research Proposal must be submitted to the advisory committee chair at least 4 weeks (20 working days) prior to end of the second semester of study.

C. Completion of Thesis
A draft Thesis must be submitted to the advisory committee chair at least 2 weeks (10 working days) prior to revision and subsequent submittal to other members of advisory committee. These other members of the advisory committee will be provided at least 2 weeks (10 working days) to review the revised draft Thesis prior to the Final Defense. Thus, the draft Thesis must be submitted to the advisory committee chair at least 4 weeks (20 working days) prior to the Final Defense.

D. Final Defense
A Final Defense consisting of an oral examination will be scheduled with all of the advisory committee members. At this examination, the student will give a presentation of the research work completed for the degree and documented in the Thesis.
E. Required Coursework (18 semester credit hours):
In addition to fulfilling the University and requirements for the Master of Science (M.S.) degree, a student enrolled in the Civil Engineering graduate program in the area of Materials Engineering must satisfy the following department requirements:

- A minimum of 15 hours must be CVEN/OCEN/MEMA coursework (exclusive of CVEN 681 and CVEN 691).
- A minimum of 24\(^4\) hours must be taken from course offerings of the following colleges: Engineering\(^5\), Geosciences, and Science.
- A maximum of 9 hours of advanced undergraduate coursework (must be 400-level if CVEN/OCEN/MEMA courses).
- A minimum of 18 hours of graduate level coursework taken at Texas A&M University (excluding CVEN 691).
- A maximum of 7 hours of CVEN 691 or combination of CVEN 691 and CVEN 685.
- The combination of CVEN 691, CVEN 685, transfer credit, and permissible undergraduate coursework may not exceed the greater of 12 hours or one-third (1/3) of the total hours on the degree plan.

And the following area requirements and/or recommendations\(^6\):

CVEN 681 Seminar in Materials and 3 of following 4 Courses:

- CVEN 622 Properties of Concrete
- CVEN 653 Bituminous Materials

\(^4\) 3 of these 24 hours may be outside of colleges of Engineering, Geosciences, and Science if selected from a list of courses approved by the student's specialty area as outlined by the specialty area's documented course work requirements.

\(^5\) Certain courses within the College of Engineering are prohibited from use on the degree plan unless written justification is made by the student's advisor and approved by the Departmental Graduate Advisor prior to enrolling in the course. Please see Departmental Graduate Advisor for listing of prohibited courses.

\(^6\) All coursework should be discussed with advisory committee chair before enrolling in course. All coursework must be consistent with the student's chosen field of study and commensurate with graduate study.
- CVEN 615 Structural Design of Pavements
- CVEN 616 Systems Design of Pavements

F. Elective Coursework (14 semester credit hours):
The student’s advisory committee, in consultation with the student, will select a minimum of 14 additional semester credit hours of coursework to complement the overall objectives of the proposed degree plan. A maximum of 7 semester credit hours of CVEN 691 Research can be applied toward this requirement. The following is a list of recommended courses:

- CVEN 624 Infrastructure Engineering
- CVEN 614 Stabilization of Soil-Aggregate Systems
- CVEN 637 Rigid Pavement Analysis and Design
- CVEN 613 Micromechanics of Civil Materials
- CVEN 689 Aggregates in Civil Engineering
- STAT 601 Statistical Analysis
- STAT 602 Statistical Methods of Regression Analysis
- Relevant CVEN, MEMA, and other Graduate Courses per recommendations of the advisory committee and department requirements

Additional graduate level courses are offered throughout the CVEN department (and other departments) and may be used to satisfy the elective coursework requirement with approval of the student’s advisory committee. Particularly for the MS degree, courses must be chosen so as to complement your research program.
**Degree of Doctor of Philosophy**

The Doctor of Philosophy (Ph.D.) degree is a research-oriented degree requiring a minimum of 64 semester credit hours of approved courses and research beyond the Master of Science (M.S.) degree [96 credit hours beyond the Bachelor of Science (B.S.) degree]. The university places limitations on these credit hours in addition to the requirements of the Department of Civil Engineering and the Structural Engineering program listed below.

A complete discussion of all university requirements is found in the current Texas A&M University Graduate Catalog (available on the Internet at [http://www.tamu.edu/admissions/catalogs/](http://www.tamu.edu/admissions/catalogs/)) under the heading “The Degree of Doctor of Philosophy.” For example, university requirements include a preliminary examination, a final examination, and submission of a dissertation to the university.

**NOTE:** All documents requiring departmental signatures must be submitted to the Civil Engineering Graduate Office at least one day prior to the Office of Graduate Studies deadline.

**A. Departmental Requirements**

In addition to fulfilling the University requirements for the Doctor of Philosophy (Ph.D.) degree, a student enrolled in the Civil Engineering graduate program in the area of Structural Engineering must satisfy the following department requirements.

- A minimum of 32 credit hours of graduate level coursework taken through Texas A&M University [a minimum of 24 credit hours if the student already has taken at least another 24 credit hours of graduate course work for the Master of Science (M.S.) or Master of Engineering (M.E.) degree].
- Remaining coursework requirement can be met by 32 hours of CVEN 691

**B. Materials Area Requirements**

The student must also satisfy the following area requirements and/or recommendations described below:

- **Qualifying Exam:** During the first semester of study, an oral and written Qualifying Examination will be scheduled with members of the Civil Engineering Materials faculty and a Civil Engineering faculty member outside the Materials area. The exam should be taken within the first two semesters of study. The written exam will be a take-home exam given to the student 1 week prior to the scheduled oral exam (at which time the completed written exam will be due). At the oral examination, the student will give a presentation of research work completed for a previous degree.
• **Degree Plan:** An advisory committee must be formed and a Degree Plan must be submitted and approved by the advisory committee after passing the Qualifying Exam and before course registration during their second semester (Fall or Spring) of study. The proposed degree plan must be typed on the official form as it appears on the Internet at http://ogs.tamu.edu/ with endorsements by the student’s advisory committee.

• **Research Proposal:** As soon as the research project can be outlined in reasonable detail, but no later than the end of the fifth semester (Fall or Spring) of study, the dissertation research proposal should be completed. The Research Proposal shall describe the proposed research, including relevant background information, and clearly demonstrate how this research will make a unique contribution of new knowledge to the student’s area of study. Upon approval of the Research Proposal by the advisory committee chair, the Research Proposal must be submitted to other members of the advisory committee at least 2 weeks (10 working days) prior to the Oral Preliminary Exam.

• **Oral Preliminary Exam:** No later than the end of the fifth semester (Fall or Spring) of study, an Oral Preliminary Examination will be scheduled with members of the advisory committee. At this examination, the student will give a presentation of the Research Proposal. The questions in this exam will cover the written proposal, the Oral Preliminary Exam presentation, and any relevant coursework.

• **Completion of Dissertation:** Upon approval of the Dissertation by the advisory committee chair, the Dissertation will be submitted to the other members of the advisory committee at least 2 weeks (10 working days) prior to the Final Defense.

• **Final Defense:** A Final Defense consisting of an oral examination will be scheduled with all of the advisory committee members. At this examination, the student will give a presentation of the research work completed for the degree and documented in the Dissertation. The student is encouraged to invite other interested individuals to the research presentation.

**C. Required and Recommended Coursework:**
A minimum of 32 credit hours of graduate level coursework taken through Texas A&M University\(^7\) (a minimum of 24 credit hours if the student already has taken at least another 24

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\(^7\) Certain courses within the College of Engineering are prohibited from use on the degree plan unless written justification is made by the student’s advisor and approved by the Departmental Graduate Advisor.
credit hours of graduate course work for the Master of Science (M.S.) or Master of Engineering (M.E.) degree). The remaining coursework requirement can be met by 32 hours of CVEN 691.

Required Coursework:

- CVEN 681 Seminar in Materials and 3 of following 4 Courses:
  - CVEN 622 Properties of Concrete
  - CVEN 653 Bituminous Materials
  - CVEN 615 Structural Design of Pavements
  - CVEN 616 Systems Design of Pavements
- Equivalent coursework from other institutions will be accepted based on approval of advisory committee.

Recommended Coursework:

- CVEN 624 Infrastructure Engineering
- CVEN 614 Stabilization of Soil-Aggregate Systems
- CVEN 637 Rigid Pavement Analysis and Design
- CVEN 613 Micromechanics of Civil Materials
- CVEN 689 Aggregates in Civil Engineering
- STAT 601 Statistical Analysis
- STAT 602 Statistical Methods of Regression Analysis
- Relevant CVEN, MEMA, and other Graduate Courses per recommendations of the advisory committee and department requirements

prior to enrolling in the course. Please see Departmental Graduate Advisor for listing of prohibited courses.

8 All coursework should be discussed with advisory committee chair before enrolling in course. All coursework must be consistent with the student’s chosen field of study and commensurate with graduate study.
Degree of Doctor of Engineering

The Doctor of Engineering (D.Eng.) degree requires 21 credit hours of professional development coursework, and an internship is required.

This degree program is administered by the College of Engineering through the Department of Civil Engineering. The applicant must first be admitted into the Department's Ph.D. program and then interviewed by the College's Admissions Subcommittee. To enter the D.Eng. program, the applicant must have earned an ABET-accredited bachelor's degree (or equivalent). More information can be found at: http://eapo.tamu.edu/engr/.

NOTE: All documents requiring departmental signatures must be submitted to the Civil Engineering Graduate Office at least one day prior to the Office of Graduate Studies deadline.

A. Materials Area Requirements

- **Qualifying Exam:** During the first semester of study, an oral Qualifying Examination will be scheduled with members of the Civil Engineering Materials faculty and a Civil Engineering faculty member outside the Materials area. The exam should be taken within the first two semesters of study. At this examination, the student will give a presentation of research work completed for a previous degree and questions can cover material addressed in the required coursework for the Materials area.

- **Degree Plan:** An advisory committee must be formed and a Degree Plan must be submitted and approved by the advisory committee after passing the Qualifying Exam and by the end of the fourth semester of study.

- Written Preliminary Exam: After completion of the coursework listed on the Degree Plan (with the exception of ENGR 684 Professional Internship), a Written Preliminary Examination will be scheduled with members of the advisory committee. This exam consists of written questions from the advisory committee. Each question should be given over a period of one day, and the exam in total should be given over a period of one week.

- **Oral Preliminary Exam:** After passing the Written Preliminary Exam, an Oral Preliminary Examination will be scheduled with members of the advisory committee. At this examination, the student will give a presentation of the proposed Internship. The questions in this exam will cover the Written Preliminary Exam, the Oral Preliminary Exam presentation, and any relevant coursework.
• **Completion of Record of Study:** A draft Record of Study must be submitted to the advisory committee chair at least 3 weeks (15 working days) prior to revision and subsequent submittal to other members of advisory committee. These other members of the advisory committee will be provided at least 2 weeks (10 working days) to review the revised draft Record of Study prior to the Final Defense. Thus, the draft Record of Study must be submitted to the advisory committee chair at least 5 weeks (35 working days) prior to the Final Defense.

• **Final Defense:** A Final Defense consisting of an oral examination will be scheduled with all of the advisory committee members. At this examination, the student will give a presentation of the Internship experience completed for the degree and documented in the Record of Study.

**B. Required and Recommended Coursework:**

In addition to fulfilling the University requirements for the Doctor of Engineering (D.Eng.) degree, a student enrolled in the Civil Engineering graduate program in the area of Materials Engineering must satisfy the following requirements and/or recommendations:

**Required Coursework:**

- CVEN 681 Seminar in Materials and 3 of following 4 Courses:
  - CVEN 622 Properties of Concrete
  - CVEN 653 Bituminous Materials
  - CVEN 615 Structural Design of Pavements
  - CVEN 616 Systems Design of Pavements

  Equivalent coursework from other institutions will be accepted based on approval of advisory committee.

**Recommended Coursework:**

- CVEN 624 Infrastructure Engineering
- CVEN 614 Stabilization of Soil-Aggregate Systems
- CVEN 637 Rigid Pavement Analysis and Design
- CVEN 613 Micromechanics of Civil Materials
- CVEN 689 Aggregates in Civil Engineering

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9 All coursework should be discussed with advisory committee chair before enrolling in course. All coursework must be consistent with the student’s chosen field of study and commensurate with graduate study.
- STAT 601 Statistical Analysis
- STAT 602 Statistical Methods of Regression Analysis
- Relevant CVEN, MEMA, and other Graduate Courses per recommendations of the advisory committee and department requirements
Graduate Coursework
The following is a table indicating the typical course offering frequency and suggested prerequisites. Keep in mind that the actual course offering schedule may differ from the table below.

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<thead>
<tr>
<th>Course #:</th>
<th>Title</th>
<th>Prerequisites</th>
<th>Typical frequency</th>
<th>Course level</th>
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<td>CVEN 613</td>
<td>Micromechanics of Civil Materials</td>
<td>CVEN 615, 616</td>
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<td>Structural Design of Pavements</td>
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<td>CVEN 616</td>
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<td>Irregularly</td>
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<td>Properties of Concrete</td>
<td>Graduate classification</td>
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<td>CVEN 624</td>
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<td>Advanced Constitutive Behavior of Cementitious Materials</td>
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<td>Nondestructive Pavement Evaluation</td>
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<td>Exp. Microstructural Characterization of Construction Materials</td>
<td>Graduate classification</td>
<td>Irregularly</td>
<td>MS</td>
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</table>
Funding Opportunities
Research Assistantships
Research Assistantship (RA) positions are offered through individual faculty members. There is no centralized list of available positions. You'll need to set-up appointments to meet with them individually. You are strongly recommended to through our department’s web site to identify the different research areas each professor is working in before meeting with them.

Teaching Assistantships
New students are automatically considered for the small number of available positions based on their graduate application package. For all other students, a call for those interested in TA positions for future semesters will typically occur around the 10th week of the semester. Please wait for the email announcement and/or posted fliers announcing that TA applications.

If you are an international student, you must have satisfactorily passed the ELPE exam before being considered for a TA position.

Fellowships
Fellowships are typically awarded to incoming students, and there is no formal application process. Any request for fellowships must come from your research advisor, who is recommending you for this award, to Dr. John Mander, who coordinates those awards for our division.

Tuition Waivers & In-state Tuition
Tuition waivers do not exist by themselves – Research and Teaching Assistantship positions will include coverage of your tuition. Additionally, you can qualify for in-state tuition if you were awarded a Fellowship.

Other job opportunities
The faculty and graduate advisors do not coordinate nor know of any student worker positions in the department. If you are interested or need to pursue job opportunities beyond the TA/RA positions, you may want to look at: http://jobforaggies.com.
Additional Information
Full-Time Enrollment
Required credit hours to be certified as a full-time are:

- Fall and Spring semesters: 9 hours
- 10-week summer semester: 6 hours

Graduate students may be certified as full time with fewer than the required hours under special circumstances, including:

- During their final semester before graduation;
- Presence of a documented disability that mandates a reduced course load

These exceptions may or may not apply to a student’s eligibility for certain types of financial aid. Students who have questions about how exceptions to the full time enrollment requirements will affect their scholarships, loans, grants, etc., should confer with their financial aid counselor.

In most cases, international students are eligible for the same exceptions to full time requirements; however, all international students requesting an exception to full time requirements must have their request approved by International Student Services. Students who are not U.S. citizens, but who are permanent U.S. residents (VISA TYPE = IM) are not required to clear with ISS on enrollment exceptions.

A student who is enrolled in less than a full-time course of study at Texas A&M may be in jeopardy of:

- being out of compliance with the Bureau of Citizenship and Immigration Services (formerly INS) if enrolled at Texas A&M on a student visa;
- losing their Research or Teaching Assistantship position
- losing insurance coverage under his or her parent/guardian’s insurance policy;
- being placed on a loan repayment schedule by a lender or guarantor if the student is the recipient of Federal financial aid; and/or
- losing a scholarship if the guidelines for receiving the scholarship require full-time enrollment, etc.

Student Offices
Students who will be funded on TTI research projects should contact Pam Kopf (5th floor of CE/TTI bldg) for a desk assignment. Students funded on TEES or other research projects should contact Dr. Amy Epps Martin (5th floor of CE/TTI bldg) for a desk assignment. Teaching assistants should contact the faculty member teaching the course they are assisting in for a desk assignment.
Academic Probation
Graduate students must maintain 3.0 GPR. This requirement includes courses in degree plan as well as all graduate courses taken. If a course is repeated, the last grade received will be the one utilized in GPR calculation. If a student's GPR falls below 3.0, the student will need to meet with their graduate advisor to set out a plan to raise GPR to above 3.0 within one semester. Under extenuating circumstances, a second semester may be allowed for the student to raise their GPR.

Once a plan has been devised, it will be forwarded to the main CE Graduate Office. If the student fails to raise their GPR, they will be removed from the structural engineering graduate program.
Frequently Asked Questions
Degree Plans

1. **What is the difference between the MS and MENG degree?**
   - MENG (Master of Engineering) - non-thesis option requiring 30 hours of graduate credit
   - MS (Master of Science) - thesis option requiring 32 hours of graduate credit

   Accordingly, the MS degree is more research oriented and MENG is more course oriented and geared towards professional practice.

2. **I have taken a graduate level course in which I got a C. This course is already present on my degree plan. Can I keep the course on the degree plan?**

   Yes. The requirement for graduate students is to maintain a GPA of 3.0 on the degree plan. The intent of the degree plan is to identify the appropriate course of study for your chosen degree as determined by your advisor. Once the courses have been chosen and placed on an approved degree plan, it is the student’s responsibility to maintain a 3.0.

   It is NOT the intent of the degree plan to allow students to take courses and then, after taking the courses and receiving a grade, to choose whether or not the courses are to be included in the degree plan. A student is NOT to choose only those courses for inclusion in the degree plan for which he/she may receive grades of A or B!

3. **Can I change the courses on my degree plan once it is filed?**

   Yes, the student can change the courses by filing a Petition. The Petition must be signed by ALL committee members AND the department head. The Petition must subsequently be filed with the Office of Graduate Studies (OGS) and approved.

4. **Can I change my degree status once I’ve been admitted?**

   Yes, once admitted to graduate school, a student may file a Petition to change a degree status. The Petition must be signed by the department head and then filed with the Office of Graduate Studies (OGS) and approved. International students must check with the International Student Services Office to maintain legal status.

5. **Can I change my degree status once a degree plan is filed?**

   Yes, the student must file a Petition that is available electronically through the Office of Graduate Studies (OGS) website. The Petition will include any changes needed to the degree plan. The Petition must be signed by ALL committee members AND the department head.
The Petition must subsequently be filed with the Office of Graduate Studies (OGS) and approved

6. **Are leveling courses to be included in the degree plan even though they cannot be counted towards the required number of credits?**

   Leveling courses should be listed at the bottom of the degree plan as prerequisites.

7. **When should I file the degree plan?**

   MENG degree: students should file within one month of starting their graduate coursework.

   PhD and MS students: students must file before preregistration of the second semester, summer semester excluded.

   Keep in mind: the Office of Graduate Studies will block you from registration after completing 9 hours of graduate courses. If you do not register, you run the risk of losing your full-time student status.

**Assistantships**

1. **There are two different types of courses for the summer, 5-week courses and 10-week courses? How can I register to satisfy the full-time status for my RA/TA?**

   To be considered a full-time student for the Summer, a student must register for a minimum of 6 credit hours in one of the two following ways:

   - 6 credit hours during the 10-week summer term OR
   - 3 credit hours during each 5-week summer term

   To hold an assistantship for the Spring and Fall semesters, the student needs to register for a minimum of 9 hours in order to be considered full-time.

   No other combinations are allowed.

2. **How do I apply for a Teaching Assistant (GAT) position?**

   All new students are automatically considered for a Graduate Teaching Assistantship. About the 10th week of the fall and spring semesters, applications become available to structural engineering graduate students. In order to apply for a TA, complete the application and return it to the listed contact person.

3. **How do I apply for a Research Assistant (RA) position?**
In order to apply for a RA, a student must contact the professors in structural engineering. The individual professors handle funding and will be able to inform students about openings for research positions.

4. **I am a foreign student and English is my second language. Can I apply for a TA? What is the requirement?**

International students whose native language is not English and who wish to apply for a TA position must fulfill an English proficiency requirement. The English Proficiency Certification is *required before* a graduate student is eligible to apply to serve as a TA or in any other position considered to be a teaching position.

It is best to meet this proficiency requirement early in a student’s program. Contact the International Admissions Office at 409-845-1071 to arrange a test.

**Probation**

1. **What is the criteria on probation?**

Graduate students are expected to maintain a Grade Point Ratio (GPR) equal to or better than 3.0 *throughout* the duration of their graduate study. This requirement applies to each of cumulative, degree plan, and semester GPR. It is also a prerequisite for receiving a graduate degree in civil engineering.

2. **What happens after one semester on probation if my GPR is not back up to 3.0?**

When a student’s GPR (either cumulative, degree plan or semester) falls below 3.0, the student is placed on probation by the department. Notifications are made by letter to the student, the advisor, and other pertinent offices within the university. The student must then meet with their graduate advisor and determine a plan to bring their GPR up to a 3.0 within one semester.

3. **What if the GPR requirement is satisfied after one semester, but falls again below 3.0 in another semester?**

If after one semester on probation a student’s cumulative or degree plan GPR is not back up to 3.0, the Office of Graduate Studies will be asked to remove the student from the graduate studies program. If extenuating circumstances exist, probation time may be extended for one more semester, allowing the student a final chance to meet the minimum GPR requirement.

4. **I took a course in which I got an I for incomplete. After one semester, it becomes an F. Now I am on probation. What can I do to change the F back to a better grade?**
The student must complete the course work for which an I was received by submitting it to the professor. The professor will then submit a grade change form. This change may or may not change the student's GPR, depending on the final grade received. The student will remain on probation until the registrar has changed the grade in the system.

5. **Does I (incomplete) in 691 (research) 684 (professional internship), or 692 (Professional study) become an F after one semester?**

   No, these courses are excluded from that rule.

6. **Does an I (incomplete) of 685 (problems) become an F after one semester?**

   Yes, if you receive an F in 685, it will turn to an F after one semester. The course 685 is a letter grade course and therefore is not excluded from the rule.