Graduate Studies

College of Engineering and Science



Biggest Issues from students

Why do I have a registration hold and what is a Plan of Study?

Why do I have a registration hold and what is a preliminary proposal?

Biggest Issues from advisors

What are the deadlines for Plans of Study, Advisory Committee, Preliminary Proposals for my students? *Is this just a formality?*

When are qualifying exams scheduled? They appear to be irregularly scheduled.

What do I do if a student brings me a "proposal" and wants it signed so that they can register?

Additional Issues from advisors & committees

Why are required courses not offered?

Why are more disciplinary courses not offered?

What do I do if a student switches to my research group? (With regard to Plan of Study and Advisory Committee.)

How can I find out the thesis/dissertation committees on which I've agreed to serve?

How can I help my international students with improving their writing? The Bulldog Achievement Resource Center!

What do I do if I am out of the country and my student needs me to sign his timesheet?

My Observations

The most common questions relate to *deadlines* – which are the points of intersection between 'global' *graduate education procedures* and the *educational research program* of a graduate student.



What are the deadlines for Plans of Study, Advisory Committee, Preliminary Proposals for my students? *Is this just a formality?*

By the end of the first quarter of graduate study a student must submit
Plan of Study
Appointment of Advisory Committee

By the end of the <u>second</u> quarter an MS student must submit Preliminary Research Proposal

By the end of the <u>fourth</u> quarter a PhD student must submit Preliminary Research Proposal

All forms can be found at:

http://www.latech.edu/graduate school/thesis dissertations/grad forms thesis.shtml



My Observations

Vital Points of Communication for a student:

Plan of Study & Appointment of Advisory Committee (first quarter of graduate study)

Preliminary Research Proposal

(<u>fourth</u> quarter for PhD) (<u>second</u> quarter for MS)

These two 'global' procedures have deadlines to force the conversation between advisor and student.

These two formalities may be the only <u>obvious</u> opportunity that a student has to discuss their plan with their advisor before starting significant research work.

If I (as an advisor) will force the conversation early in a student's graduate career, he will understand deadlines and be excited that there is a plan!

When are qualifying exams scheduled? *They appear to be irregularly scheduled.*

PhD ENGR
Each track handles their own written exams

PhD BIEN
Written exam followed by oral in the same quarter

PhD CAM
Computer Science
Mathematics

We now have 7 different qualifying exams across the college.

If you advise students from multiple programs, or tracks within a program, you will have students taking qualifying exams at different times of the year with different expectations for oral comprehensive exams.

PhD ENGR

Written Qualifying Exam (ENGR 685):

Administered each Spring (intention is to provide more opportunities but has been a challenge with additional workload/coordination)

Prior to 2009, Administered centrally for ALL Engr students (matrix of student courses, attempted to gather questions from common courses which ended up being core classes – current instructor solicited).

In 2009, a track coordinator (Chad O'Neal, Erez Allouche, Lee Sawyer, Galen Turner) were designated – these faculty had the flexibility of defining exams that could be broader and more in-depth, tailored to a given area (Micro/Nano; TTC; Physics; Cyber).

There was a discussion about using FE or Mock FE exam, and then a discussion about utilizing the Mock FE as an entrance exam to identify needs of courses in the plan of study – this had not currently been implemented

PhD ENGR

Oral Exam (ENGR 686):

The idea of the oral exam is to provide the committee with an opportunity to ask in-depth questions with give/take from the candidate. Usually a defense of proposal work but can be areas identified in written exam that are weaknesses that need to be probed further.

Ideal timing is sometime soon after written qualifying exam is taken and results are known. Written qualifying exam is supposed to be taken when student is finishing majority of coursework (ideally, Spring of second year) and oral exam would be performed shortly thereafter (in practice it has varied up to the final stages of the student graduating – part of the reason for this meeting!!)

I need advisors to email me date and outcome of Oral Exam (successful or not) the quarter the student is signed up for ENGR 686 (sometimes difficult to determine the student's advisor in rush of grades!)

PhD BIEN Qualifier

Timing:

Written: Early Winter Quarter

Oral: Student's 2nd Year (after completion of BIEN Core)

Purposes:

1. Identify weaknesses.

- 2. Identify methods and concepts that could be applied to the student's research.
- 3. Integrate experimentation with analysis.
- 4. Accelerate completion of the final proposal.

Written Format:

- 1. Student writes a description of his/her proposed research.
- 2. Student describes how material in the core can be applied to enhance the proposed research project.

Oral Format:

Questions to clarify the student's approach.

Questions to examine other promising approaches.



CAM Curriculum

Math Core 9 SCH	MATH 414 & MATH 415 with either MATH 407 or STAT 620/STAT 621 (or approved MATH higher level courses)				
CS Core	CSC 428 & CSC 438				
6 SCH	(or approved CS higher level courses)				
oben	A B C D E				
Tracks*	High Performance Computing, High Availability Computing	Data Mining, Bioinformatics, Data Warehousing	Cyberspace, Network Science, Information Assurance	Computation, Simulation, Modeling	Applied Statistics, Knowledge Discovery
Supporting	CSC 585	CSC 579	CSC 475	CSC 557	CSC 579
Core	MATH 435	STAT 625 or QA 610	MATH 435	MATH 574	STAT 506 or QA 622
CS – 3 SCH MATH – 6 SCH	MATH 585/535	MATH 435	MATH 535	MATH 575	STAT 511 or QA 605
Suggested	CSC 581	CSC 580	CSC 450	CSC 585	STAT 625 or QA 610
Elective	CSC 582	CSC 557	CSC 554	Math 435	STAT 507
courses	CSC 557	STAT 506 or QA 622	CSC 575	Math 535	STAT 652
(see advisor)	CSC 534	STAT 652	CIS 521, CIS 522	CSC 470	STAT 650
(21 SCH total)	STAT 620		CIS 524	CSC 570	STAT 680
	STAT 506 or QA 622		CIS 523	CSC 579	
	CAM 657				
Directed Study (6 SCH)	CAM 650 or equivalent courses with other prefixes				
Qualifying Exams	Math: CAM 685 (Twice a year in the Spring and Fall quarters) CS: CAM 686 (Twice a year in the Spring and Fall quarters)				
Comprehensive Exam	The exam includes a lecture and followed by a question/answer period on the student's proposed dissertation topic that exhibits a clear demonstration of an understanding of the principles and methods involved in his proposed area of specialization.				
Dissertation (18 SCH)	CAM 651				
Total 72 SCH	Math 15 SCH + CS 9 SCH + Elective 21 SCH + Directed Study 6 SCH + CAM610 3 SCH + Dissertation 18 SCH				

^{*} Similar tracks are available for engineering, physics, and operation research.

What do I do if a student brings me a "proposal" and wants it signed so that they can register?

The Proposal is one of the *POINTS OF CONVERSATION* with a student; so a student should <u>not</u> do this in a hurry.

If a student wants a proposal signed only so that he can register, and you are not comfortable signing at that time, then don't sign it!

If it does happen, e-mail me (gturner@LaTech.edu) with the student's name, ID number and advisor's name. I will contact the advisor explaining that this has not been taken care of in a timely manner and the student should file a formal request for an extension to their advisor who will then forward this with their request to remove the registration hold. I will then make a determination at that point.

Please do not feel pressured to sign a document that you do not believe is acceptable or that you do not feel you have had enough time to read!

Suggestion to Advisor: Require your student to e-mail the proposal to the committee and program coordinator and even the Associate Dean before routing!



My Observations

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Additional Issues from advisors & committees

How can I help my international students with improving their writing? The BARC!

What do I do if I am out of the country and my student needs me to sign his timesheet?

Please authorize a faculty member associated with your research group, or academic program, to sign – this person should have close contact with you (and ideally the student) to feel comfortable signing the timesheet.

Why are required courses not offered?

Start the discussion with the program coordinator for that graduate program, your own academic director, and the Associate Dean for Graduate Studies.

Additional Issues from advisors & committees

Why are more disciplinary courses not offered? Start the discussion with your Program Chair and your Academic Director. If a preliminary plan is developed to offer more graduate courses, the AD working with the Associate Deans of Graduate and Undergraduate Studies can look at how the plan might be implemented. We don't know everything you think should be offered – we can only work with what you tell us, but it needs to be coordinated with your AD.

What if a student switches to my research group?

(With regard to Plan of Study and Advisory Committee.)

Immediately work with the student on a new Advisory Committee, and submit the form. You'll also need to develop a new Plan of Study for the student (signatures must match the Advisory Committee form).



Additional Issues from advisors & committees

How can I find out the thesis/dissertation committees on which I've agreed to serve?

- -- We are trying to develop a new database that will capture this information. It will likely take us through summer to complete (fitting this it into everything else we are doing in the Graduate Studies Office), but once in place, we should be able to give you this information when you ask.
- -- I have also discussed a possibility with the Registrar of recording the committee members names in the student record (CICS) system. This will not be cross-indexed by faculty member, but if we are successful, you will be able to see a particular student's committee.



Graduate Assistantships Consequences of not registering early!

If a student fails to register for the next quarter in a timely manner, then

-The *Appointment Request Form* for their assistantship cannot be processed. Here is a typical algorithm that students implement:

Step 1: Student registers late (but this triggers the ARF being sent)

Step 2: Student will receive a bill for their tuition and fees (including the out-of-state fee waiver – which will be reimbursed later after the ARF for their GA is completely processed).

Step 3: If the student does not pay the fees, they will be purged, assistantship will be cancelled and we all have to return to Step 1.

Step 4: After finally paying their fees, the student, frustrated and tired, complains about the 'unknown' procedures of graduate studies.

Thank you

