



PhD Program

You Passed the Quals...
Now What?

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Timeline

- Pass Quals
- Within the 1st Term
 - Identify a Thesis Advisor
 - Submit “tentative” pre-proposal
- Within 2nd term:
 - Form Doctoral Committee
 - Submit Thesis Proposal
 - Propose a Program or Study (Major and Minor)
- Every Subsequent Semester (Fall and Spring)
 - Thesis committee meeting
- Final Semester
 - Open Presentation of Thesis (The “Defense”)



Thesis Advisor

- Helps to Define Thesis Area
- Usually Primary Advisor (along with the Committee)
- Often Provides Funding
 - If so, you are also a junior research staff member for them
- Need Not be ME Faculty
 - Must be Faculty at MIT, Research staff at WHOI, or an ME Principal or Senior Research Scientist



Thesis Committee

- Comprises
 - At Least 3 MIT Faculty Members
 - Two Members Must be from ME
 - At Least 1 from “outside” your area
 - Can be More than 3
 - Can have Non MIT
 - Can have ME or WHOI Research Staff (Principal and Senior)

- Committee Chair
 - Typically the Advisor
 - If Advisor not ME or WHOI, must have ME Chair

NB: For WHOI Students: **Thesis Committee**

One member must be from the MIT ME department and one must be from the WHOI AOPE department. Committee chair must either be from the MIT ME department or from the WHOI AOPE department. Submit names to MIT ME Graduate Officer and JCAOSE Chair for approval.



Role of the Committee

- Group of Faculty who can Contribute to your Research
 - Different perspectives
 - Different disciplines
 - Different labs, etc.

- Meetings
 - Monitoring of progress
 - Opportunity for input, redirection, etc.
 - Need not be “milestones”

- Final Approval
 - Consensus on Completion
 - Thesis Document Review



The Proposal

- Purpose
 - Statement of Thesis Area and Proposed Research
 - Informs Faculty
 - Potential Input and Collaboration
 - Can Define Committee
- Brief!
 - Limited to 6 pages with Figures
 - Focus on Prior Work and Tentative Plans
- It is not:
 - A pre-thesis
 - Immutable
- It is:
 - An “Initial Condition”



Role of the Graduate Officer

- Act on Behalf of the ME Faculty

- Must Approve
 - Committee
 - Major
 - Minor

- May Approve
 - Exceptions

- Help Resolve Disputes



The Major

- Learn “state of the art” in Chosen Area of Interest
- Program of Advanced Study in your
 - Breath and Depth
 - In a “Field” of Science or Engineering
 - E.g. Mechanics, Product Design, Manufacturing, Energy Science, Ocean Science, BioEngineering, etc.
 - Alternative can be proposed subject to approval
 - Subjects typically H level
- Principal Component of Coursework
- Must be Approved by
 - Committee
 - Graduate Officer



The Minor

- Develop Competence in Area ***Different*** from Principal Filed of Interest
- Can be ME, Engineering, Science or Math
- Can be non Engineering, Math or Science
 - Management
 - Languages
- Must be 3 Subjects and at least 24 units
- If ME or Math, must all be H level
- If SB or SM different from ME, may use credits from there with approval.



Policy Evolution

- Graduate Policy Committee (Standing Committee of ME Faculty)
 - “Owners” of the Policy Manual
 - Periodic Review of the Program
- Graduate Program Review Committee (ad hoc Committee with 1 year term 1-09 to 12-09)
 - Review of Graduate Curriculum (Content and Structure)