FAQ – BS/MS PROGRAM

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www.me.gatech.edu/files/ug/bsms-faq.pdf
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Q: Am I even allowed to apply to and/or attend other graduate schools after being accepted in the BS/MS program?
A: You are allowed to apply for another institution's graduate program. You are also allowed to apply for other graduate programs and departments here at Georgia Tech. If you choose to do so, you will not be able to double count the 6 hours of course work at the undergraduate and graduate level, and most likely you will have to take the GRE exam. Your commitment to join our BSMS program is not binding.

Q: Is there a MS program curriculum?
A: There is no such thing as a set curriculum for the MS degree. That's the whole point of the degree, in that you deepen your knowledge in areas of your choosing (your major and minor) instead of taking a bunch of pre-determined classes like for your BS. You get to choose whatever class you want, it is all electives. There are some guidelines you need to follow, of course (for example, you need a math class, etc) which are given in the BS/MS Presentation but mostly it's your call. In terms of what is offered, your best bet is to look at the research portion of the ME website which provides details on every research area in ME and the various professors conducting that research. Or just think of the BS classes you most enjoy and see if you want to deepen your knowledge in those areas. Once you have selected your minor and major, you can get more info on the classes offered in those areas from the Graduate Handbook, especially Appendices A & B. Of course, you are always welcome to set up meetings with the BS/MS advisor to discuss this.

Q: Can I take one graduate course online and have it count towards my MS, even if the rest of the MS courses are taken on campus?
A: Yes, you can switch to being a temporary distance learning student, but you will need to be changed in the registration system. You will need to see a graduate advisor in the ME office to do this. Also, note that you will have to pay full distance learning tuition and fees for any course you take by distance learning. There is no such thing as “in-state” tuition and fees for distance learning students. In addition, you will be required to pay a technology fee for each semester that you are enrolled. More information on the cost of Distance Learning can be found on the Center for Distance Learning website.

Q: How do I select my ME electives so they can count towards my MS?
A: Appendix A in the Graduate Handbook has a list of all graduate-level courses offered in ME listed by semester. You can also see a list of graduate courses per research area in the Appendix B of the Graduate Handbook. Based on what you plan your MS major and minor to be, you should pick a class from those areas. Also obviously check OSCAR to make sure whatever class you pick is indeed offered when you plan to take it – the Graduate Handbook is not always 100% accurate since there can be changes if not enough people register for a class, or the usual instructor leaves GT, etc. Once you have done that, you should email the instructor to warn him/her that you are an undergraduate student planning to take a graduate level class and get his/her ok.

Q: How do I register for a graduate class?
Undergraduate students with a 3.2 GPA are allowed to take graduate level classes. However, undergraduate students are not allowed to take ME 6753, ME 6754, ME 6789, ME 6792 and ME 6799. In addition, undergraduates are not allowed to take seminar classes or teaching practicum classes. If you want to take these classes towards your ME degree, you can take them after you matriculate into the MS program. Instructions to register for graduate level classes are on the ME website.
Q: Can the courses that I wish to double-count towards my MS degree be part of the required BS degree curriculum?
A: No. Only ME electives or free electives can double count. You cannot double count required BSME courses. Students who are pursuing an ME concentration can double count any of those classes with the exception of the design elective.

Q: Can I double count more than 6 hours of classes towards my MS and BS?
A: No. Even if you decide to take coursework that would be eligible to count towards your MS degree, you are only allowed to double count 6 hours (2 classes) towards both your BS and MS degrees. As an undergraduate, you are eligible to take extra classes that are not counted towards your BS that can be used towards your MS. This is common for students who only need 1-2 classes during their final semester. Those students can then take up to 6 additional hours (2 classes) and have it count only towards their MS degree. Undergraduate students can move a maximum of 12 hours from the BS level towards the MS degree. This includes the 6 hours of double counted classes, plus up to 6 additional hours of classes.

Q: How many 4XXX level courses can I count towards my MS?
A: You can take at most two 4XXX level courses for your MS, and that’s regardless of whether you do thesis or non-thesis. Students can double count 2 classes (6 hours maximum) towards the BS and MS degrees. In ME, this can be either free electives or ME electives (at the 4000 or 6000-level). In NRE, this is two technical electives. The most common options are below:
- ME Students: Double count one ME elective and a 4000 level Math course taken as a free elective
- ME Students: Double count two ME electives
- NRE Students: Double count two technical electives

Q: Can I have ME 6753, ME 6789 and/or ME 6799 count towards my MS minor?
A: Yes, they are allowed for your minor, but not your major.

Q: Can I double count ME 4699 (Undergraduate Research)?
A: Yes, you can double count ME 4699 towards your BS and MS degrees. This is allowed for both the thesis and non-thesis MS options.

Q: Can I defer my MS program?
A: Students are required to start into the MS program immediately after completing their BS degree. The only exception to this is summer semester. Students who graduate in the spring are allowed to take summer semester off and start in the fall semester. If you need to defer your admission outside of these rules, you will need to apply to the MS program through the regular admission process.

Q: I've come up with my MS plan of study. How do I get this approved?
A: You are welcome to meet with your BS/MS advisor to review your plan, but ultimately, to make sure you get those courses counted properly towards your MS, you should go to the graduate database and submit your program of study. This is sent to Dr. Whiteman who will review and approve or deny it. You should do this pretty soon (definitely before you graduate with your BS) to make sure the ME electives you selected work, so you can go and register for them on time. If something comes up (i.e. some ME grad course you had planned to take in the 2nd semester of your MS isn’t offered) you can always go back to that previous website and revise your plan of study so it meets approval again. People can revise it as often as they want based on actual course offerings. The key is you want to file your MS Program of Study as soon as possible so you get your choices confirmed in time for registration.
Q: I have come up with my MS plan of study. When does this need to be approved?
A: You are welcome to submit your program of study during your senior year, before you enter into the MS program. This can be modified as many times as necessary if there are conflicts or scheduling issues. Your program of study must be submitted by your first semester in the MS program at the very latest.

Q: I cannot get into the link to submit my MSME Program of Study. What do I do?
A: Sometimes, when you type in my GT login, the window just asks you to login again and again. When you close the window, you get a blank page with a message that says “You are not authorized to view this page.” To fix this, please contact Computer Support at computer.support@me.gatech.edu. They should be able to assist you.

Q: Should I take the Thesis or the Non-Thesis route for my MS? What are the advantages and disadvantages of them?
A: The Non-Thesis (NT) route is very similar to a BS degree: classes, homework, exams, and after 2-3 semesters of this, you can graduate, get a job and move on. Graduate courses typically require more work than undergraduate courses (a full load in grad school is 4 courses per semester) but are run very much like undergraduate courses. This is best suited for students who are in a hurry and do not mind taking more classes. The main disadvantage is you will have to pay the tuition yourself, unless you have some sort of fellowship that will cover that for you (which is extremely rare). If you are an out-of-state student, you will pay out-of-state tuition (unless you do your MS at Georgia Tech Lorraine, which only requires in-state tuition). Another disadvantage is that you miss the opportunity of doing a thesis — in case you were at all curious about it. If you are curious about it, you should know that people disagree as to whether it is preferable to go to graduate school right after your BS or if you are better off postponing until after you have graduated and worked in industry a while. Some say it is harder to postpone because the financial sacrifices one makes pursuing a thesis are that much more difficult to bear once you are used to a “real world” salary – especially if you are also responsible for a family. Others say industrial experience is best, because you know more clearly what to do your thesis about, and also you are extra motivated to succeed at it since you already experienced the “real world” first-hand. Ultimately, this is very much a personal decision that depends on your individual circumstances and goals. The Thesis (T) route involves taking fewer classes than you would in the NT option (3 less). What replaces these courses is the thesis, although the thesis will generally take longer (at least 1 extra semester) than the courses would have taken. A thesis means you work on an engineering project under the close supervision of a faculty member, who, typically, will pay you as a Graduate Research Assistant (GRA). This GRA will pay the majority of your tuition and a stipend (~$2000/month). This money comes out of the faculty member’s research funds in exchange for your work. You get to experience research, which is a fundamentally different experience from just taking classes. The problems you work on for your thesis are cutting edge and you get to participate in tomorrow’s technological advances, which can be extremely rewarding. There is more intellectual depth in a thesis than can ever be in a course, no matter how challenging, due to its limited duration. You get to write a thesis, which is substantially more ambitious than a capstone design report. The chance to work closely with a faculty member, who then becomes your mentor, can change your life (in a good way!). Also, the majority of your tuition is paid from your GRA tuition waiver. You are still required to pay reduced tuition (see the Graduate Assistantship Rates) and fees. You may also receive additional fellowships. The main disadvantage is that you’ll graduate later than if you had gone the NT route. How much later varies based on your research project and advisor, but generally you should count on an extra semester or two to graduate.
Q: What kind of financial aid can I get for my MS?
A: The basic rule of thumb is that (almost) nobody will pay you to just take courses, so you will be responsible for all of the tuition and fees on your own. There are a few exceptions where you get money for course work (for example, the Gates Millennium award) but they are extremely rare.

- **Fellowships** - Most fellowships (a fellowship is a scholarship for graduate students) require you to do a thesis and are extremely competitive. Dr. Donnell is the ME resident expert on fellowships, so talk to him if you plan to apply. Georgia Tech also has a Fellowship Office to help students look for fellowships. The main advantage of having a fellowship is that you have much more flexibility in your choice of the research project and/or advisor you want to work on and/or with. You effectively bring your own money and so you come “free” to your thesis advisor. Also, these fellowships are very prestigious and look great on your resume! However, they demand a significant amount of time and effort as the application process for most of them is arduous (transcripts, GRE, letters of recommendation, essay, etc). Most require US citizenship or permanent residency.

- **Graduate Research Assistantship (GRA)** - If you don’t have a fellowship but want to do a thesis MS, you should first determine what type of research interests you have. Once you know what you’d like to work on, meet with graduate students and/or faculty who also work in this area, and try to develop a relationship with them. Tell them you’re interested in working with them for your MS. Maybe offer to work in their lab for course credit or pay while you’re still an undergraduate student, or get a PURA award to do some undergraduate research with them. If people know you and know that you do good work, they will fund you for your MS (i.e., you’ll get a GRA tuition waiver to cover the majority of your tuition and you will receive a monthly stipend to live on).

- **Graduate Teaching Assistantship (GTA)** - The GTA, or Graduate Teaching Assistantship, works like a GRA, except that instead of doing a thesis, you help a faculty member teach his/her courses. Usually you set up and monitor labs or deliver lectures or grade or any combination thereof. Generally GTAs are extremely hard to get because they go by priority to ME graduate students who are doing an MS thesis or PhD. As MS Non Thesis, you are at the bottom of the priority order: top priority are Ph.D. students who have passed their proposal, next are Ph.D. students who have passed their qualifying exams but not their proposal, next are Ph.D. students who have been admitted but haven’t passed their qualifying exams, next are MS Thesis students, and then... you. In any given semester, there are too many students needing money and with higher priority than you for you to expect to get any money at all. It may happen, but it’s unpredictable and highly unlikely. Dr. Whiteman is the person who assembles the tentative GTA list each semester. The list then receives final approval from the Woodruff School Chair and Associate Chairs.

- **Georgia Tech Lorraine (GTL)** - All non-thesis MS students pay in-state tuition at GTL. If you are considered an out-of-state student on the Atlanta campus, and know you don’t want to do a thesis for your MS, you might want to consider doing your MS at GTL so you’re only charged in-state tuition (and not out-of-state as you would in Atlanta).

Q: What percentage of students have funding for the MS program?
50% of on-campus grad students have funding. 80% of those students are PhD students. 15% are MS thesis students. Less than 5% of MS non-thesis students end up with a GTA (and even then, maybe only for 1 term if Dr. Whiteman needs to fill a late availability in the GTA schedule).

Q: Will my final transcript after graduation include the courses I took as an undergraduate in calculating my graduate GPA?
No, the courses that you took as an undergraduate toward your BSME degree will only appear on your undergraduate transcript.
Q: I want to do my MS at Georgia Tech Lorraine. Can I take the MATH course there?
A: GTL does not have anyone from the School of Mathematics teaching there, so you can either take the class through distance learning there or take it here while you’re still on campus (before you leave for GTL) if that’s possible with your schedule.

Q: Is there a difference between ME 4451 and ME 6407, the undergraduate and graduate robotics classes?
A: There are many differences. For example, ME 4451 is 2D, covers serial and parallel robots, and has a lab. ME 6407 is 3D, covers serial robots only but in more depth, and has no lab. We now allow double counting of these courses.

Q: I am interested in getting a Certificate in Manufacturing during my MS. How do I do that?
A: Information on the Certificate of Manufacturing is available on the MARC website. You may have to add a seminar course to get it.

Q: Where can I get more information about the medical physics MS program?
A: Dr. Farzad Rahnema approves the MP Programs of Study, so please contact him directly for any MP questions. Please be aware that there is also a requirement for a clinical rotation in this program. Additionally, to be accepted to the MP program students are required to complete a minor in physics. This is because the ABR board requires specific classes to sit for the qualifying exam in Medical Physics. The physics classes to be included in the minor that will also satisfy the ABR requirements are:
   a. Electricity and Magnetism: PHYS 3122 (ECE 3025 also satisfies the ABR requirements)
   b. Thermodynamics: PHYS 3141 (ME 3322 also satisfies the ABR requirements)
   c. Mechanics: PHYS 3201
   d. Quantum Mechanics: PHYS 3143
   e. Statistics Physics: PHYS 4142
   f. Atomic Physics: PHYS 4261

Q: Where can I get more information about the bioengineering MS program?
A. There is often confusion between the MS in Bioengineering and the MS in Biomedical Engineering. The Woodruff School serves as one of the home schools for an MS in the interdisciplinary bioengineering program. There is no BS/MS program to apply to the Biomedical Engineering program at Georgia Tech. If you want the MS in Biomedical Engineering, then you must apply to that program through the regular admissions process.