

Economics Major Advice

This short paper is a compilation of advice for students choosing to major in Economics at Middle Tennessee State University. I graduated in May 2013 with a degree in Mathematics and Economics from MTSU and am pursuing graduate studies. Because of this, my advice is tailored for those interested in pursuing graduate studies. With that in mind, it also contains general advice useful for all Economics majors. The suggestions that follow are from personal experience and should be carefully examined. Requirements change quickly, so double check and verify any decision you make with your advisors.

I. Liberal Arts or Business Degree

The Bachelor of Science through the College of Liberal Arts is a more flexible major with more elective options. If there is a possibility that you are considering graduate school in economics (Masters or Ph.D.), then the B.S. is the preferable option because mathematics courses can be added as electives to supplement the degree. Its flexibility is also ideal for those wanting to pursue interests that are not business related such as law. The B.B.A through the College of Business has requirements such as marketing, management, information systems, and accounting more suited for those pursuing business interests. I do know some people that are pursuing an M.B.A. who majored in economics, and so the B.B.A. was a better choice for them.

II. Class Choices

A. Math 1910 or 1810

When choosing to take Math 1810 or Math 1910 for either major, Math 1910 is the better choice unless you are sure you are not going to pursue graduate school. If you are not interested in graduate school but are a strong student, then Math 1910 is more advantageous. There is no Math 1820 offered to follow Math 1810 even though it is listed in the catalog. In my case I took Math 1810, and then decided to pursue graduate school. Since many graduate schools require a minimum of three semesters of calculus, I needed to continue taking calculus. The math department is reluctant to accept 1810 in place of 1910, so I had to take 1910 before I could continue. Math 1910 is four credit hours and is more difficult than 1810, but in the long run it is

worth it. While calculus is not a prerequisite for many economic classes, some of the professors do use it, so Math 1910 would be more helpful.

B. QM 2610 or Stat 3150

With similar reasoning from above, it is better to take Stat 3150 than QM 2610 if you are a strong student or interested in graduate school. I took the business statistics QM 2610 and then had to take mathematical statistics Stat 3150. Graduate schools prefer math classes taken in the Mathematics Department rather than the College of Business. Stat 3150 is slightly more difficult, but its benefits far outweigh the costs. It is also a much better preparation for econometrics. Check that the College of Business will accept Stat 3150 in place of QM 2610.

C. Minor Choices

A minor in mathematics is very beneficial when applying to graduate school in economics. Calculus I, II, III, Linear Algebra, and Statistics would fulfill the minor requirements and would satisfy the minimum math requirements for graduate school (more math classes need to be taken to be competitive). If you take Stat 3150 in place of QM 2610 for the economics major then take Stat 4190 (Stat II) for the statistics credit for the math minor. The B.S. in Economics is flexible enough that you can double major in Mathematics. I started mathematics during my fourth semester and took one summer class to graduate on time. I also wasted time retaking many classes because I did not know what I know now so it would still be doable if I had started my junior year. If you are serious about graduate school, then a double major would be ideal. Make sure to communicate with both departments and colleges on requirements and check the requirements on your own because it can get confusing with two majors.

III. Undergraduate Research

A. Getting Started

If you are interested in research, the best place to start is talking to faculty that you are familiar with or have had classes with. Another great option is to talk to the Chair of the Department of Economics and Finance to suggest some professors to work with. Two things that hinder students from doing research are not having a research topic or not having enough experience in Economics. These are not good excuses because of the highly devoted faculty in the department. They are extremely receptive and are willing to work with you to select a topic and to see the project through to completion.

Many students receive academic scholarships through MTSU that require five hours of work per week in their assigned department. It is possible for research to count toward these hours. Communicate with the scholarship office and department to request to be transferred to the Department of Economics and Finance for the work requirement. Of course, you will have to find a professor mentor before you can substitute research for the work requirement.

B. Undergraduate Research Center

Check out the [Undergraduate Research Center](#) at MTSU. They offer a URECA grant to undergraduates doing research for up to \$3500. The grant is available for two semesters after acceptance. Applications are usually due in March and are fairly detailed. You must have a well thought out and organized idea and a faculty mentor. Again talk to professors or the chair to find a suitable mentor. Applications are due in October for the fall and March in the spring.

C. Presentation Opportunities

The first opportunity for research presentations is [Posters at the Capitol](#). Schools across the state send participants to Nashville to present posters of their research and to talk to state legislators. This is a very fun experience and a great opportunity to meet others interested in your field of study. This event is coordinated by the Undergraduate Research Center and takes place in February.

[Scholars Week](#) is also a great opportunity. It is a good chance to present your research and a resume builder. Scholars Week also judges the posters and selects three winners from each college with a monetary award. Both Scholars Week and Poster at the Capitol are poster presentations, which means people walk around and talk to you so you don't have the pressure of presenting to a large group but get good practice.

D. Research Timeline

Fall Junior Year

Find a faculty mentor and a research topic

Spring Junior Year

Submit proposal for URECA Grant in March

Summer Junior Year

Research

Fall Senior Year

Research

Spring Senior Year

Prepare poster for Posters@Capitol in December and January

Present Research at Posters@Capitol in February

Present at Scholars Week in April

IV. Applying to Graduate School

A. Preparation

Everything listed above is really advice on preparing for your application to graduate school. Undergraduate research is a great component to strengthen your application. Math courses are vital. As I said a double major in Economics and Mathematics would be best. Most schools require a minimum of three semesters of calculus, one semester of statistics, and linear algebra but more mathematics is vital. Good GRE scores are also important to make it into a competitive program. Although important, don't be discouraged if your score is slightly below the average at the school you are applying to. My quantitative score was below average at five of the six schools where I was accepted. Of course whether you need to retake the GRE or not has a lot to do with where you plan to apply as better schools desire higher scores. The statement of purpose is also an important component of your application and should first include your purpose for pursuing graduate studies which is to further your education to aid in research goals. Then the statement should include the reasons why you will succeed, including: the tools you have gained, the abilities you possess, and the interests you have.

B. Where to Apply

The best place to start looking is at individual program websites. Pick schools in areas that you would not mind moving to and schools that fit your interests. Usually they have information such as faculty research interests on the website. Also most schools provide average GRE scores and GPA of previous incoming students so you can get a good idea of your competitiveness. Another place to look at is the rankings published by [US News and World Report](#). I applied to twenty schools and they were fairly evenly distributed across the top sixty listed in this ranking. I chose ten in the top thirty and ten in the thirty to sixty range. Make sure to choose one or two back up schools that might not be in the top sixty just in case. Also don't be afraid to apply to a few in the top ten because you never know what can happen. Two more useful rankings are based on [professor articles](#) and [placement of graduates](#).