

THE UNIVERSITY OF AKRON  
COLLEGE OF ARTS & SCIENCES  
DEPARTMENT OF STATISTICS  
**GRADUATE STUDENT HANDBOOK**



EFFECTIVE SPRING 2019

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## **INTRODUCTION**

Welcome to graduate study in Statistics! We live in a data-driven society and you have chosen a discipline that is held in high regard in business, industry, government, research, and society in general. We are pleased that you have selected The University of Akron for your graduate preparation.

Congratulations if you have been awarded a Graduate Assistantship for this academic year. This honor is the culmination of years of hard work and dedication at the undergraduate level. If you have not been awarded a Graduate Assistantship or are a part-time student in the program, then you will still find valuable information in this handbook, which will answer many of your questions about the graduate program. Whether you are a part-time or a full-time student, we hope that your study with us is beneficial and rewarding. This handbook has been prepared to aid you in planning your studies here and to guide you through some of the procedures and requirements of the Statistics program.

*The mission of the Department of Statistics is to provide students with a quality education in statistics, in which they acquire fundamental statistical skills and develop a sense of statistics as a profession. In addition, our graduates will be prepared for advanced studies in statistics and related disciplines and for the diverse uses of statistics in business, industry, government, scientific research, and society.*

Whether as a statistics major or a student in one of the department's numerous service courses, students receive training in critical thinking about sources of data, interpretation of data, and the merit of conclusions drawn from data. As all members of society are increasingly bombarded with information, the skills learned in the study of statistics contribute significantly to the development of enlightened members of society. The masters-level program offered by the Department of Statistics at The University of Akron is the only comprehensive program in statistics at a public institution in the region. The research activities of faculty are primarily collaborative efforts with scientists and other researchers. These efforts have resulted in securing external grants, including federal funding.

## **A LITTLE MORE ABOUT US**

The Department of Statistics maintains two instructional computer labs. One of these labs is used for class laboratory sessions for the general education statistics courses, Statistics for Everyday Life and Basic Statistics, and is located in the College of Arts and Sciences Building, Room 108. The advanced lab, located in Room 109, is used for graduate statistics courses and becomes a second home for Graduate Assistants. The Center for Statistical Consulting, housed in the department and maintained by the Buchtel College of Arts and Sciences, provides opportunities for students to gain valuable experience in the practical applications of statistics while interacting with faculty and clients. Students are required to take the Statistical Consulting course for at least 1 credit hour, which gives students the experiences of working with projects outside of the classroom.

## **ABOUT THE PROGRAM**

The M.S. degree program in Statistics is designed to give students a solid foundation in graduate-level statistics, provide hands-on experience in problem-solving and the uses of technology in statistical data analysis. The program requires a minimum of 30 credits of coursework.

The Master's degree program in Statistics is designed to give students comprehensive training in the design, collection and analysis of data. The program provides the student with a solid theoretical and applied statistical background in preparation for their chosen career. With careful advising, the program at The University of Akron can also prepare a student for continuing study at the Ph.D. level.

### **How is Graduate School different from my undergraduate work?**

You will concentrate all your studies in your chosen field; there are no general education requirements; however, there are specific core requirements which must be taken in sequence starting your first fall semester. You will work with your Graduate Academic Advisor to guarantee that all elective courses are suitable for a statistician in training.

You will spend much more time on each course than you spent on a typical undergraduate course. This time will be divided between in-class guided study of the course topic from the textbook, notes, and outside sources and preparation of solutions to homework problems. You must take responsibility for learning much of the material on your own.

### **What other responsibilities do I have outside of the classroom?**

1. Students awarded a graduate assistantship or tuition scholarship must enroll in a full-time program of graduate study at the University during each semester of appointment and maintain that minimum for the entire semester/session. Full-time study is defined as 9 graduate credit hours during fall and spring semesters. The appointment may be rescinded if registration drops below these minimums or students may be required to pay back stipend monies. Full-time students will receive up to 9 graduate credit hours of tuition remission during each semester. Students should meet with their advisor to determine a plan of registration. Students must pay for any graduate credit hours over the above stated maximums, as well as all fees related to their courses.
2. Depending upon the level of your funding, you may be required to work up to 20 hours/week on assigned duties (see your contract for details). Those duties generally teaching a general education computer lab course, tutoring undergraduate students, grading for faculty or other assigned duties. You are in training as a professional in your field, so always carry out your duties to the best of your ability. If for some reason you are unable to carry out your assigned duties due to illness, automobile problems or other personal reasons, please call the Statistics office at 330.972.6886 and let the office know so that other arrangements can be made. However, you are expected to find your own substitute for regularly scheduled activities and should let the office know what arrangements you have made for all but last minute problems.
3. You also have the responsibility for meeting all requirements and deadlines of the Department and the Graduate School as they pertain to your program. Be aware of them and be prompt in meeting them. Reminders of important information and deadlines will be sent via the department listserv to you UAnet email account.
4. In addition, you should make an effort to take an active part in departmental life. You are strongly encouraged to attend departmental colloquium and parties when offered.

### **How do I know what courses to take and when?**

You should meet regularly with your Graduate Advisor to review the course offerings and determine which courses you should take and when. The program is structured such that between the first fall and spring semesters, a student should be able to complete all core courses and one elective.

### **THE MASTER OF SCIENCE IN STATISTICS PROGRAM**

#### **What must I do to earn a master's degree?**

1. You must complete the required five core courses and one credit hour in the Statistical consulting class, complete the required minimum credit hours of course electives, and complete either a thesis or masters paper as well as present the thesis or paper in a colloquium.
2. You must pass the courses in your curriculum with a grade point average of no less than 3.0 and have no more than 6.0 credits of "C" grades.
3. You must have applied for graduation on My Akron and reviewed your degree progress report (DPR) to be sure your courses are accounted for and all categories listed are either complete, in progress or anticipated for the future. The Degree Sought is "MS," the Program of Study is "Statistics," and the Degree/Program Code is "347000MST" for the thesis option and "347000MS" for the non-thesis option. If you decide to postpone your graduation after the date you originally applied for, you must contact Graduation Services at 330.972.8300 to advise them of the postponement and notify them of your new graduation date.
4. You must submit a satisfactory thesis or masters paper and have all required signatures; i.e., Thesis/Paper Advisor, Reader, Department Chair, Dean of the College, and/or Dean of the Graduate School as required, before it is considered complete (see Attachment B sample cover for thesis and Attachment D sample cover for masters paper). Since few students choose the thesis option and requirements are specific and addressed by the Graduate School, only general discussion will follow at this time for the majority of students who will be choosing the non-thesis option. If you should choose the thesis option, current standards will apply as specified at the Graduate <https://www.uakron.edu/dotAsset/678007.pdf>.

## **THE CURRICULA**

### **1. What about those prerequisites we talked about?**

Entrance into the Master of Science in Statistics program will require completion of the following prerequisites *prior to starting the program*. International students and students taking the following courses under different names can accelerate the application process by **submitting complete course descriptions** from which equivalency to the following can be determined.

- 3 Semesters of Calculus
- Applied Statistics or equivalent

### **2. What courses must I take for the Core Curriculum?**

3470:580	Statistical Data Management	3
3470:551	Theoretical Statistics I	3
3470:552	Theoretical Statistics II	3
3470:663	Experimental Design	3
3470:665	Regression	<u>3</u>
	Total	15

### **3. What do I need to do to earn a Master's degree in Statistics with the thesis option?**

You will be required to complete a total of 30 credits of graduate work, including the following in addition to the 15 credits of the core curriculum. The paper or thesis will be presented in a colloquium to faculty and students. NOTE: Please see your Graduate Advisor before deciding on the thesis option.

3470:595	Statistical Consulting	1-3
3470:699	Master's Thesis	3-4
3470: Electives	As Approved by Graduate Advisor	at least 9

*\*No more than 2 credits of Statistical Consulting will count toward graduation requirements.*

### **4. What do I need to do to complete the non-thesis option?**

You will be required to complete a total of 30 credits of graduate work, including the following in addition to the 15 credits of the core curriculum. The Statistics Masters Paper will be presented in a colloquium to faculty and students.

3470:595	Statistical Consulting	1-3
3470:692	Statistics Master's Paper	2-3
3470: Electives	As Approved by Graduate Advisor	at least 11

*\*No more than 2 credits of Master's Paper will count toward graduation requirements. Additionally, no more than 2 credits of Statistical Consulting will count toward graduation requirements.*

**5. Can I transfer courses from another graduate program toward my MS Statistics degree?**

Yes, normally you can transfer up to 6.0 **elective** credits with permission of your Graduate Advisor upon completion of a minimum of 12.0 credit hours of coursework at this university. Please bring in a syllabus and course description (and book if available) for the course(s) you wish to have evaluated for transfer. Core course requirements cannot be transferred.

**6. What electives can I take?**

The department offers two - three elective courses each semester in addition to the core courses. It is recommended that students plan to take the Statistics electives unless there is a legitimate reason why a non-Statistics course is needed or preferred based on particular needs. If a student gets permission from the Graduate Advisor to take an elective outside of the department, certain departments have historically offered statistics-based courses which have been approved in the past. Search the following department codes to find out what is being offered in those departments for the term. Otherwise, bring the course of your choice to the Graduate Advisor for his/her approval. For your convenience, we maintain a list of external electives approved in the past.

- 3250 Economics
- 3450 Mathematics
- 3460 Computer Science
- 6400 Finance
- 6500 Management
- 6600 Marketing

The permission should be documented in your student file, so make sure to provide the Graduate Advisor's approval to the Administrative Assistant.

**7. Am I required to take a Practicum?**

No

**8. What is required of a thesis?**

It is a research study of some statistical topic at a level beyond that of a research paper. Some original contribution is expected. The thesis must be written in accordance with the thesis guidelines of the Graduate School. Furthermore, the student must present the thesis in a colloquium to faculty and students. Earning a master's degree with thesis option requires a unanimous pass vote by your Thesis Committee.

**9. When do I sign up for the Thesis (3470:699)?**

You should allow at least two semesters to complete your work. The decision to pursue a thesis should only be made after consultation with the faculty member under whom you are carrying out the study. In conjunction with that faculty member, the student should complete the "Request for Permission to Enroll in Master's Thesis" form (see Attachment A) to be enrolled in 3470:699 and then proceed to form a Thesis Committee.

**10. Aside from my Advisor, who else is on my Thesis Committee?**

The Thesis Committee will include a thesis advisor, and two other members on the thesis committee. At least one of the committee members must be a member of the Department of Statistics.

**11. What is required of a Statistics Masters Paper?**

It should be an exposition of a statistical topic. It need not contain original mathematical results, but it should reflect the student's understanding and organization of the topic. It should be typed and presented more or less in the form prescribed by the Graduate School for a thesis, although it is not submitted as such and is generally not required to be formatted as rigidly as a thesis.

**12. When do I sign up for the Statistics Masters Paper (3470:692)?**

You should allow at least one semester to complete your work. The decision to pursue a topic for your paper should only be made after consultation with the faculty member under whom you are carrying out the study. In conjunction with that faculty member, the student should complete the "Request for Permission to Enroll in Statistics Masters Paper" form to be enrolled in 3470:692 (see Attachment C) and submit it to the main office by the published deadline. Upon receipt of the approved permission form, the student will be enrolled in the course.

**13. When do I decide to do a paper or a thesis?**

You should talk to the faculty about their research programs and/or specialty area and select an advisor and reader no later than the mid-point of the semester prior to the one in which you expect to graduate for your paper and at least two semesters prior to graduation for your thesis.

**14. When is the thesis or paper due?**

- A. One copy of the thesis must be delivered to the Graduate School in proper form by the posted deadline. This means that the final copy must be passed on by your Thesis Committee well before this date. All master's thesis must be submitted to the Graduate School for a preliminary format check at least once on or before the preliminary thesis deadline. All corrections to formatting must be made before the Dean of the Graduate School will approve the manuscript. Thesis students will not be cleared for graduation unless the manuscript is approved. The exact procedure, formatting and deadlines may be obtained from the "Guidelines for Preparing a Thesis or Dissertation" located at <https://www.uakron.edu/dotAsset/678007.pdf>
- B. Upon completion of the Statistics Masters Paper, four (4) original copies of the paper with a TITLE PAGE listing title of the paper, name of the student, and signatures and date lines for yourself, your Faculty Sponsor, Faculty Reader and Department Chair must be turned in to your Faculty Sponsor by the end of exam week (see Attachment D). You will receive a final, signed copy for your records.

**15. What about that required colloquium?**

Prior to the end of the semester and upon near completion of the thesis or master's paper, you will be scheduled to present your thesis or master's paper in a colloquium to department faculty and other students. The colloquium will be scheduled in agreement with your Faculty Sponsor.

## **REGISTRATION FOR GRADUATION**

Students register for graduation in My Akron. The Graduate School and Graduation Services generally make no exceptions (except under extenuating circumstances) for students missing the posted deadline. Failure to apply for graduation by the posted deadline results in a possible fine or denial of graduation for the intended semester. The university sends out multiple graduation notices via Zipmail, so please pay attention to that. Please review important information and apply for graduation at <http://www.uakron.edu/registrar/graduation>. Also be sure to double-check your My Degree Progress Report (My DPR) and make sure it is correct and all your courses are accounted for. If you see a problem, please let the front office know so it can be investigated and corrected if necessary.

## **IMPORTANT THINGS TO KNOW**

### **1. Students on Assistantship**

You will be required to complete the Graduate School orientation. You will be contacted by the Graduate School about this orientation that includes Sexual Harassment Prevention and information from the Institute for Teaching and Learning.

### **2. Key Policy**

The Department of Statistics requires that all Graduate Students on assistantship get office keys and department lab keys. Please see the Department of Statistics Administrative Assistant for details.

### **3. Payroll Procedures**

Students on assistantship will be submitting their required payroll forms online during the online Graduate Student orientation session. International students should check with Payroll regarding exemption of certain taxes.

If you should need to change your Employee's Withholding Allowance Certificate (W-4) and/or Employee's Withholding Exemption Certificate (IT-4 found on reverse side of W-4), blank certificates are available in the Payroll Office or on their website at <https://www.uakron.edu/controller/payroll-forms.dot>.

If upon graduation you discover you may need copy(s) of your past W-2 statements, please call the Payroll Office at 330.972.7205 instead of calling the department. The department does not have access to such confidential information.

Graduate assistants changing their mailing address, phone number or other information should change their biographical data on My Akron.

#### 4. Parking

Students who take more than five credit hours are assessed a Transportation Fee for that term. This fee will allow students to receive a parking permit on request (at no additional charge), and they will have unlimited access to the expanded shuttle service.

Fee	A Transportation Fee, which will include a permit to park on campus (on request) and a much-expanded shuttle service
Who pays	Students on the Akron campus who take more than 5 credit hours
Subsidy	Partial reimbursement (if applicable) from department deducted from invoice amount
Benefits for the environment	Fewer cars parked on campus as students who live near campus ride the shuttle to class

The Department of Statistics does not subsidize graduate assistant parking permits for the summer sessions during appointment period; however, we do subsidize part of the permit fee for the regular fall and spring academic year semesters for fully funded graduate students. The parking permit application process is completed online by going to: <https://www.uakron.edu/parking/permits.dot>. After the permit is approved by the department Administrative Assistant, you will receive an email indicating that you may pick up your permit at the Parking Office.

#### 5. Health Insurance

Domestic graduate assistants are not covered by The University of Akron employee health insurance. Many are covered under their parent's health insurance or they may purchase other health insurance plans. International students are required to purchase health insurance and show proof of such insurance to the Office of International Programs. Failure to purchase insurance will result in a hold being placed on your account which will prevent any future enrollment. Details regarding the health insurance requirement can be found at <https://commerce.cashnet.com/cashnetb/selfserve/BrowseCatalog.aspx>. All students are entitled to seek treatment at Student Health Services located in the Student Recreation and Wellness Center.

#### 6. Campus Resources

There are many valuable resources available to you through the Internet. General University information can be obtained from using the search engine on The University of Akron home page located at <https://www.uakron.edu/>. Graduate School information is located at <https://www.uakron.edu/gradsch/>. You may also access the full Graduate School Bulletin at this location which contains more detailed information on up-to-date graduate student rules and programs.

For funded graduate students, payroll dates can be found at <http://www.uakron.edu/controller/payroll.dot>.

Please be sure to visit The University's home page for complete and updated information about university news and activities and read your weekly email for important information.

Additionally, ALL departmental news will be sent out via the department listserv, so be sure to keep informed on a daily basis by reading your email. Prior to the start of the semester, we will use the email address from your graduate application. After the semester starts, we will only use UAnet ID's. You can forward your email to your private address by logging into "My Akron" and clicking on the "UANET Services" link from the home page under the block listed as "School Services."

We encourage you to register with the Career Center in Simmons Hall by contacting their office at (330) 972-7747 or <https://www.uakron.edu/career/>. By registering with the Career Center, you have access to internship information, job search databases and about career choices you will make after graduation. Additionally, the Buchtel College of Arts & Sciences also has a Career Center located in CAS 125. Contact their office by calling (330) 972-5714 or visit their website at <https://www.uakron.edu/ascareer/index.dot>.

**REQUEST FOR PERMISSION TO ENROLL IN MASTER’S THESIS**

Class Number \_\_\_\_\_

Course Number: 3470:699: \_\_\_\_\_

Student Name \_\_\_\_\_

PeopleSoft ID \_\_\_\_\_

**Description of Proposed Master’s Thesis Project:**

<b>Note: Upon completion of the Statistics Thesis, follow all requirements listed on the “Guidelines for Preparing a Thesis or Dissertation” located at <a href="https://www.uakron.edu/dotAsset/678007.pdf">https://www.uakron.edu/dotAsset/678007.pdf</a></b>

Requested Credit Hours (2-4): \_\_\_\_\_

If permission is granted to enroll, I promise to submit a report detailing the results obtained.

\_\_\_\_\_  
**Student Signature**

\_\_\_\_\_  
Date

**Faculty Sponsor:** I agree to supervise the student listed above and agree to submit both a grade and a report summarizing the student’s activities.

\_\_\_\_\_  
**Faculty Sponsor Signature**

\_\_\_\_\_  
Date

**Faculty Reader Approval:**

\_\_\_\_\_  
**Faculty Reader Signature**

\_\_\_\_\_  
Date

**Faculty Reader Approval:**

\_\_\_\_\_  
**Faculty Reader Signature**

\_\_\_\_\_  
Date

**Department Chair Approval:**

\_\_\_\_\_  
**Department Chair Signature**

\_\_\_\_\_  
Date

Sample signature page for thesis:

COMPLETE TITLE  
THAT MAY REQUIRE  
THREE LINES

Author's Name

Thesis

Approved:

\_\_\_\_\_  
Advisor  
Name

Accepted:

\_\_\_\_\_  
Dean of the College  
Name

\_\_\_\_\_  
**Co-Advisor or Faculty Reader**  
Name

\_\_\_\_\_  
**Dean of the Graduate School**  
Name

\_\_\_\_\_  
**Faculty Reader**  
Name

\_\_\_\_\_  
**Department Chair or School Director**  
Name

\_\_\_\_\_  
Date

**REQUEST FOR PERMISSION TO ENROLL IN STATISTICS MASTERS PAPER**

Class Number: 3470:692: \_\_\_\_\_ ( \_\_\_\_\_ ) Semester \_\_\_\_\_

Requested Credit Hours (1-3 with only 2 counting toward degree requirement): \_\_\_\_\_

Student Name \_\_\_\_\_ PeopleSoft ID \_\_\_\_\_

**Description of Proposed Statistics Masters Paper:**

<p><b>Note: Upon completion of the Statistics s Paper, four (4) original copies of the paper with a TITLE PAGE listing title of the paper, name of the student, and signature and date lines for your Faculty Sponsor, Faculty Reader, Graduate Advisor and Department Chair must be turned in to your Faculty Sponsor. You will receive a final, signed copy for your records.</b></p>

**If permission is granted to enroll, I promise to submit a report detailing the results obtained.**

\_\_\_\_\_ Student Signature \_\_\_\_\_ Date

**Faculty Advisor:** I agree to supervise the student listed above and agree to submit both a grade and a report summarizing the student’s activities.

\_\_\_\_\_ Faculty Advisor Signature \_\_\_\_\_ Date

**Faculty Reader Approval:**

\_\_\_\_\_ Faculty Reader Signature \_\_\_\_\_ Date

**Department Chair Approval:**

\_\_\_\_\_ Department Chair Signature \_\_\_\_\_ Date

Faculty Advisor: In order to prove that this project has been completed, a copy of the **TITLE PAGE** with the signatures of the Faculty Advisor, Faculty Reader and Department Chair must be provided with the grade report or the grade change form.

