# Online Master of Science in Analytics

Advisor Q&A Session



- Welcome: Meet the team
- Did you know?
- OMS Analytics curriculum & prerequisite knowledge
- GPA & grade requirements: academic standing
- DegreeWorks
- Registration
- Withdrawal vs. drop
- Withdrawal & readmission
- Graduation & Commencement
- Student resources
- Q&A and feedback



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#### Meet the team



Jennifer Wooley
Director, Academic Programs &
Student Services
Professional Education



**Yvonne McKinnon**Academic Program
Manager



**Justin LaFantano**Academic Advisor

- >> Heather Paige
  Academic Advisor
- >> Robyn Presley
  Academic Advisor

- >>> Katie Beccue

  Academic Advisor
- >>> Tiara Anderson
  Academic Advisor



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# Did you know?



**One-on-one advising sessions.** OMS Analytics Advisors are available for personal, customized advising appointments. Simply <u>contact us</u> and provide several days and times you're available. One of our advisors will send you a calendar invitation with the day that aligns with his/her schedule.



Meet-Up events at the end of each term. Connect with peers and the OMS Analytics faculty and program director. Each event starts as a large group. Then, we divide into smaller groups for more focused conversations. You pick which breakout discussion to join:

- Analytical Tools track
- Business Analytics track
- Computational Data track
- Course tips
- Graduates
- Hang out
- New students



# Did you know?



We send out monthly emails with a lot of relevant information including important dates and deadlines. These emails are useful to keep you on track for action items such as: registration, opt-out and advanced-standing petitions, practicum, Meet-Ups, and advisor Q&A session input.



Registration is in priority order by the number of earned credits you have. This is why we strongly encourage students to register in Phase I.



We provide answers to all POPin questions. Sometimes questions are very dynamic or specific to you the individual; other times, the topic also would be useful to peers. You can see how they have been incorporated into this presentation.



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nary Core	Basic	CSE 6040: Computing for Data Analysis  MGT 8803/6754: Business Fundamentals for Analytics  ISYE 6501: Intro to Analytics Modeling				
Interdisciplinary Core	Advanced	CSE 6242: Data and Visual Analytics	MGT 6203: Data Analytics in Business	<b>ELECTIVES:</b> 2 Statistics, 1 Operations Research		
		Analytical Tools Electives	Business Analytics Electives	Computational Data Analytics Electives		
Track	<ul><li>Tracks and Electives</li><li>Analytical Tools</li><li>Business Analytics</li><li>Computational Data Analytics</li></ul>	ISYE 6420: Bayesian Statistics ISYE 6740: Computational Data Analysis (Machine Learning) ISYE 6669: Deterministic Optimization ISYE 6414: Regression Analysis ISYE 6644: Simulation ISYE 6402: Time Series Analysis ISYE 7406: Data Mining and Statistical Learning ISYE 8803: High-Dimensional Data Analytics	MGT 8823: Data Analysis for Continuous Improvement MGT 6311: Digital Marketing MGT 8813: Financial Modeling MGT 8833: Privacy for Professionals	CSE 6250: Big Data in Healthcare ISYE 6740: Computational Data Analysis (Machine Learning) CS 6400: Database Systems CS 6601: Artificial Intelligence CS 6750: Human Computer Interaction CS 7637: Knowledge-Based AI CS 7642: Reinforcement Learning CS 7643: Deep Learning CS 7646: Machine Learning for Trading		
Practical Experience	ISYE/MGT/CSE 6748: Applied Analytics Practicum					

Courses are subject to change.



### OMS Analytics Curriculum: Electives

Statistics Electives		
CS 7641: Machine Learning**		
ISYE 6402: Time Series Analysis*		
ISYE 6414: Regression Analysis		
ISYE 6420: Bayesian Statistics*		
ISYE 6740: Computational Data Analytics		
ISYE 7406: Data Mining and Statistical Learning		
ISYE 8803: Topics on High Dimensional Data Analytics		

#### **Operations Research Electives**

ISYE 6644: Simulation

**ISYE 6669**: Deterministic Optimization\*



<sup>\*</sup>Electives not offered in Summer

<sup>\*\*</sup>No longer in OMS Analytics curriculum; replaced with ISYE 6740

# OMS Analytics Recommended Prerequisites

- CSE 6040: Computing for Data Analysis Python
- ISYE 6501: Introduction to Analytics Modeling R
- MGT 8803: Business Fundamentals for Analytics Accounting and Finance
- CSE 6242: Data and Visual Analytics CSE 6040
- MGT 6203: Data Analytics in Business ISYE 6501



### OMS Analytics Recommended Prerequisites

#### Probability and Statistics - NEW (topics as covered in ISYE 6739)

- Probability and Statistics I: A Gentle Introduction to Probability
- Probability and Statistics II: Random Variables
- Probability and Statistics III: A Gentle Introduction to Statistics
- Probability and Statistics IV: Confidence Intervals and Hypothesis Tests

#### Basic Linear Algebra - NEW (topics as covered in Math 1553)

- <u>Linear Algebra I</u>: Linear Equations
- <u>Linear Algebra II</u>: Matrix Algebra
- Linear Algebra III: Determinants and Eigenvalues
- <u>Linear Algebra IV</u>: Orthogonality & Symmetric Matrices and the SVD



### OMS Analytics Recommended Prerequisites

#### Computer Programming topics as covered in Intro to Computing CS 1301

- Python I: Fundamentals and Procedural Programming
- Python II: Control Structures
- Python III: Data Structures
- Python IV: Objects & Algorithms

#### We also recommend using edX to find a comparable course for:

- Calculus (to include topics covered in MATH 1712 Survey of Calculus)
- R Basics for Data Science



# Sample Programs (yours can vary)

Two courses per semester, Fall start		
Fall	ISYE 6501 CSE 6040*	
Spring	MGT 8803 CSE 6242*	
Summer	MGT 6203	
Fall	Elective Elective	
Spring	Elective Elective	
Summer	Elective Practicum**	

Two courses per semester, Spring start		
Spring	ISYE 6501 CSE 6040*	
Summer	MGT 8803	
Fall	CSE 6242* MGT 6203	
Spring	Elective Elective	
Summer	Elective	
Fall	Elective Elective	
Spring	Practicum**	

One course per semester, Fall start		
Fall	ISYE 6501	
Spring	CSE 6040*	
Summer	MGT 8803	
Fall	CSE 6242*	
Spring	MGT 6203	
Summer	Elective	
Fall	Elective	
Spring	Elective	
Summer	Elective	
Fall	Elective Practicum**	

One course per semester, Spring start*		
Spring	CSE 6040*	
Summer	ISYE 6501	
Fall	MGT 8803	
Spring	CSE 6242*	
Summer	MGT 6203	
Fall	Elective	
Spring	Elective	
Summer	Elective	
Fall	Elective	
Spring	Elective Practicum**	



<sup>\*</sup> CSE 6040 and CSE 6242 are not offered in Summer

<sup>\*\*</sup> Can be taken with up to two courses

<sup>&</sup>gt; Courses can be taken out of order if you are proficient in math and programming

#### Courses Not Offered in the Summer





- CS 6601: Artificial Intelligence
- CS 7637: Knowledge-Based Al
- CSE 6040: Computing for Data Analysis
- CSE 6242: Data and Visual Analytics
- CSE 6250: Big Data Analytics in Healthcare
- ISYE 6402: Time Series Analysis
- ISYE 6420: Bayesian Statistics
- **ISYE 6669:** Deterministic Optimization
- ISYE 7406: Data Mining and Statistical Learning







- Complete at least eight courses, including **CSE 6242** and **MGT 6203**, prior to (and not concurrent with) the practicum.
- Must use the knowledge you've gained in the program to produce the desired outcome.
- Different for everyone because students are employed in every imaginable industry and have varying amounts of data to report.
- Can complete your practicum project with your current employer, internship or sponsor. You are responsible for finding your own internship.







- Proposal should include a problem you want to solve (e.g., an approach to identify credit card holders' default patterns, an algorithm that captures something specific).
- If you work with your employer, you can redact sensitive information.
- If you work with a Georgia Tech-sponsored project, you may be required to work in teams of 2-3 students.
- Two deliverables:
  - mid-term presentation
  - final, written report







#### Course objectives:

- Properly define and scope an analytics project to fit the needs of an organization.
- Apply appropriate analytics ideas, methodologies and tools.
- Create value, insight and knowledge using analytics skills and principles.
- Manage a project.
- Present results professionally in writing.







- Each preceding semester, advisors send an email to eligible students (February for Summer term, May for Fall term, September for Spring term); students complete survey mentioned in email.
- Can't register for practicum course without a permit
- Permit not issued until all steps complete:
  - Employer projects project must be approved by faculty.
  - GT-sponsored projects make project selection, sign and return NDA (if applicable)



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### GPA and Grade Requirements: Academic Standing

- The Institutes academic standing is based on both the term (semester) grade point average and the cumulative average of the students' performance.
- The minimum term and overall grade point averages for a student to be designated as having Good Standing is 2.7.
- A grade of "D" can be earned in any course; however, it will impact and reduce the GPA.
- A student can retake a course that they did not perform well in, but the GPA will still calculate all grades and there is no grade replacement.
- Students are not dismissed with their first instance of poor performance, but subsequent poor performance can result in academic dismissal.



# GPA and Grade Requirements: Academic Standing

Academic Standing	Description	
Good	Student is not on academic warning or probation; is maintaining satisfactory academic progress	
Warning	Student's most recent academic performance has been <b>unsatisfactory</b> , or the overall average is <b>below the minimum requirement</b> . Academic warning is a subcategory of good academic standing, differing only in the <b>maximum allowable schedule load</b> .	
Probation	Student's most recent academic performance has been <b>extremely unsatisfactory</b> , or the term average has continued to be unsatisfactory, or the overall academic <b>average has continued to be below the minimum requirement</b> .	
Review	Student who normally would be dropped from the rolls due to academic deficiencies but appears from the record not to have completed the term. Student <b>cannot be enrolled</b> on Review status and should contact their major school for further information.	
Drop/Dismissal	Student has been <b>dropped from enrollment</b> due to academic deficiencies. Student may apply for readmission after an absence of one term <i>unless</i> this is second Drop/Dismissal. Students on Drop should seek advisement from their major school regarding future re-admission.	



# GPA and Grade Requirements: Academic Standing

- We highly recommend reading over these websites that outline the academic policies as well so you have as much information as possible:
  - <a href="http://catalog.gatech.edu/rules/6/">http://catalog.gatech.edu/rules/6/</a> and
  - https://registrar.gatech.edu/info/academic-standing
- It is **recommended** that students earn a "B" or better in their courses to show they have a solid grasp on the material in the program.



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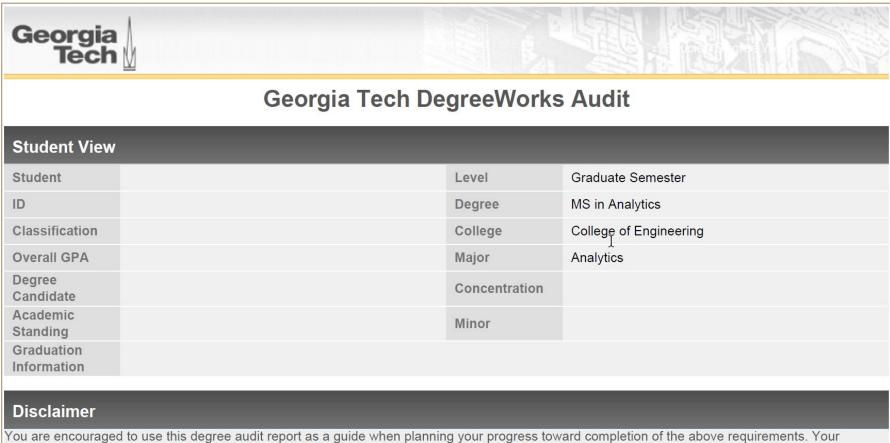


#### https://degreeaudit.gatech.edu/

- Use to:
  - View your curriculum requirements
  - View your grades
  - Use for employment verification
- How to use it:
  - Enter your GTID
  - Hit enter

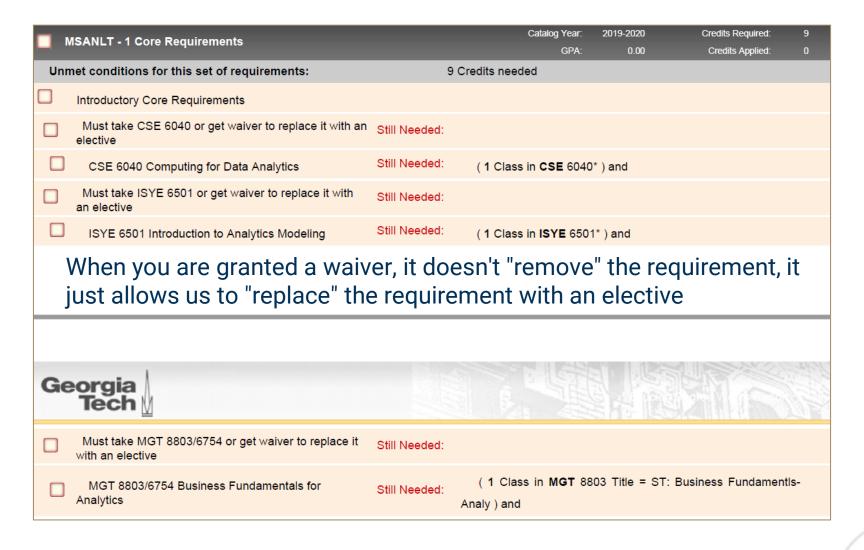






academic advisor or the Registrar's Office may be contacted for assistance in interpreting this report. This audit is not your academic transcript and it is not official notification of completion of degree or certificate requirements. Please contact the Registrar's Office regarding this degree audit report, your official degree/certificate completion status, or to obtain a copy of your academic transcript.











MSANLT - Track Requirements			Catalog Year: 2019-2020 Credits Required: 6  GPA: 0.00 Credits Applied: 0
Unr	Unmet conditions for this set of requirements:		6 Credits needed
	Track Electives	Still Needed:	Choose from 1 of the following:
	Track Electives	Still Needed:	( Choose from 1 of the following: )
	Analytical Tools Track Electives	Still Needed:	( 2 Classes in ISYE 6402* or 6404* or 6413* or 6414* or 6416* or 6420* or 7406* or 6644* or 6650* or 6669* or 8803 Title = High-Dimensional Data Ana(**)c or CSE 6740* or ISYE 6740* or CS 7641* ) or
	Business Analytics Track Electives	Still Needed:	( 2 Classes in MGT 6311* or 8813 Title = ST: Financial Modeling or 8823 Title = ST: DataAnalys-Continuous Impr or 8803 Title = ST: Valuation & Value Creation ) or
	Computational Data Analytics Track Electives	Still Needed:	( 2 Classes in CSE 6140* or 6240 or 6250* or CS 6400* or 7450* or CSE 6740* or ISYE 6740* or CS 7641* additionally you need a minimum of 1 Classes from CSE 6740* or ISYE 6740* or CS 7641*)



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#### Course Load

- By default all OMS Analytics students are set at a maximum of six credit hours
- Students can register for as little as one course per semester
- After your first semester, you are not required to register every semester, meaning you can take time off.
  - If you are out for two consecutive semesters, not counting a semester where you have a "W" mark, you will need to complete a <u>Readmission Form</u>
- Students have up to six-years from their first semester to complete the degree and graduation requirements
- Keep in mind each OMS Analytics course is just as rigorous, challenging, and time-consuming (average 15 hours per week/course) as its on campus equivalent



#### OSCAR and BuzzPort

Public portal to access schedule of class, course catalog, institute calendars <a href="https://oscar.gatech.edu">https://oscar.gatech.edu</a>

BuzzPort is your student portal and gateway access to Oscar and DegreeWorks

#### Use OSCAR to:

- Search the Course Catalog
- View Financial Aid Information

#### Use Buzzport to:

- Access Oscar
- Register for Class
- Access DegreeWorks your Degree Audit







### Registration

- Log into Buzzport, Oscar, Registration or <a href="https://buzzport.gatech.edu/">https://buzzport.gatech.edu/</a>
- Add CRNs to Worksheet (versus course name)



OMS Analytics advises students to register as soon as they can to ensure they will secure a seat and have access to their course on day one.



#### Fall 2022 Registration – Phase II





- Time Tickets will be available on August 16, 2022 by 6:00 PM ET
- Registration will open for Phase II on August 13, 2022
- If you are on the waitlist and a seat becomes available an email will be sent to your Georgia Tech student email and you have 12 hours to register or be dropped off the list
- Phase II closes at 4:00 p.m. EDT on August 26, 2022 No changes after that the portal will close and the withdrawal period will open
- August 26, 2022 (last day to "drop" a course without penalty)\*



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### Withdrawal Deadline: Drops vs. Withdrawals

Course Withdrawal Deadline for Summer is July 2, 2022 and the Withdrawal Deadline for Fall is October 29, 2022 at 4 p.m. EDT

What's the difference between a drop and a withdrawal?

#### **Drop**

- A drop can only occur during the add/drop period. After 4 p.m. on the Friday of the first week
  of class, the registration window closes, and the withdrawal window opens the following
  Tuesday.
- The add/drop period coincides with the registration "phases" Phase I and/or Phase II
   (specific dates are in the <u>academic calendar</u>).
- If you drop a course during that time, it won't appear on your transcript.
- It also won't be included on your final tuition bill. If you paid for a course in advance and drop
  it during the "add/drop" period, you'll receive a refund.



# Withdrawal Deadline: Drops vs. Withdrawals

Course Withdrawal Deadline for Summer is July 2, 2022 and the Withdrawal Deadline for Fall is October 29, 2022 at 4 p.m. EDT

> What's the difference between a drop and a withdrawal?

#### Withdrawal

- A withdrawal occurs when you log into your student portal to remove yourself from a course after the add/drop period ends.
- When you withdraw from a course, a grade of "W" will appear on your transcript for that course; the "W" has no impact on your GPA or standing with the degree program.
- You can still register for the course in a future term as needed.
- If you're registered for multiple courses but only withdraw from some, you won't receive a refund.
- If you withdraw from all courses, Georgia Tech will prorate your refund, if you qualify for one.
- If you are a registered for 12 credit hours and you withdrawal from all courses, you will be required to complete a Petition to Faculty to return for the next semester.

# Withdrawal Deadline: Drops vs. Withdrawals

- How do I know if I should withdraw from a class?
  - If you are struggling to manage and/or balance your time due to other obligations and your coursework is impacted.
  - If you are currently struggling in a course (for example, if you are below a C letter grade) you may want to consider withdrawing from a course, as you would rather have a W than a D or a F on your transcript.
  - If your academic standing is already probation and you are at risk of academic dismissal.
  - If you are not sure, set up an appointment with one of our advisors.



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#### Withdrawal and Readmission

- What represents two consecutive semesters?
  - a. Any semester without a registration record counts toward the "two"
  - b. Any semester with a "W" withdrawal does not count toward the "two"
  - Example: You registered for Summer 2022 but do not register for Fall 2022 or Spring 2023, that is two consecutive semesters
  - Example: You registered for Summer 2022 and registered for Fall 2022 but withdrew before the midpoint. Your transcript was marked with a "W" and you do not register for Spring 2023... Spring 2023 would be your fist semester toward the "two." Therefore, if you do not register for Summer 2023, you will need a Readmission Form on file to register for or maintain your Fall 2023 registration.



#### Withdrawal and Readmission

- What is readmission? Am I completing a new application?
  - Readmission is a simple application where you are updating your status from inactive student to active student
  - It starts as a hyperlink to a webform where you answer a few simple questions.
  - Once you pay the \$30 application fee, it will generate a new hyperlink that takes you to the actual form to download, sign, and email as a PDF document to our team.
  - Readmission is not a full admission application there is no admission committee involved
  - The advising team reviews your degree audit and GPA
  - To date, no students have been denied unless they have issues our team is not aware of (example-balance or OSI)



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#### **Graduation and Commencement**



- Graduation is the action and Commencement is the event
- All students must apply to Graduate it is not an automatic process
- Students can apply before their last semester ends up until the first week into their final semester
- Commencement is held two times per year: Spring and Fall, there is no Summer Commencement.
- If you want to participate in a Commencement other than your term, you will need to reach out to <u>Institute Communications</u>
- Summer graduates by default participate in the Fall Commencement. To participate in Spring, you must apply for your actual term of graduation and complete a separate application to request permission from the Registrar's Office to "Early Walk." Depending on space, this application may not be approved



#### **Graduation and Commencement**



- We can cancel your graduation application per your request if needed or it will be cancelled if you do not meet the curriculum requirements to graduate for the term you applied
- You can take additional courses before or after graduation. If you want to formally graduate and return, there are two forms you must complete. Tuition rates are currently the same
- Your GPA will continue to calculate with any graduate level course you take before or after graduation even after your "degree requirements" are met
- No, there is no option to audit courses after graduation under the OMS Analytics student status
- The Summer 2022 graduation application closed



# Your Degree – Just Imagine your Name

The President and Faculty

# The Georgia Institute of Technology

To all to whom these presents may come, Greeting: Whereas

has completed all the requirements for Graduation, now, therefore, Me, under the authority vested in us, do hereby confer the degree of

#### Master of Science in Analytics

with all the rights, privileges and honors, thereunto appertaining. In witness whereof, the signatures of the Chancellor of the University System, the President and the Registrar of The Georgia Institute of Technology are hereto subscribed, and the seal of the Institute is affixed. Given at Atlanta on the first day of August, two thousand and twenty.











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#### Career Resources





- <u>Career Center</u>: Career-advising appointments (on the phone, in person, via email)
- Access to <u>career fairs</u> and workshops in person
- The ability to self-register for the <u>CareerBuzz</u> job board
- The Career, Research and Innovation Development conference organized in collaboration with Graduate Student Government Association and GTPE



#### Other Campus Resources



- <u>Alumni Career Services</u>: Gives you access to JacketNet Jobs (another search site to complement CareerBuzz).
- <u>Campus bookstore</u>: Located in the heart of Tech Square. Mostly for local students, but also a great place to visit if you're in town.
- <u>Communication Center</u>: "Help desk" for graduate students who would like one-to-one consultation re: a communication project (e.g., presentation, paper, proposal, resume).
- <u>Library and Information Center</u>: Georgia Tech Electronic Library (GTEL) has databases, selected by library staff for the Georgia Tech community. It includes access to periodicals with up-to-date information about many companies.
- <u>CARE</u>: The Center for Assessment, Referral and Education is committed to the health and well-being of the campus community.



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# Our questions for you

Please respond via meeting chat.





- Are these online Q&A sessions helpful? Why or why not?
- Is there anything about these Q&As that we should consider doing differently?

