

# Fall 2024 ECE Graduate Teaching Assistantship Application

## Fall 2024 ECE Graduate Teaching Assistantship Application Process

The ECE Department is now accepting Graduate Teaching Assistantship (GTA) Applications for the Fall 2024 semester. To apply, please follow the instructions below:

1. Fill out the form, and attach the following two items along with the form:
  - a) **Your latest resume**
  - b) **A Short Video** (for NEW applicants only. See instructions below)
2. Any GTA who is offered a position, and whose native language is not English, will need to pass the **CELTD Test** administered by INTO Mason. Any GTA who does not pass the CELTD test by August 14, 2024, will have his/her contract cancelled by the ECE Department. The instructions of how to sign up for the test will be provided after being offered the GTA position.
3. Any GTA who is offered a position will need to attend the **mandatory** GTA orientation and training scheduled on Thursday, August 22, 2024. GTAs who do not attend the orientation or fail the training will have their contracts canceled by the ECE Department.
4. For NEW Applicants: Please prepare a **short video** of you teaching a technical course or lab (irrespective of whether or not you are interested in teaching a recitation or lab). The video should be less than 3 minutes. Please convert the video into an mp4 file, preferably with the video codec: H.264 mp4. We do not accept other video file formats. If you submit the video in other formats, we would consider your application as incomplete. **If the video cannot be played by the interview committee, the application would also be considered as incomplete.** Please double check the video quality before you submit. Video images should be clear and steady. No blurry videos, up-side-down videos, etc. If you have previously applied for an ECE GTA position and have already submitted your video before, you do not need to submit the video again. We have a record of the video and can extract it from our files.
5. Video Submission: After the ECE department receives your application, we will send you a notification email. In that email, we will include instructions for you to upload the video to Blackboard. **We DO NOT accept YouTube links or any social media links for video submission.**
6. Application File Naming Conventions: Please save your application with file name "FL24 ECE GTA Application-First Name Last Name". If you need to send your resume as a separate file, please save file as "FL24 ECE GTA Application Resume-First Name Last Name".
7. Email your complete application to ECE Department at ece@gmu.edu by the deadline. Complete application includes the application form and the aforementioned items.
8. Please note that we do not award graduate teaching assistantships to first-semester new MS students. Exception may be given to Mason BS ELEN and BS CPE graduates.
9. **The ECE department will notify you ONLY if you are selected for a position.** You will not be notified if you have not been selected. The latest notification date is August 23, 2024 for Fall 2024 applications.

### **Deadline:**

For RENEWAL and NEW applications: **Friday, April 12, 2024**

Please note: For those who were MS GTAs during the previous semester, we DO NOT renew your applications automatically. Please re-apply for FL24 if you are interested in being reconsidered as a GTA again, together with all the above listed application materials.

Applicant Name: \_\_\_\_\_

G#: \_\_\_\_\_

## Fall 2024 ECE Graduate Teaching Assistantship Application

Forward this form directly to ECE Department at [ece@gmu.edu](mailto:ece@gmu.edu)

Please attach your resume when submitting. If you are a new applicant, a short video is also required.

### Personal Information

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

G#: \_\_\_\_\_ GMU Email: \_\_\_\_\_

Current Program: ☐ PhD ECE ☐ MS EE ☐ MS CpE ☐ Other: \_\_\_\_\_

Admitted Term: \_\_\_\_\_ cGPA: \_\_\_\_\_ Credits Completed: \_\_\_\_\_

Status: ☐ US citizen ☐ Permanent residence ☐ International student ☐ Other: \_\_\_\_\_

For international students only: TOEFL scores: Total: \_\_\_\_\_ Speaking: \_\_\_\_\_ Listening: \_\_\_\_\_ Writing: \_\_\_\_\_ Reading: \_\_\_\_\_

### Graduate Teaching Assistantship Application Questionnaire

1. Have you been a Graduate Teaching Assistant or student wage employee at GMU before?

☐ No.

☐ Yes. List the department/unit you worked for and the date/s of your assignment:

\_\_\_\_\_

2. If you answered yes to the previous question, what type of assignments did you have (teaching labs, recitations, and/or grading, cashier, server etc.)?

\_\_\_\_\_

3. When do you plan to graduate? \_\_\_\_\_

4. Do you plan to do a MS thesis?

☐ No

☐ Yes

☐ I am a PhD student

5. If you answered yes to the previous question, who is your planned MS thesis advisor? \_\_\_\_\_

6. If you are currently a PhD student, who is your PhD advisor? \_\_\_\_\_

7. The Fall 2024 schedule has been published on Patriot Web. Please discuss your schedule with your academic advisor and write down your planned course schedule for Fall 2024 in the following table:

<u>Courses</u>	<u>Days</u>	<u>Time</u>

Applicant Name:

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**8.** Provide your preference for supporting courses in the areas listed in the table below. Express your preference using the scale from 1 – most desired to 10 – least desired. You can assign the same score to multiple areas. The areas without a score will be assumed to have score 10 (least desired). Please note that we may not be able to always match your preference. Therefore, please consider assigning scores between 1 and 3 to at least three different areas. Additionally, please mark checkboxes next to titles of all courses you feel comfortable supporting.

Your Preference (1..10, where 1 – Most desired, 10 – Least desired)	Teaching Area	Major Fall 2024 Courses in Need of TA Support
	Communications & Networking	<input type="checkbox"/> ECE 460 Communication and Information Theory <input type="checkbox"/> ECE 463 Digital Communications Systems <input type="checkbox"/> ECE 465 Computer Networking Protocols <input type="checkbox"/> ECE 467 Computer Networking Laboratory <input type="checkbox"/> ECE 528 Introduction to Random Processes in ECE <input type="checkbox"/> ECE 542 Computer Network Architecture and Protocols <input type="checkbox"/> ECE 632 Digital Communications
	Computer Architecture	<input type="checkbox"/> ECE 445 Computer Organization <input type="checkbox"/> ECE 511 Computer Architecture <input type="checkbox"/> ECE 516 Mobile Systems and Applications
	Control & Robotics	<input type="checkbox"/> ECE 370 Robot Design <input type="checkbox"/> ECE 421 Classical Systems and Control Theory <input type="checkbox"/> ECE 429 Modern Control Systems Lab <input type="checkbox"/> ECE 521 Linear Systems and Control <input type="checkbox"/> ECE 590-001 Human Robot Interaction <input type="checkbox"/> ECE 620 Optimal Control Theory <input type="checkbox"/> ECE 625 Autonomous Control for Robotic Systems <input type="checkbox"/> ECE 699-001 Robot Learning
	Cybersecurity	<input type="checkbox"/> ECE 476 Cryptography Fundamentals <input type="checkbox"/> ECE 646 Applied Cryptography
	Digital Design	<input type="checkbox"/> ECE 231 Digital System Design <input type="checkbox"/> ECE 232 Digital System Design Lab <input type="checkbox"/> ECE 301 Digital Electronics <input type="checkbox"/> ECE 448 FPGA Design with VHDL <input type="checkbox"/> ECE 545 Digital System Design with VHDL
	Electronics	<input type="checkbox"/> ECE 285 Electric Circuit Analysis I <input type="checkbox"/> ECE 286 Electric Circuit Analysis II <input type="checkbox"/> ECE 305 Electromagnetic Theory <input type="checkbox"/> ECE 330 Circuit Theory <input type="checkbox"/> ECE 333 Linear Electronics I <input type="checkbox"/> ECE 334 Linear Electronics Lab <input type="checkbox"/> ECE 430/584 Principles of Semiconductor Devices <input type="checkbox"/> ECE 433 Linear Electronics II <input type="checkbox"/> ECE 434 Linear Electronics II <input type="checkbox"/> ECE 587 Design of Analog Integrated Circuits
	Embedded Systems & IoT	<input type="checkbox"/> ECE 350 Embedded Systems and Hardware Interfaces <input type="checkbox"/> ECE 446 Device Driver Development <input type="checkbox"/> ECE 447 Microcontrollers <input type="checkbox"/> ECE 508 Internet of Things

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	Introduction to ECE	<input type="checkbox"/> ECE 101 Introduction to ECE
	Machine Learning & Big Data	<input type="checkbox"/> ECE 527 Learning From Data <input type="checkbox"/> ECE 552 Big Data Technologies <input type="checkbox"/> ECE 618 Hardware Accelerators for Machine Learning <input type="checkbox"/> ECE 651 Advanced Learning From Data <input type="checkbox"/> ECE 655 Advanced GPU Programming and Deep Learning
	Power & Energy	<input type="checkbox"/> ECE 412 Renewable Energy Lab <input type="checkbox"/> ECE 415 Power System Analysis <input type="checkbox"/> ECE 418/518 Power System Protection and Control <input type="checkbox"/> ECE 419/519 Power Electronics for Modern Power Systems <input type="checkbox"/> ECE 590-002 Energy Storage for the Electric Grid <input type="checkbox"/> ECE 606 Advanced Data Analytics in Smart Grid
	Programming	<input type="checkbox"/> ECE 240 C Programming for Engineers <input type="checkbox"/> ECE 340 Data Structures and Embedded Systems Programming in C/C++
	Senior Design Project & PCB	<input type="checkbox"/> ECE 436 Printed Circuit Board Design Lab <input type="checkbox"/> ECE 491 Engineering Seminar <input type="checkbox"/> ECE 492 Senior Advanced Design Project I <input type="checkbox"/> ECE 493 RS: Senior Advanced Design Project II
	Signal Processing	<input type="checkbox"/> ECE 201 Introduction to Signals and Systems <input type="checkbox"/> ECE 321 Continuous-Time Signals and Systems <input type="checkbox"/> ECE 535 Digital Signal Processing
	Space-Based Systems	<input type="checkbox"/> ECE 660 Space Systems Engineering

9. Provide your preference for a particular type of support. Express your preference using the scale from 1 – most desired to 5 – least desired. You can assign the same score to multiple areas.

Your Preference (1..5, where 1 – Most desired, 5 – Least desired)	Type of TA Support
	Grading
	Developing new course materials
	Helping students with tools
	Teaching recitations
	Teaching labs

10. Please specify all known in advance justifiable time conflicts. Examples of such conflicts include courses you are planning to take in Fall 2024, family obligations, health and religious constraints, etc. Examples of conflicts that you should not list here include research group meetings, other part-time jobs, etc. Such conflicts should be resolved before the semester starts by discussing them with your research advisor, job supervisor, etc.

Day	Hours (e.g., 4:30-7:10 pm)
Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Applicant Name:

G#:

- 11.** Which of the following languages, tools, skills, etc. are you familiar with and what level of familiarity do you have? Mark with a check either No experience, Introductory Level, Mid-Level or Expert level.

	No experience	Introductory level	Mid-level	Expert level
C				
Python				
MATLAB				
Simulink				
Java				
VHDL				
Verilog				
Vivado				
Vitis				
Synopsys				
Cadence				
Circuitlab				
PSpICE				
FPGA & SoC boards				
Microcontroller boards				
Linux				
Raspberry Pi				
Arduino				
BeagleBone				
Oscilloscope				
Logic analyzer				
Multimeter				
PCB design software				
PCB manufacturing				
Breadboarding				
Soldering				
Sensor and actuator interfacing				
3D CAD software				
3D printing				
Wireshark				
Signals and systems - transforms, convolution, etc.				
Circuits and electronics				
Probability and statistics				
PowerWorld				
PSSE				
PSCAD				
RTDS				

I understand that my graduate application will be the primary source of information in the consideration of my assistantship application.

Upon request, I will furnish any additional information. I understand that providing false information will result in an honor code violation.

Applicant Name:

G#:

I understand that by submitting this application and by signing this form, I will refrain from contacting the department or individual faculty (either via email, by phone, or personally) regarding any available GTA or grader positions. I acknowledge that if I am selected, the department will notify me. **I understand that failure to abide by this departmental policy will automatically disqualify me from consideration.**

**Master's Students** - I understand that I cannot be employed in a full-time position outside the university during my appointment as a graduate assistant, and I agree to take a minimum of 6 credit hours per semester. If appointed part time, I agree to take at least 3 credit hours per semester. (Exception: student who have less than 6 hours to complete their degree and graduate.) I realize that I must earn at least \$4,000 in the academic year to be eligible for in-state tuition rates.

**Doctoral Students** - I understand that I cannot be employed in a full-time position outside the university during my appointment as a graduate assistant and that I must be registered for a minimum of 6 credit hours of course work per semester to be eligible for tuition waiver. (Exception: students who have less than 6 hours to complete their degree and graduate.) I realize that I must earn at least \$4,000 in the academic year to be eligible for a tuition waiver. I understand that my enrollment will be monitored on the last schedule adjustment day and that my stipend check will not be issued until I am enrolled for the minimum number of hours required.

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Signature of Applicant

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Date

**By signing this form, I attest that all information that I have provided is accurate and correct and bound by the George Mason Honor Code.**