MME Graduate Teaching Assistantships Winter 2025 Term

All graduate students are invited to apply for a Graduate Teaching Assistantship for the Winter 2025 term. Following the Collective Agreement, students who are studying in the Mechanical and Materials Engineering department will be given preference over students from outside the department. It is recommended that you read the PSAC Local 901, Collective Agreement for Graduate Teaching Assistants found at: https://www.queensu.ca/facultyrelations/psac%20901-1/collective-agreements/MoAs/LoUs

Please see the attached list of courses being taught this term with TA's being hired by MME. For more information on each course, please see the Undergraduate Calendar at http://calendar.engineering.queensu.ca/

TA assignment usually include duties such as leading laboratories or tutorials, hosting office hours, marking of assignments, reports, quizzes, exams. A TA position is typically 60-100 hours over the semester, but hours are assigned based on enrollment and duties. Due to changes in enrollments, some positions may have their hours adjusted once the semester begins. All positions are in person on campus and run the entire term. Any necessary course specific training will be included in the assignment; Any mandatory TA training will be paid as additional hours. It is expected that for any courses that you apply for and are hired for within the department that you have the background requirements as a graduate student in the mechanical engineering program to act as a TA. Learning a new topic will not be considered course specific training.

In some cases, instructors will require your assistance outside of regular hours for midterm and exam proctoring or marking. It is your responsibility to ensure you make yourself available to complete the TA work. *If you are planning on being away from campus or internet access for a significant amount of time during the semester, please indicate this when submitting your application and keep your employment supervisor up to date during the semester. Note that for Winter 2025, final exams are scheduled until April 23 so it is possible that marking may be required right to the end of the month or even the start of May.*

Application Process:

Review the attached tables of available TA positions for the Winter 2025 Term for current opportunities. Make note of your top 3 preferences. (NOTE: We are also hiring for Mechatronics courses taught through MME, so please read carefully).

The application process involves two steps:

- 1. Please complete the <u>application form.</u>
- 2. Submit a Curriculum Vitae/ Resume and a copy of your recent transcripts (not official) via email to <u>mmeadmin@queensu.ca</u> with the subject "TA Application"

Please complete the form and submit your CV package to the Department Manager, Gabrielle Whan (<u>mmeadmin@queensu.ca</u>) by **November 18 at 8:30 am.** Complete applications will be reviewed at the end of the application period.

NOTE: There are Teaching Assistant Positions available for APSC courses. Please see the Faculty Office website for more information: <u>https://smithengineering.queensu.ca/about/employment-opportunities/index.html</u> Please let Gabrielle know <u>if you apply or have been hired</u> for any TA / TF positions outside MME. For TA opportunities outside of Mechanical and Materials Engineering please see the PSAC website or the HR website. Graduate students are not allowed to work more than 120 hours per semester on average.

All Applications are due by November 18 at 8:30 am

| COURSE | COURSE TITLE | Estimated CLASS SIZE | INSTRUCTOR | Estimated number of TAs required |
|------------------|---|-------------------------|-------------------------|----------------------------------|
| APSC 200 | Engineering Design & Practice (Mod 2 MECH only Support) | 240 | H. Ploeg/ R. Rainbow | 1-2 |
| MECH 203 | Math & Computational Tools II | 230 | ТВС | 5-8 |
| MECH 210 | Electronic Circuits & Motors for Mechatronics (Including Labs) | 300 | A. Wu | 8-12 |
| MECH 228 | Kinematics and Dynamics | 220 | R. Rainbow | 6-8 |
| MECH 241 | Fluid Mechanics I | 245 | J. Kurelek | 6-8 |
| MECH 273 | Materials Science & Engineering Labs | 230 | S. Persaud | 10-12 |
| MECH 323 | Machine Design | 260 | ТВС | 6-10 |
| MECH 341 | Fluid Mechanics II | 240 | U. Piomelli | 4-7 |
| MECH 346 | Heat Transfer | 240 | B. da Silva | 4-7 |
| MECH 350 | Automatic Controls | 260 | Q. Li | 4-7 |
| MECH 350 | Automatic Controls - Labs | 260 | Q. Li | 3-5 |
| MECH 371 | Fracture Mechanics and Dislocation Theory | 50 | Z. Yao | 1 |
| MECH 393 | Biomech. Product Development (including Labs) | 100 | S. Dobri | 2-4 |
| MECH 397 | Materials Eng Lab II (all labs) | 20 | B. Diak | 1 |
| MECH 399 | Mechanical Eng Lab II: Vibrations Heat Transfer Electromyography (ME3) Lift and Drag 1: Existing Geometry Lift and Drag 2: Prototyped Geometry | 245 | B. Diak | 3 3 2 3 3 |
| MECH 444 | Computational Fluid Mechanics | 100 | D. Matovic | 2 |
| MECH 455 | Computer Integrated Manufacturing | 85 | G. Zak | 1-2 |
| MECH 456 | Introduction to Robotics | 65 | L. Notash | 1-2 |
| MECH 461 | Research Project | 15 | K. Pilkey | 0-1 |
| MECH 462 | Team Project | 50 | J. Sneep | 1 |
| MECH 476 | Composites and Polymers | 60 | L. Balogh | 0 |
| MECH 480 | Airplane Aerodynamics | 85 | U. Piomelli | 1 |
| MECH 494 | Kinematics of Human Motion | 50 | M. Rainbow | 1 |
| Mechatronics and | Robotics (MREN) Courses/Sections | | ł | |
| MREN 103 | Mechatronics & Robotics Design I | 80 | B. Surgenor | 1-3 |
| MREN 230 | Thermodynamics and Heat Transfer (including Labs) | 130 | ТВС | 3-6 |
| MREN 303 | Mechatronics & Robotics Design III | 65 | A. Wu | 2-4 |
| MREN 320 | Signals and Systems (including labs) | 65 | B. Surgenor | 1-3 |
| MREN 403 | Mechatronics & Robotics Design IV | 18 | M. Robertson | 1 |
| MREN 410 | Intelligent Machines & Autonomous Systems | 18 | X. Wang | 0-1 |