## MME Graduate Teaching Assistantships Winter 2024 Term

All graduate students are invited to apply for a Graduate Teaching Assistantship for the Winter 2024 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 <a href="https://www.queensu.ca/academic-calendar/engineering-applied-sciences/">https://www.queensu.ca/academic-calendar/engineering-applied-sciences/</a>

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 you must be available during the entire term. Any necessary course specific training will be included in the assignment; Any mandatory TA training will be paid as additional hours.

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 2024, final exams are scheduled until April 25 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 2024 Term for current opportunities. Make note of your top 3 preferences. (NOTE: There are changes to the curriculum and we are hiring for more than just MECH courses 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 mmeadmin@queensu.ca with the subject "TA Application"

Please complete the form and submit your CV package to the Department Manager, Gabrielle Whan (<a href="mmeadmin@queensu.ca">mmeadmin@queensu.ca</a>) by **November 28 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: <a href="https://smithengineering.queensu.ca/about/employment-opportunities/index.html">https://smithengineering.queensu.ca/about/employment-opportunities/index.html</a> Please let Gabrielle know <a href="mailto:if you apply">if you apply</a> for these positions so that you are not also assigned a position in 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 28 at 8:30 am

## Winter 2024 courses

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
MREN 103	Mechatronics & Robotics Design I	80	B. Surgenor	1-2
MREN 230	Thermodynamics and Heat Transfer (including Labs)	115	M. Mohebbi	3-6
MREN 303	Mechatronics & Robotics Design III	65	A. Wu	3-4
MREN 320	Signals and Systems (including labs)	75	B. Surgenor	
MECH 203	Math & Computational Tools II	230	TBC	5-8
MECH 210	Electronic Circuits & Motors for Mechatronics (Including Labs)	275	A. Wu	8-12
MECH 228	Kinematics and Dynamics	220	R. Rainbow	6-8
MECH 241	Fluid Mechanics I	245	TF: F. Ambrogi	6-8
MECH 273	Materials Science & Engineering Labs	220	S. Persaud	10-12
MECH 323	Machine Design	240	IY. Kim	6-10
MECH 333	Gender, Engineering & Technology	25	H. Ploeg	0-1
MECH 341	Fluid Mechanics II	215	U. Piomelli/ TBC	4-7
MECH 346	Heat Transfer	240	TBC	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	40	Z. Yao	1
MECH 393	Biomech. Product Development (including Labs)	80	S. Dobri / TBC	2-4
MECH 397	Materials Eng Lab II (all labs)	10	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	230	B. Diak	3 3 2 3 3
MECH 423	Introduction to Microsystems	60	Y. Lai	1
MECH 435	Internal Combustion Engines	135	G. Ciccarelli	1-2
MECH 448	Compressible Fluid Flow	100	P. Oosthuizen	1-2
MECH 452	Mechatronics Engineering	60	TBC	1-2
MECH 455	Computer Integrated Manufacturing	85	G. Zak	1-2
MECH 456	Introduction to Robotics	80	L. Notash	1-2
MECH 457	Additive Manufacturing	65	V. Fallah/ IY. Kim / G. Zak	1-2
MECH 461	Research Project	15	K. Pilkey	0-1
MECH 462	Team Project	50	J. Sneep	1
MECH 470	Deformation Processing	15	K. Pilkey	0
MECH 476	Polymers and Composite Materials	10	L. Balogh	0
MECH 480	Airplane Aerodynamics	60	U. Piomelli	1
MECH 494	Kinematics of Human Motion	40	M. Rainbow	1