

**TEACHING ASSISTANT, DEMONSTRATORS and MARKER POSTING
FALL TERM 2022
DALHOUSIE UNIVERSITY - Department of Mechanical Engineering**

POSTING DATE: Wednesday, August 3rd, 2022
APPLICATION DEADLINE: Tuesday, August 16th, 2022, at 9:00 am
POSITION(S): Teaching Assistants, Demonstrators, and Markers
DEPARTMENT/LOCATION Mechanical Engineering Department.
 1360 Barrington Street, Room C1-360, Halifax, N.S. B3H 4R2
PAY RATE: As per CUPE Collective Agreement

<https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/hr/Academic-Staff-Relations/CUPE-3912-Collective%20Agreement.pdf>

APPLICATION PROCESS. Online form required by deadline: <https://forms.office.com/r/Ts4QmflCEs>

WORK ASSIGNMENT: Marking and/or lab demonstration as required; duties as discussed with the course instructor. TA's may be asked to assist with invigilation of one or more exams. Hours will be worked over 13-weeks, September to December inclusive

REQUIREMENTS OF POSITION:

- Excellent knowledge of and experience in the topic they're applying to work in, and of course material to be covered
- Experience conducting labs and completing course work associated with the Course. Preference is given to high evaluations/grades
- Previous TA experience for the course is an asset
- Good command of English language
- Currently enrolled in B. Eng or higher degree; priority is given to student enrolled in Mechanical Engineering
- Students must be comfortable in online course delivery, knowledge of Brightspace is an asset.
- See below for other specific requirements

Course Code	Course Name	Instructor(s)	Requirements*
Core Courses			
MECH 3020	Machine Design: II	Dr Hubbard	
MECH 3150*	Materials Engineering	Dr Yemenidjian	
MECH 3200*	Mat Engineering: Structure–Property Relationships	Dr Farhat	
MECH 3305	Fluid Mechanics	Dr Groulx	Knowledge of COMSOL Multiphysics
MECH 3660	Finite Element Methods in Mechanical Design	Dr Taheri	Knowledge of FEM, and LS-DYNA finite element software
MECH 3705	Heat Transfer	Dr Sponagle	Knowledge of COMSOL Multiphysics
MECH 3900	Systems I	Dr Seto	Knowledge in Matlab / Simulink Programming, and system modelling
MECH 4015	Design Project I	Dr Johnston	
MECH 4300	Stress Analysis	Dr Taheri	
MECH 4600	Engineering Measurements	Dr Allen	
MECH 4805	Thermo-Fluid Engineering III	Dr Ross	
* New core course			
Technical Electives			
MECH 4280	Solidification & Casting	Dr Yemenidjian	
MECH 4290	Corrosion & Degradation of Materials	Dr Jarjoura	
MECH 4650	Biomedical Engineering	Dr Maksym	
MECH 4820	Energy Renewable Resource	Dr Swan	Experience in renewable energy systems and modeling
MECH 4851	Heating, Ventilation and Air Conditioning	Dr Ugursal	Proficient in HVAC
MECH 4950	Advanced Control Engineering	Dr Pan	Knowledge in Matlab/Simulink programming and system control
Other – Marker only			
MECH Coop	Coop Work Term	Dr Ugursal	Report marking, all hours in September

Final appointments are approved by the Head of Department and are conditional upon sufficient enrolment in the course. Courses, course list, and instructors are subject to change.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. Dalhousie University is committed to fostering a collegial culture grounded in diversity and inclusiveness. The university encourages applications from Aboriginal people, persons with a disability, racially visible persons, women, persons of minority sexual orientations and gender identities, and all candidates who would contribute to the diversity of our community.