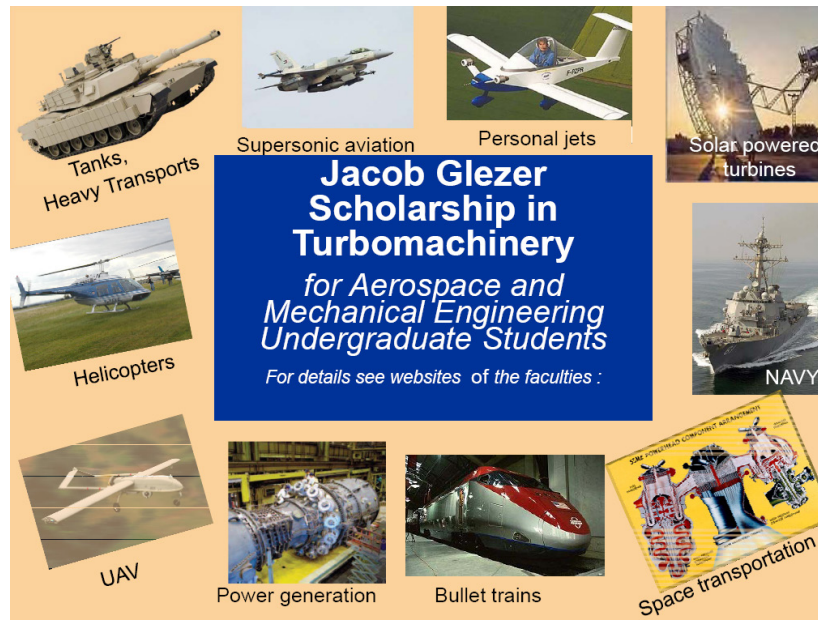


# The Jacob Glezer Scholarship in the field of Turbomachinery

## מלגת יעקב גלזר ללימודים בתחום מנועי סילון וטורבינות גז



The following announces the Jacob Glezer Scholarship in the field of Turbomachinery. The grant is established at the Technion by the Glezer family in memory of Jacob (Yakov) Glezer.

The grant is intended for students who will specialize in the field that applies aeropropulsion and land/marine use of gas turbine engines for Israel's industry and/or academia.

The inspiration for the named scholarship is a growing demand for well-educated turbomachinery engineers for both the Israel defense and industrial areas. The later includes gas turbine driven pumping equipment for a recently discovered natural gas and electric power generation. The scholarship is dedicated to education of the senior year undergraduate students in the Technion's Aerospace and Mechanical Engineering Faculties.

Gas turbine engines present one of the most intriguing and challenging areas of mechanical and aerospace engineering. This is an interdisciplinary subject that includes the most advanced developments in aerodynamics, fluid mechanics, heat transfer, combustion, creative mechanical design, material sciences, system dynamics and control, advanced production methods and more. Every element, every system within the engine has to be designed exploiting the best performance potentials, in order to achieve reliable operation with maximum performance characteristics at minimal fuel consumption and emissions.

Israel is known for its advanced technologies and as the "start-up" nation. However, the subject of turbo-machinery still lags behind and needs accelerated advancement in this field for both the defense and industrial applications. The "Jacob Glezer Scholarship" is intended to assist in promoting this education for students dedicated to turbomachinery.

## **Terms and conditions**

Three scholarships are intended for senior year undergraduate students who commit to study turbomachinery related disciplines and are selected on a bases of merit, interview by the Selection Committee representing both Faculties and prerequisite courses taken during prior year(s) as to be defined annually by the Committee.

The amount of the scholarship provides \$5,000 per year (in two payments) for each student during his/her senior undergraduate studies (or after completion of 115 academic credit points). The first payment of \$2,500 is distributed to each recipient at the beginning of his/her senior year, after registering for / completing at least three of the required courses, with the second payment of \$2,500 to be made upon successful completion of their undergraduate studies.

Aerospace Engineering faculty candidates have to complete their study in the Turbo Jet Propulsion course (#084401). Mechanical Engineering faculty candidates have to complete their study in the course # 034210 - Turbomachinery Design 1.

Over the course of two senior year's semesters, the recipients of the scholarship are required to take at least six courses, at least one from the other faculty. We anticipate three scholarships will be available for senior undergraduate students in October of each year. Excellent students (average grade 90% and above) may be exempt from the need for cross faculty course requirement.

### **Offered by Aerospace Eng.**

- 084401 Jet Engine 1 (compulsory for Aero. Eng. Students)
- 084312 Compressible Aerodynamics
- 084512 Structural Analysis and Computer Applications
- 084640 Aerospace Engineering Design and Manufacturing
- 085851/2 Research Project (in the field of Turbo Jet Engines)
- 086480 AeroThermal Fundamentals of Turbomachinery Design
- 086320 Heat Transfer in Aerospace Engineering
- 086461 Selected Topics in Aerospace Propulsion 1 (Turbo Engine Design)
- 086483 Fluid Mechanics, Heat Transfer and Performance of Turbo Jet engines
- 086478 Combustion Processes

### **Offered by Mechanical Eng.**

- 034210 Turbo Machinery Design 1 (compulsory for Mech. Eng. Students)
- 034309 Project of Turbo machinery 1 (compulsory for Mech. Eng. Students)
- 034016 Mechanical Engineering Design
- 034037 Computerized Engineering Drawings
- 034337 CAD/CAM Project
- 035091 Thermodynamics 2
- 035035 Fluid Mechanics 2
- 036042 Dynamics of Rotating Machinery
- 036007 Vibration of Structures
- 036008 Compressible Flow
- 036009 Heat and Mass Transfer
- 036015 Finite Element Methods in Mech. Eng.