



## WORK OFFER

Ref. No. IR-2021-1022

### Employer Information

**Employer:** Tarbiat Modares University  
Enghelab Eslami Ave, Ghods St, Farhangi Alley, Unit 8, No. 1,  
Tehran  
Iran

**Website:** www.modares.ac.ir  
**Location of placement:** Tehran  
**Nearest airport:** Imam Khomeini International Airport (IKA)  
**Working hours per week:** 40.0  
**Working hours per day:** 8.0

**Number of employees:** 5

**Business or products:** Research & Development

### Student Required

**General Discipline:** CIVIL ENGINEERING, GEOLOGY AND MINING  
**Field of Study:** Geotechnical and Geoenvironmental Engineering.;  
.Mining and Mineral Engineering.;  
.Geological/Geophysical Engineering.

**Completed years of study:** 2  
**Student status requirements:** .

**Language required:** English Good (B1, B2)

**Required Knowledge and Experiences:**

**Other requirements:**

### Work Offered

Laboratory rock cutting tests are one of the most reliable and acceptable methods for evaluating rock cuttability and engineering optimization of mechanical mining excavators. Within a rock cutting test, a dynamometer or load cell is used to measure the three orthogonal force components exerted on cutting tools.

Recently, a strain gauge based dynamometer was designed and fabricated at Mechanized Excavation Laboratory (MEL), Tarbiat Modares University. We are to optimize the dynamometer in accordance with the cutting tools and their geometry. So, there are several topics including, but not limited to following:

- Numerical modeling and simulation of the present dynamometer
- Evolutionary structural optimization of the dynamometer
- Design and fabrication of new rock cutting tools.

**Number of weeks offered:** 6 - 9  
**Working environment:** Research and development;Office work  
**Within the months:** 01-JUL-2021 - 30-SEP-2021  
**Gross pay:** 22500000 IRR / Month  
**Or within:** -  
**Deduction to be expected:** 0  
**Company closed within:** -  
**Payment method / time of first payment:** Cash /

**Latest possible start date:**

### Accommodation

**Canteen at work:** No  
**Expected type of accommodation:** Student dormitory  
**Estimated cost of lodging:** 15000000 IRR / Month  
**Accommodation will be arranged by:** IAESTE  
**Estimated cost of living incl. lodging:** 22500000 IRR / Month

### Additional Information

### Nomination Information

**Deadline for nomination:** 15-MAR-2021

**Date:** 26-JAN-2021  
**On behalf of receiving country:** Mohammad Shekarchizadeh