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| C:\Users\Ram Computer\Downloads\qqqqqqqqqqqqqq.png | **TISHK INTERNATIONAL UNIVERSITY**  **Civil Engineering Department**  **Graduation Project Proposal Form** |

**Project Information**

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| **Title of the Project** |
| Classification of building taxonomy and vulnerability through building stock survey |
| **Project Description** |
| A uniform classification system is required to define the attributes that influence the probability of a structure to suffer damage or loss due to a hazard. Different approaches are necessary for the description of the affected building stock, depending on the size of the target area, the upcoming objectives, and the availability of data. Macro- and mesoscale approaches, which allow land-use-based studies of the risk and damage potential on a large scale, are more and more superseded by micro-scale approaches at the single-object level. The detailed description of the building stock is a challenge: the relevant building parameters of the potentially endangered objects in the target area have to be documented systematically including the use, the geometry parameters for the assessment of the replacement values, and the relevant information for vulnerability assignment with respect to the building types and their structural systems. The experience from building surveys for seismic risk mapping and for the validation of the EDAC-Flood Damage Model provides the basis for an ambitious multi-hazard risk and vulnerability assessment approach. |

**Project’s Supervisor**

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| **Project Justification/Characteristics** | |
| New Aspects/  Challenging Problems and Issues (if any) |  |
| Related Civil Engineering Science Fields and Subfields | Natural hazards risk assessment, building stock survey, building taxonomy |
| Tools |  |
| Labs Needed for this Project |  |