



## Master's thesis (30 ECTS)

MT\_60

### Working Title

Study on the mechanical behaviour of artificial soft rock samples

### Project objectives

Behavioural mechanisms for natural materials are usually studied from the performance of mainly destructive laboratory tests, e.g. UCS and triaxial tests. Natural samples of soft anisotropic rock, however, often include inhomogeneities and sample disturbances which make it nearly impossible to receive clean and unaffected testing results. Therefore, the aim of the work is to provide an overview of artificial modelling materials found in literature for the replication of soft rocks and to carry out experimental investigations on artificial cementitious samples in terms of uniaxial and triaxial compression tests.

### Student has enthusiasm for

Material science, performance of laboratory tests

### Requirements on student

Attention to detail, engagement

### Start (earliest / latest)

April 2021

### Project term (min. / max.)

6 months full-time

### Coop. with external institution

no

### Possibility of remuneration

no

### Contact person

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PDF on

tunnel.tugraz.at:

