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| Code of course: BMA-LOTD-327.02, BMI-LOTD-327E.02 |
| Title of course: **Institution Independent Logic** |
| Title of course in English: **Institution Independent Logic** |
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| Lecturer: **Övge Öztürk** |

**Content of the course:**

Categories, Institutions, Many-sorted ﬁrst order logic with equality, Institution morphisms, Institution encodings, Institutions as Functors, Theories and Models, Encoding many-sorted logic into single-sorted logic, Theory (co-)limits, Model Amalgamation, Internal Logic, Interpolation, Deﬁnability, Possible Worlds, Institutions with Proofs.

**Grading criteria, specific requirements:**

Grading is based on final exam (oral or written).

Prerequisites: Basic set theory and algebra

**Required reading:**

Diaconescu, R. (2008). Institution-independent model theory. Birkhäuser Basel.