**MaMaSELF TUM**

**Curriculum 1.year Physics (Applied and Engineering Physics, AEP)**

**Semester 1: October – March**

Mandatory:

1. Continuum Mechanics 10
2. Physics with Neutrons I 5
3. Advanced lab course (FOPRA) 3
4. Soft skills (language class) 2
5. Student seminar (related to at least one of the courses below) 4

Choose at least two out of the following special courses (see special catalogue):

1. Modern X-rays physics 5
2. Physics of Polymers I 5
3. Applied superconductivity 10
4. Frontiers of Surface and Nanoscale Science 5
5. ++++

**Semester 2: April – September**

Mandatory:

1. Physics with Neutrons II 5
2. Advanced lab course (FOPRA) 3
3. Elective, non-physics (list to be found on the Physics departments web site) 8

Choose at least two out of the following courses (see special catalogue):

1. Physics of Polymers II 5
2. Nanostructured Soft Materials II 5
3. Superconductivity and Low Temperature Physics II 5
4. Computational Physics II 5
5. Renewable Energy II 10
6. Fuel Cells 5
7. Reactor Physics and new concepts in nuclear power II 5
8. ++++

**Curriculum 2.year**

**Semester 3: October-March**

1. Master seminar (Literature research and specialization) 10
2. Master training (Methodology and project planning) 15

Additional courses + exams: see list from the 1st and 2nd semester.

**Semester 4: April – September**

1. Master thesis 30
2. Master colloquium 5

Stand August 2016