

## List of teaching units for Tongji students

The following study program details the course structure for Tongji students. The teaching units that have to be taken are indicated. The list also details the corresponding teaching unit/subject area at the other university. The corresponding Tongji and TU credits are also indicated where applicable.

The names of the teaching units refer to the names of the teaching units at the respective universities as defined in the respective module guides.

CP: Credit point TU Darmstadt

TC: Tongji credit point

### Semester 1 (at Tongji)

<i>Numerical Analysis, Tongji compulsory (replaces Micromechanics of Materials Science, TUDa compulsory)</i>	6CP / 3 TC
<i>Materials Preparation Technology and Experiments, Tongji compulsory (replaces Research Lab I, TUDa compulsory)</i>	4CP / 2 TC
<i>Surface Chemistry and Physics of Materials (replaces Surfaces and Interfaces, TUDa compulsory)</i>	5 CP / 3 TC
<i>Laboratory safety, not graded, Tongji compulsory (transferred to TUDa as Non Mat. Sci. Selective Course)</i>	2CP / 1TC

*TUDa semester credits: Total (compulsory, MS selective, Non MS selective): 17CP (15/0/2)*

*TUDa cumulative credits: Total (compulsory, MS selective, Non MS selective): 17CP (15/0/2)*

### Semester 2 (at Tongji)

<i>Modern Analytical Methods, Tongji compulsory (replaces Advanced Characterization Methods of Materials Science, TUDa compulsory)</i>	6CP / 2TC*
<i>Advanced Lectures for Graduate Students, Tongji compulsory (transferred to TUDa as Mat. Sci. Selective Course if it is graded.)</i>	4CP / 2TC
<i>Thesis proposal, Tongji compulsory (transferred to TUDa as Mat. Sci. Selective Course if it is graded.)</i>	2CP / 1TC
<i>Writing of Scientific Literature, Tongji compulsory (transferred to TUDa as Mat. Sci. Selective Course)</i>	4CP / 2TC
<i>Research writing and ethical norm, graded, Tongji compulsory (transferred to TUDa as Non Mat. Sci. Selective Course)</i>	4CP / 2TC
<i>Interim-Assessment, not graded, Tongji compulsory</i>	0TC

*TUDa semester credits: Total (compulsory, MS selective, Non MS selective): 20CP (6/10/4)*

*TUDa cumulative credits: Total (compulsory, MS selective, Non MS selective): 37CP (21/10/6)*

### Semester 3 (at TUDa)

<i>Functional Materials, TUDa compulsory (replaces Tongji selective course Inorganic Functional Materials)</i>	6CP / 3TC
<i>Sustainable Materials, TUDa compulsory (transferred to Tongji as Mat. Sci. Selective Course)</i>	6CP / 3TC
<i>Mat. Sci. Selective Courses of Choice (transferred to Tongji as Mat. Sci. Selective Course)</i>	8CP / 4TC
<i>German Courses, Non Mat. Sci. TUDa (transferred to Tongji as Non Mat. Sci. Selective Course)</i>	4CP / 2TC

*TUDa semester credits: Total (compulsory, MS selective, Non MS selective): 24CP (12/8/4)*

*TUDa cumulative credits: Total (compulsory, MS selective, Non MS selective): 61CP (33/18/10)*

*Semester 4 (at TUDa)*

<i>Theoretical Materials Science, TUDa compulsory (replaces Thermodynamics of Materials)</i>	<i>6CP / 3TC</i>
<i>Research Lab II, TUDa compulsory (transferred to Tongji as Mat. Sci. Selective Course)</i>	<i>4CP / 2TC</i>
<i>Advanced Research Lab with Seminar, TUDa compulsory (transferred to Tongji as Mat. Sci. Selective Course)</i>	<i>15CP / 7,5TC</i>
<i>Mat. Sci. Selective Courses of Choice (transferred to Tongji as Mat. Sci. Selective Course)</i>	<i>4CP / 2TC</i>

*TUDa semester credits: Total (compulsory, MS selective, Non MS selective): 29CP (25/4/0)*

*TUDa cumulative credits: Total (compulsory, MS selective, Non MS selective): 90CP (58/22/10)*

*Semester 5 (at Tongji)*

<i>Master Thesis, graded, Tongji compulsory (replaces Master Thesis TUDa compulsory)</i>	<i>30CP / 15TC</i>
<i>Schedule of the Master Thesis</i>	
<i>The Topic is defined in early semester 3 in cooperation between a professor from Tongji and TUDa. A kick-off seminar takes place in semester 3. The mid-term defense is scheduled at semester 4. The thesis shall be defended (both supervisors, teleconference possible) after the theses has been submitted to Tongji. At least one research paper has to be published max. 21 months after the defense</i>	

*TUDa semester credits: Total (compulsory, MS selective, Non MS selective): 30CP (30/0/0)*

*TUDa cumulative credits: Total (compulsory, MS selective, Non MS selective): 120CP (88/22/10)*

*\* The content of the two modules (Modern Analytical Methods, Tongji compulsory, 2TC and Advanced Characterization Methods of Materials Science, 6CP, TUDa compulsory) match very well with each other. But credit points are different, particularly due to the exercise hours, thereby 2CP less. But on the other hand, Surface chemistry of materials 3TC at Tongji are transferred to TUDa only as 5CP. To avoid the overload, the study office suggests to transfer the Modern Analytical Methods 2TC to Advanced Characterization Methods of Materials Science, 6CP.*