

# Materials Science (M.Sc.) - Effective 01 April 2016

The degree programme consists of 120 Credit Points (CP) in total:

**Mandatory Subject Area:** 46 CP ■  
**Elective Subject Area:** 44 CP ■  
**Research/Thesis:** 30 CP ■

Language of Tuition:  
 ENGLISH  
 certificates required

The following **module overview** is an abbreviated, easy-to-read version of the **official course schedule** in the examination regulations, to be found in the Satzungsbeilagen of TU Darmstadt:

1st semester	2nd semester	3rd semester	4th semester
Research Lab I (4 CP)	Research Lab II (4 CP)	Advanced Research Lab with Seminar (15 CP)	Master's Thesis (30 CP)
Functional Materials (6 CP)	Theoretical Methods in Materials Science (6 CP)		
Surfaces and Interfaces (5 CP)	Advanced Characterisation Methods of Materials Science (6 CP)		
Elective Courses Quantum Mechanics/ Micromechanics (6 CP)			
Elective Courses Materials Science (29 CP) (i.e. Fundamentals and Technology of Solar Cells or Mathematical Methods in Materials Science)			
Elective Courses (not Materials Science) (9 CP) (i.e. Cognitive Science or Project Management)			

Study Programmes

[www.tu-darmstadt.de/studieren](http://www.tu-darmstadt.de/studieren)

Course Schedule

[www.tucan.tu-darmstadt.de](http://www.tucan.tu-darmstadt.de)

Application and Admission for international students  
(International Office)

[www.tu-darmstadt.de/international](http://www.tu-darmstadt.de/international)

Zentrale Studienberatung und -orientierung ZSB  
(Central Student Advisory and Orientation Office)

Karolinenplatz 5,  
64289 Darmstadt  
Building S1 | 01  
email [info@zsb.tu-darmstadt.de](mailto:info@zsb.tu-darmstadt.de)

Opening hours: [www.zsb.tu-darmstadt.de](http://www.zsb.tu-darmstadt.de)

## Imprint

**Publisher** President of TU Darmstadt  
**Editorial office** Zentrale Studienberatung und  
-orientierung ZSB

Please fold here

# Materials Science Master of Science



Design: DUBBEL SPÄTH, Darmstadt | Teilfoto: Gregor Schuster, Darmstadt

## Brief Description

The Master of Science programme Materials Science focuses on functional materials such as energy materials, magnetic materials, or electronic materials and their synthesis and characterisation. Courses on theoretical materials science include quantum mechanics, non-equilibrium thermodynamics, and continuum mechanics. Applicants need a strong background in the fundamentals of materials science, in particular in semiconductors, functional ceramics, metals, and polymers.

[www.matgeo.tu-darmstadt.de](http://www.matgeo.tu-darmstadt.de)

## Admission

For information on application deadlines please refer to [www.tu-darmstadt.de/international](http://www.tu-darmstadt.de/international)