

Preliminary teaching programme for academic year 2026-27

Code	Course unit name	Scope (cr)	Period	Languages	Form of teaching / Method of completion	Open university studies	Open to exchange students	Open to other degree programmes	Additional information on target groups
MATR302	Materials Characterization	5 op	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR3031	Solid state physics: crystal structure and atomic dynamics	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR3032	Solid state physics: electronic structure and properties	5 op	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR306	Materials Physics	5 op	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR307	Solid State Continuum Mechanics I	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR308	Surface Physics	5 op	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR3082	Physics of thin films and heterostructures	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR309	Radiation Protection	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	Limited to 20 students to ensure hands-on tutorial to be effective in student pairs.
MATR310	Laboratory Exercises	10 op	1.-4. period	fi en sv - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR3101	Physics of semiconductor devices	5 op	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR311	Synchrotron light in materials science	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR318	Solid State Continuum Mechanics II	5 op	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR321	Numerical Methods in Scientific Computing I	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR322	Numerical Methods in Scientific Computing II	5 op	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR323	Basics of Monte Carlo Simulations	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR3251	Molecular Dynamics Simulations in Materials Science	5 op	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR331	Introduction to Biological Physics	5 op	1. period	English - Completely in English (or multilingual)	includes both contact and distance teaching (aka, blended teaching)	Course unit is only for degree students.	yes	yes	
MATR332	Physics of Biological Systems	5 op	3. period	English - Completely in English (or multilingual)	includes both contact and distance teaching (aka, blended teaching)	Course unit is only for degree students.	yes	yes	
MATR338	Ultrasonics	10 op	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR342	Determination of Crystal and Molecular Structures	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	There is no limitation in the number of students the lecture is open for master students, Ph.D. students, but also for Bachelor students (but not recommended)
MATR343	Microscope techniques in materials characterization	5 op	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR344	Vacuum technology	5 op	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR345	Polymer chemistry 1	5 op	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR346	Polymer Physics	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR347	Polymer Chemistry 2: Advanced synthesis and functional materials	5 op	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR348	Laboratory Practicum, p 1-2	5 op	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR348	Laboratory Practicum, p 3-4	5 op	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR352	Light Scattering	5 op	May intensive period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR353	Polymer characterization: Spectroscopy and thermal methods	5 op	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR356	Polymers in Medicine	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR358	Inorganic Materials Chemistry	5 op	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	no	yes	
MATR364	Seminar in Materials Research	5 op	1.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	Only open to TCM students unless otherwise agreed
MATR365	Radiation damage in materials	5 op	1.-4. period	English - Completely in English (or multilingual)	online teaching (not time-bound)	Course unit is only for degree students.	yes	yes	
MATR369	Industrial Physics	5 op	4. period	English - Completely in English (or multilingual)	distance teaching (time-bound)	Course unit is only for degree students.	yes	yes	
MATR372	Nanocatalysis	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR377	Photonics	10 op	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR378	Finite element modelling for physicists I	5 op	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR379	Finite element modelling for physicists II	5 op	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR382	Methods in Molecular Biophysics	5-10 op	3.-4. period	English - Completely in English (or multilingual)	includes both contact and distance teaching (aka, blended teaching)	Course unit is only for degree students.	yes	yes	
MATR384	Polyelectrolytes and Colloids	5 op	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR385	Ion beam methods for materials characterization	5 op	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR387	Materials Chemistry and Physics for Sustainability	5 op	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	
MATR388	Additive Manufacturing: Techniques, Chemistry, Materials and Applications	5 op	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	