

Preliminary teaching programme for academic year 2025-26

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
MATR301	Introductory Course to Materials Research	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR302	Materials Characterization	5 cr	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 cr	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 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR305	Nanophysics and Nanochemistry	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR306	Materials Physics	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR308	Surface Physics	5 cr	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 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR309	Radiation Protection	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	no	yes	-
MATR310	Laboratory Exercises	10 cr	1.-4. period	fi en sv - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR311	Synchrotron light in materials science	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR315	Radiation Dosimetry	5 cr	1.-2. period	Finnish - Materials, assignments, and guidance also in English	contact teaching	Course unit is only for degree students.	no	yes	-
MATR316	Nuclear Physics	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR319	Lääketieteellinen fysikka	5 cr	3.-4. period	Finnish - Materials, assignments, and guidance also in English	contact teaching	Course unit is only for degree students.	no	yes	-
MATR320	Nano Acoustics I	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR321	Nano Acoustics II	5 cr	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 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR324	Monte Carlo Simulations in Physics	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR325	Molecular Dynamics Simulations	5 cr	2. period	English - Completely in English (or multilingual)	including both contact and distance teaching (aka. blended teaching),	Course unit is only for degree students.	yes	yes	-
MATR326	Tools of High Performance Computing	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR329	Optics	10 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR331	Introduction to Biological Physics	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR332	Physics of Biological Systems	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR333	Modeling of Biological Systems	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR335	Electronics II	10 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR341	Surface Chemistry	5 cr	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 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR345	Basics in Polymer Chemistry	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR346	Polymer Physics	5 cr	2. 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 cr	4. 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 cr	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 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR351	Rheology	5 cr	other period - intensive period in May	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR355	Functional polymers	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR356	Polymers in Medicine	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR359	Solid State Chemistry	5 cr	4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR361	Thin films	10 cr	1.-2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR362	Workshop on X-ray diffraction and thermoanalytical methods	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR364	Seminar in Materials Research	5 cr	1.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	no	yes	Only open to TCM students unless otherwise agreed
MATR365	Radiation damage in materials	5 cr	1.-4. period	English - Completely in English (or multilingual)	online teaching (not time-bound)		yes	yes	-
MATR3700	Carbon capture and utilisation	5 cr	2. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR373	Atomic layer deposition and etching	5 cr	3. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR381	Electrochemistry in materials science	5 cr	1. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-
MATR386	Physics of positrons in solids and defects	5 cr	3.-4. period	English - Completely in English (or multilingual)	contact teaching	Course unit is only for degree students.	yes	yes	-