

NANOİLİM VE NANOTEKNOLOJİ ANA BİLİM DALI YÜKSEK LİSANS PROGRAMI DERS MÜFREDATI

Dersin Kodu	Dersin Adı	Dersin Türü	T	U	K	AKTS
ENNT 601	Nanotechnology I	Seçmeli	3	0	3	7,5
ENNT 602	Nanotechnology II	Seçmeli	3	0	3	7,5
ENNT 603	Nanocharacterization I	Seçmeli	3	2	5	7,5
ENNT 604	Nanocharacterization II	Seçmeli	3	2	5	7,5
ENNT 605	Synthesis and Applications of Nanomaterials	Seçmeli	3	2	5	7,5
ENNT 606	Environmental Nanotechnology	Seçmeli	3	0	3	7,5
ENNT 607	Phase Diagrams and Calculations in Nanotechnology	Seçmeli	3	0	3	7,5
ENNT 608	Quantum Chemistry	Seçmeli	3	0	3	7,5
ENNT 609	Quantum Mechanics and Applications	Seçmeli	3	0	3	7,5
ENNT 610	Production of Composite Materials	Seçmeli	3	0	3	7,5
ENNT 611	Mechanics of Thin Solid Films	Seçmeli	3	0	3	7,5
ENNT 612	Nanotechnology in Food Industry	Seçmeli	3	0	3	7,5
ENNT 613	Computational Techniques in Nanoscience	Seçmeli	3	0	3	7,5
ENNT 614	Nanotechnology Applications in Industry	Seçmeli	3	0	3	7,5
ENNT 615	Polymer Characterization	Seçmeli	3	0	3	7,5
ENNT 616	Polymer Nanocomposites	Seçmeli	3	0	3	7,5
ENNT 617	Macromolecular Physics	Seçmeli	3	0	3	7,5
ENNT 618	Advanced Polymer Engineering	Seçmeli	3	0	3	7,5
ENNT 619	Surface Science and Technology	Seçmeli	3	0	3	7,5
ENNT 620	Fabrication Technologies of Thin Solid Films	Seçmeli	3	0	3	7,5
ENNT 621	Nanophotonics	Seçmeli	3	0	3	7,5
ENNT 622	Introduction to Bionanotechnology	Seçmeli	3	0	3	7,5
ENNT 623	Advanced Molecular Genetics	Seçmeli	3	0	3	7,5
ENNT 624	Bionanotechnology Laboratory Techniques I	Seçmeli	3	2	5	7,5
ENNT 625	Bionanotechnology Laboratory Techniques II	Seçmeli	3	2	5	7,5
ENNT 626	Genome Analysis in Plants	Seçmeli	3	0	3	7,5
ENNT 627	Genetics Engineering Applications in Plants	Seçmeli	3	2	5	7,5
ENNT 628	Bacterial Molecular Genetics	Seçmeli	3	0	3	7,5
ENNT 629	Microbial Secondary Metabolites and Biotechnology	Seçmeli	3	0	3	7,5
ENNT 630	Genetics Identification	Seçmeli	3	0	3	7,5
ENNT 631	Industrial Enzymology	Seçmeli	3	0	3	7,5
ENNT 632	Bioinformatics	Seçmeli	3	0	3	7,5
ENNT 633	Biosensors and Application Areas	Seçmeli	3	0	3	7,5
ENNT 634	Nanomaterials in Photovoltaic Technology	Seçmeli	3	0	3	7,5
ENNT 635	Fundamentals of Materials Science and Engineering	Seçmeli	3	0	3	7,5
ENNT 636	Scientific Research Methods and Ethics	Zorunlu	3	0	3	7,5
ENNT 637	Genomics	Seçmeli	3	0	3	7,5
ENNT 638	The Molecular Basis of Drug Discovery	Seçmeli	3	0	3	7,5
ENNT 639	Nanodrugs	Seçmeli	3	0	3	7,5
	Seminar	Zorunlu				0
	Expertise area Course	Zorunlu	4	0	0	0
	Thesis	Zorunlu	0	0	0	30

NANOİLİM VE NANOTEKNOLOJİ ANA BİLİM DALI DOKTORA PROGRAMI DERS MÜFREDATI

Dersin Kodu	Dersin Adı	Dersin Türü	T	U	K	AKTS
ENNT 701	Reverse Engineering	Seçmeli	3	0	3	7,5
ENNT 702	Structure-Property Relations in Composite Materials	Seçmeli	3	0	3	7,5
ENNT 703	Polymer-Matrix Composite Materials	Seçmeli	3	0	3	7,5
ENNT 704	Coating Tribology	Seçmeli	3	0	3	7,5
ENNT 705	Microporous and Mesoporous Materials	Seçmeli	3	0	3	7,5
ENNT 706	Nanocarbon Technology	Seçmeli	3	0	3	7,5
ENNT 707	Morphology of Block Copolymers and Nanostructures	Seçmeli	3	0	3	7,5
ENNT 708	Powder X-Ray Diffraction and Structure Analysis	Seçmeli	3	0	3	7,5
ENNT 709	Thermal Analysis Techniques	Seçmeli	3	0	3	7,5
ENNT 710	IR and Raman Spectroscopy	Seçmeli	3	0	3	7,5
ENNT 711	Scanning Probe Microscopy	Seçmeli	3	0	3	7,5
ENNT 712	Quantitative and Qualitative Analysis in Electron Microscopy	Seçmeli	3	0	3	7,5
ENNT 713	Fundamental Software of Informatics	Seçmeli	3	0	3	7,5

ENNT 714	Membrane Processes	Seçmeli	3	0	3	7,5
ENNT 715	Thermodynamics and Kinetics of Nanomaterials	Seçmeli	3	0	3	7,5
ENNT 716	Chemoinformatics	Seçmeli	3	0	3	7,5
ENNT 717	Bionanotechnology	Seçmeli	3	0	3	7,5
ENNT 718	Advanced Molecular Bionanotechnology	Seçmeli	3	0	3	7,5
ENNT 719	Microbial Glicobiology	Seçmeli	3	0	3	7,5
ENNT 720	Purification Techniques of Biomolecules	Seçmeli	3	0	3	7,5
ENNT 721	Characterization Techniques of Biomolecules	Seçmeli	3	0	3	7,5
ENNT 722	Protein Engineering	Seçmeli	3	0	3	7,5
ENNT 723	Bioenergy and Biofuels	Seçmeli	3	0	3	7,5
ENNT 724	Computer Based Methods in Protein Structure and Dynamics	Seçmeli	3	0	3	7,5
ENNT 725	Advanced Immunology	Seçmeli	3	0	3	7,5
ENNT 726	Environmental Bionanotechnology	Seçmeli	3	0	3	7,5
ENNT 727	Advanced Cell Biology	Seçmeli	3	0	3	7,5
ENNT 728	Pharmaceutical Chemistry	Seçmeli	3	0	3	7,5
ENNT 729	Nanomedicine and Nanomaterials Used For Drug Delivery	Seçmeli	3	0	3	7,5
ENNT 730	Safety of Nanomaterials	Seçmeli	3	0	3	7,5
ENNT 731	Computer-Aided Drug Design	Seçmeli	3	0	3	7,5
ENNT 732	Computational Quantum Chemistry	Seçmeli	3	0	3	7,5
ENNT 733	Advanced Nanotechnology	Seçmeli	3	0	3	7,5
	Seminar	Zorunlu				0
	Expertise area Course	Zorunlu	4	0	0	0
	Thesis	Zorunlu	0	0	0	30