

Curriculum

□ Undergraduate Course

Classification	Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
Mandatory Major Course	BiS200	Introduction to Bioinformation and Bioelectronics	3:0:3(3)	Spring, Fall	
	BiS232	Bio-Data Structures	3:0:3(6)	Fall	
	BiS271	BioNanoEngineering	3:0:3(6)	Spring	
	BiS321	Systems Bioengineering	3:0:3(6)	Spring	
	BiS331	Bio Computer Engineering	3:0:3(3)	Spring	
	BiS350	Biological Instrumentation Laboratory	1:6:3(2)	Fall	
Elective Major Course	BiS221	General Biochemistry	3:0:3(6)	Spring	*BS205, *BS208, *CH381, *CH482 *BS202
	BiS222	General Cell Biology	3:0:3(4)	Fall	
	BiS223	Biological Physics	3:0:3(6)	Fall	
	BiS252	Fundamentals of BioElectronics	3:0:3(6)	Fall	
	BiS272	Biomechanics	3:0:3(6)	Fall	*MAE231
	BiS324	Biochemistry and Biotechnology Laboratory	0:9:3(5)	Fall	
	BiS332	Bio-Database System	3:0:3(6)	Fall	
	BiS333	Bioinformatics Engineering	3:0:3(6)	Fall	
	BiS351	Biological Signal Processing	3:0:3(6)	Spring	
	BiS353	Neural Information Processing Algorithm	3:0:3(6)	Spring	
	BiS354	Analog Microelectronic Circuits	3:0:3(6)	Fall	
	BiS355	Digital System Laboratory and Bio-Application	1:6:3(2)	Spring	
	BiS371	Biofluidics	3:0:3(6)	Spring	
	BiS372	Dynamic Motion and Response	3:0:3(6)	Fall	
	BiS400	Special Topics on BioSystems	3:0:3(6)	Spring, summer, Fall, Winter	
	BiS410	Bio-Fusion Project	1:6:3(6)	Spring, Fall	
	BiS421	Human Physiology	3:0:3(2)	Spring	*BS351
	BiS422	Science Communication & Leadership	3:0:3(6)	Fall	
	BiS423	Molecular Biology	3:0:3(4)	Spring	*BS433
	BiS424	Instrumental Analysis for Biomaterials	3:0:3(6)	Fall	*CH463
	BiS431	System Modeling	3:0:3(6)	Spring	
	BiS432	Bioinformatics and Biostatistics	3:0:3(6)	Fall	*CBE362
	BiS451	Cognitive Neuroscience	3:0:3(6)	Spring	
	BiS471	Bio-Inspired Systems	3:0:3(6)	Spring	
	BiS472	Micro Heat & Mass Transport	3:0:3(4)	Fall	
	BiS473	Bio-MEMS Laboratory	2:3:3(6)	Spring, Fall	
Research	BiS490	Graduation Research	0:6:3		
	BiS495	Individual Study	0:6:1		
	BiS496	Seminar	1:0:1		

※ *: Alternative courses

※ BiS400-level courses are admitted to the Master's degree program.

Graduate Course

Classification	Subject No.	Subject Name	Lecture:Lab.:Credit (Homework)	Semester	Remark
General Course	CC010	Leadership Lecture	1:0:0(0)		
	CC500	Science Writing in English	3:0:3(4)		
	CC510	Introduction to Applied Computer Science	2:3:3(10)		
	CC511	Probability and Statistics	2:3:3(6)		
	CC512	Introduction to Materials Science	3:0:3(3)		
	CC513	Engineering Economy and Cost Analysis	3:0:3(6)		
	CC522	Introduction to Instrumentation Engineering	2:3:3(8)		
	CC530	Entrepreneurial Mentality and Management Strategies	3:0:3(3)		
	CC531	Patent Analysis and Invention Disclosure	3:0:3(6)	Spring, Fall	
Mandatory Major Course	BiS500	Bioinformation and Bioelectronics	3:0:3(3)	Spring	
Elective Major Course	BiS510	Technology Commercialization and Venture Business	3:0:3(6)	Fall	*BS543
	BiS521	Biology for Engineers	3:0:3(6)	Spring	
	BiS522	Genomics and Proteomics	3:0:3(4)	Fall	
	BiS523	Information and Electronics for Scientists	3:0:3(6)	Spring	
	BiS525	Brain Dynamics	3:0:3(6)	Spring	*EE538
	BiS531	Bioinformatics	3:0:3(6)	Spring, Fall	
	BiS532	Bioinformatics Laboratory	2:3:3(6)	Fall	
	BiS533	Computing Technology	3:0:3(6)	S or F	
	BiS551	Medical Image Processing	3:0:3(3)	Spring	*CBE567
	BiS552	Digital Biomedical Signal Processing	3:0:3(6)	Fall	
	BiS554	Neural Networks	3:0:3(6)	Fall	
	BiS571	BioElectroMechanics	3:0:3(6)	Spring	
	BiS572	Microtransducers and Laboratory	2:3:3(6)	Fall	*EE737
	BiS573	Biophotonics	3:0:3(6)	Spring	
	BiS622	Metabolic Engineering	3:0:3(3)	Fall	
	BiS623	Bioelectronic Devices	3:0:3(3)	Spring, Fall	
	BiS631	Data Mining	3:0:3(6)	Spring	*CS580
	BiS632	Bio-Statistics	3:0:3(6)	Spring, Fall	
	BiS634	Database Construction	3:0:3(6)	Fall	
	BiS651	Hearing and Auditory Model	3:0:3(6)	Spring	
	BiS652	Human Visual Model	3:0:3(6)	Fall	*EE737
	BiS653	Biomedical Imaging System	3:0:3(6)	Spring	
	BiS671	Nanomaterial Process and Behavior	3:0:3(4)	Spring	
	BiS672	Nano Electro Mechanical Systems	3:0:3(4)	Fall	
	BiS721	Computational Cell Biology	3:0:3(6)	Spring	*CS580
	BiS722	Cell Signaling Network	3:0:3(6)	Fall	
	BiS731	Bio-Pattern Recognition	3:0:3(6)	Spring	
	BiS732	Bio-Network	3:0:3(6)	S or F	
	BiS733	Bio-Intelligence	3:0:3(6)	Spring	*CS580
	BiS734	Information Processing for Genomics and Proteomics	3:0:3(6)	Fall	
	BiS735	Computer Graphics and Bio-Application	2:3:3(6)	Spring	
	BiS752	Neural Engineering	3:0:3(6)	Spring	
	BiS771	Nanobiotechnology	3:0:3(4)	Spring	*CS580
	BiS772	Nano/Micro-Machining Process Laboratory	2:3:3(4)	Fall	
	BiS800	Special Lecture on Bioinformatics & Bioelectronics	3:0:3(6)	Spring, Fall	
	BiS810	Leadership & Communication	3:0:3(6)	Fall	
Research	BiS960	Thesis/Dissertation Research (Master)			
	BiS965	Individual Study (Master)			
	BiS966	Seminar (Master)	1:0:1		
	BiS980	Thesis/Dissertation Research (Doctoral)			
	BiS986	Seminar (Doctoral)	1:0:1		
	BiS987	Advanced BioSeminar	1:0:1	Spring, Fall	

※ * : Alternative courses

※ BiS500-level courses are admitted to the undergraduate program.