

## Course Tables

**Table 1 - Compensatory courses for Biophysics in Master's Degree**

Index	Course Title	Number of units			Total Hours			Prerequisite
		Theoretical	Practical	Total	Theoretical	Practical	Total	
1	Modern physics	4	0	4	64	0	64	
2	Cellular and molecular biology	2	0	2	32	0	32	
3	Basic Biochemistry Physics	4	0	4	64	0	64	
4	Physical chemistry	2	0	2	32	0	32	
5	General Mathematics 1	3	0	3	48	0	48	
6	General Mathematics 2	3	0	3	48	0	48	
7	General Physics 1	3	0	3	48	0	48	
8	General Physics 2	3	0	3	48	0	48	
9	General Chemistry 1	3	0	3	48	0	48	
10	General Chemistry 2	3	0	3	48	0	48	
<b>TOTAL</b>		30	0	30	480	0	480	

Students may choose, if necessary (with the opinion of the manager or supervisor), a maximum of 12 units from the courses listed in the table above.

**Table 2 - Compensatory courses for Biophysics in Ph.D. Degree**

Index	Course Title	Number of units			Total Hours			Prerequisite
		Theoretical	Practical	Total	Theoretical	Practical	Total	
1	Modern physics	4	0	4	64	0	64	
2	Basic Biochemistry Physics	4	0	4	64	0	64	
<b>TOTAL</b>		8	0	8	128	0	128	

Students may choose, if necessary (with the opinion of the manager or supervisor), a maximum of 6 units from the courses listed in the table above.

**Table 3. Specialized courses for Biophysics in Master's Degree**

Index	Course Title	Number of units			Total Hours			Prerequisite
		Theoretical	Practical	Total	Theoretical	Practical	Total	
1	Biophysical Chemistry	2	0	2	32	0	32	
2	Radiation Biophysics	2	0	2	32	0	32	
3	Membrane Biophysics	2	0	2	32	0	32	
4	Molecular Biophysics	2	0	2	32	0	32	
5	Methods of Biophysics	2	0	2	32	0	32	
6	Enzymes Kinetics	2	0	2	32	0	32	
7	Seminar I	1	0	1	16	0	16	
8	Seminar II	1	0	1	16	0	16	
<b>TOTAL</b>		14	0	14	224	0	224	

**Table 4. Specialized-Optional courses for Biophysics in Ph.D. Degree**

Index	Course Title	Number of units			Total Hours			Prerequisite
		Theoretical	Practical	Total	Theoretical	Practical	Total	
1	Biophysical Chemistry	2	0	2	32	0	32	
2	Radiation Biophysics	2	0	2	32	0	32	
3	Membrane Biophysics	2	0	2	32	0	32	
4	Molecular Biophysics	2	0	2	32	0	32	
5	Methods of Biophysics	2	0	2	32	0	32	
6	Enzymes Kinetics	2	0	2	32	0	32	
7	Glycolipobiology	2	0	2	32	0	32	
8	Advanced Biochemistry of Proteins and Nucleic acids	2	0	2	32	0	32	
9	Mechanism of enzyme action	2	0	2	32	0	32	
10	Advanced Bioinformatics	2	1	3	32	32	64	
11	Algorithms in Bioinformatics	3	0	3	48	0	48	
12	Biological Databases	2	1	3	32	32	64	
13	Seminar I	1	0	1	16	0	16	
14	Seminar II	1	0	1	16	0	16	
<b>TOTAL</b>		<b>27</b>	<b>2</b>	<b>29</b>	<b>432</b>	<b>64</b>	<b>496</b>	

**Table 4. Specialized-Optional courses for Biophysics in Master's & Ph.D. Degree**

Index	Course Title	Number of units			Total Hours			Prerequisite
		Theoretical	Practical	Total	Theoretical	Practical	Total	
1	Cellular Biophysics	2	0	2	32	0	32	
2	Biosensors	2	0	2	32	0	32	
3	Mathematical Models in Biological Issues	2	0	2	32	0	32	
4	Methods and Research Logic	2	0	2	32	0	32	
5	Biothermodynamics	2	0	2	32	0	32	
6	Physical Chemistry of Proteins	2	0	2	32	0	32	
7	Topics in Biophysics	2	0	2	32	0	32	
8	Biospectroscopy	2	0	2	32	0	32	
9	Ligand Protein Interaction	2	0	2	32	0	32	
10	Pharmaceutical Biophysics	2	0	2	32	0	32	
11	Bio-electromagnetics	2	0	2	32	0	32	
12	Biophysics and Tissue Engineering	2	0	2	32	0	32	
13	Environmental Biophysics	2	0	2	32	0	32	
14	Topics in radiation Biology	2	0	2	32	0	32	Radiation Biophysics
15	Computational Biophysics	2	0	2	32	0	32	
16	Topics in the Philosophy of Biology	2	0	2	32	0	32	
17	X-Ray scattering from Biological Macromolecule	2	0	2	32	0	32	
18	Bioelectrochemistry of proteins and nucleic acids	2	0	2	32	0	32	
19	Biophysics of ion channels	2	0	2	32	0	32	
20	Enzymology	2	0	2	32	0	32	
21	Advanced Molecular Biology	2	0	2	32	0	32	
22	Bioinformatics	2	0	2	32	0	32	
23	Molecular Modeling	2	0	2	32	0	32	
24	Modeling of Biological Systems	2	0	2	32	0	32	
<b>TOTAL</b>		48	0	48	768	0	768	

- MSc student is allowed to select 8 units from the table above.
- Ph.D. student is allowed to select 14 units as a total of courses in Tables 4 and 5, and endorsed by their supervisor.