

**Doctorate in Molecular Biomedicine****Synthesis of Academic Program****First term**

List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Design of experiments and biostatistics	DBM5011		48	48	6
Molecular and cellular biology	DBM5021		48	48	6
Experimental analytical methods	DBM5031		48	48	6
Pharmacology and toxicology	DBM5041		48	48	6
		Total	192	192	24

**Second term**

List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Pathophysiology	DBM5051		48	48	6
Drug design	DBM5061		48	48	6
Experimental biological and molecular methods	DMB5071		48	48	6
Basic elective 1			48	48	6
		Total	192	192	24

**Third term**

List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Seminar for professional responsibility	PTA5011		48	48	6
Knowledge exam	DBM5121	DBM5011 DBM5021 DBM5031 DBM5041 DBM5051 DBM5061 DBM5071	48	48	6
Thesis I	DBM5161	DBM5011 DBM5021 DBM5031 DBM5041 DBM5051 DBM5061 DBM5071	48	48	6
Basic elective 2			48	48	6
		Total	192	192	24

**Fourth term**

List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Thesis II	DBM5171	DBM5161	48	48	6
Predoctoral exam	DBM5171	DBM5121	16	16	2
Bioethics	DBM5221		16	0	1
		Total	80	64	9

Fifth term					
List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Advanced elective 1			48	48	6
Advanced elective 2			48	48	6
Advanced elective 3			48	48	6
		Total	144	144	18

Sixth term					
List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Research seminar I	DBM6041	PTA5011 DBM5131 DBM5171	48	48	6
Thesis III	DBM6091	PTA5011 DBM5131 DBM5171	48	48	6
		Total	96	96	12

Seventh term					
List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Research seminar II	DBM6051	DBM6041	48	48	6
Thesis IV	DBM6101	DBM6091	48	48	6
		Total	96	96	12

Eighth term					
List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Research seminar III	DBM6061	DBM6051	48	48	6
Thesis V	DBM6111	DBM6101	48	48	6
		Total	96	96	12

Ninth term					
List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Research seminar IV	DBM6071	DBM6061	48	48	6
Thesis VII	DBM6121	DBM6111	48	48	6
		Total	96	96	12

Tenth term					
List of subjects or learning units	Key	Prerequisite	Hours		Credits (Units)
			With teacher	Independent	
Research seminar V	DBM6081	DBM6071	48	48	6
Thesis VII	DBM6131	DBM6121	48	48	6
		Total	96	96	12

Basic elective 1 y 2	
List of subjects or learning units	Key
Obtaining active principles for biotechnology	DBM5181
Pharmaceutical biotechnology	DBM6191
Selected themes in clinical research	DBM5201
Development of clinical studies	DBM5211

Advanced elective 1, 2, 3	
List of subjects or learning units	Key
Medical systems biology	DBM6141
Genomic medicine	DBM6151
Select themes I	DBM6161
Identification of biological compounds	DBM6171
Nanomedicine	DBM6181
Select themes II	DBM6191
Clinical research	DBM6201
Molecular methods	DBM6211
Select themes III	DBM6221