



Universidad Autónoma  
de Madrid

## BIOCHEMISTRY DEGREE

### ACADEMIC YEAR 2020/2021

Studies	Biochemistry Degree
Centre	Faculty of Sciences C/ Darwin, 2 Campus de Cantoblanco 28049 – Madrid Phone: 914978264  <a href="#">Web page</a>
Knowledge Branch	Sciences
ECTS Credits	240

ECTS CREDITS	
Basic training (FB)	60
Compulsory (OB)	138
Optional (OP)	24
External practical (PE)	-
End-of-degree Project (TFG)	18
<b>Total</b>	<b>240</b>

### FIRST YEAR

Code	Subject	Credits	Type	Semester
<u>18201</u>	CHEMISTRY	6	FB	1
<u>18202</u>	BASIC PRINCIPLES OF BIOLOGY	6	FB	1



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Code	Subject	Credits	Type	Semester
<u>18203</u>	CELLS, TISSUES AND ORGANS	6	FB	1
<u>18204</u>	PHYSICS	6	FB	1
<u>18205</u>	MATHEMATICS	6	FB	1
<u>18206</u>	ORGANIC CHEMISTRY	6	FB	2
<u>18207</u>	GENES AND EVOLUTION	6	FB	2
<u>18208</u>	INTRODUCTION TO MICROBIOLOGY	6	FB	2
<u>18209</u>	APPLIED STATISTICS	6	FB	2
<u>18210</u>	BASIC PRINCIPLES OF BIOCHEMISTRY	6	FB	2

## SECOND YEAR

Code	Subject	Credits	Type	Semester
<u>18211</u>	METHODS IN BIOCHEMISTRY	6	OB	1
<u>18212</u>	PHYSICAL BIOCHEMISTRY	6	OB	1
<u>18213</u>	STRUCTURE OF MACROMOLECULES	6	OB	1
<u>18214</u>	EXPERIMENTAL BIOCHEMISTRY I	6	OB	1
<u>18215</u>	PHYSIOLOGY I	6	OB	1
<u>18216</u>	FUNCTION OF MACROMOLECULES	6	OB	2
<u>18217</u>	MOLECULAR GENETICS AND GENETIC ENGINEERING	6	OB	2
<u>18218</u>	BIOMEMBRANES, TRANSPORT AND BIOENERGETICS	6	OB	2
<u>18219</u>	EXPERIMENTAL BIOCHEMISTRY II	6	OB	2
<u>18220</u>	PHYSIOLOGY II	6	OB	2

## THIRD YEAR

Code	Subject	Credits	Type	Semester
<u>18221</u>	CELL ORGANIZATION AND CONTROL I	6	OB	1
<u>18222</u>	METABOLISM AND METABOLIC REGULATION	6	OB	1
<u>18223</u>	BIOSYNTHESIS OF MACROMOLECULES	6	OB	1
<u>18224</u>	MOLECULAR BASIS OF PATHOLOGY I	6	OB	1
<u>18225</u>	ADVANCED EXPERIMENTAL BIOCHEMISTRY I	6	OB	1
<u>18226</u>	CELL ORGANIZATION AND CONTROL II	6	OB	2
<u>18227</u>	MOLECULAR BASIS OF PATHOLOGY II	6	OB	2
<u>18228</u>	IMMUNOLOGY	6	OB	2
<u>18229</u>	ADVANCED EXPERIMENTAL BIOCHEMISTRY II	6	OB	2
<u>18230</u>	VIROLOGY	6	OB	2

## FOURTH YEAR

Code	Subject	Credits	Type	Semester
<u>18231</u>	BIOINFORMATICS AND MOLECULAR SYSTEMS BIOLOGY	6	OB	1



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Code	Subject	Credits	Type	Semester
<u>18232</u>	BIOCHEMISTRY AND SOCIETY	6	OB	1
<u>18233</u>	DESIGN AND EXECUTION OF PROJECTS	6	OB	1
	OPTIONAL	12	OP	1
<u>18234</u>	END-OF-DEGREE PROJECT	18	TFG	2
	OPTIONAL	12	OP	2

#### OPTIONAL SUBJECTS

##### ROUTE: MOLECULAR BIOMEDICINE

Code	Subject	Credits	Type	Semester
<u>18235</u>	CLINICAL MICROBIOLOGY	6	OP	1
<u>18237</u>	EXPERIMENTAL MODELS IN MOLECULAR BIOMEDICINE	6	OP	1
<u>18236</u>	GENOME AND DISEASE	6	OP	2
<u>18238</u>	HEALTH BIOTECHNOLOGY	6	OP	2

##### ROUTE: MOLECULAR BIOLOGY APPLICATIONS

Code	Subject	Credits	Type	Semester
<u>18239</u>	DEVELOPMENTAL BIOLOGY	6	OP	1
<u>18240</u>	ENZYME BIOTECHNOLOGY	6	OP	1
<u>18242</u>	GLYCOBIOLOGY	6	OP	1
<u>18241</u>	MICROBIAL BIOTECHNOLOGY *	6	OP	

\* Subject not offered in 2020-2021

##### COMMON TO ALL ROUTES

Code	Subject	Credits	Type	Semester
<u>18243</u>	MOLECULAR NEUROBIOLOGY	6	OP	1
<u>18245</u>	PROGRAMMING TOOLS IN BIOCHEMISTRY AND MOLECULAR BIOLOGY	6	OP	1
<u>18877</u>	EXTERNAL PRACTICAL	6	OP	1 and 2