

## BIOCHEMISTRY DEGREE

Centre ([see](#))

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



**CLICK ON THE CODE OF EACH SUBJECT TO ACCESS THE COURSE HANDBOOK**

### FIRST YEAR

| Code                  | Subject                          | Credits | Type | Semester |
|-----------------------|----------------------------------|---------|------|----------|
| <a href="#">18201</a> | CHEMISTRY                        | 6       | FB   | 1        |
| <a href="#">18202</a> | BASIC PRINCIPLES OF BIOLOGY      | 6       | FB   | 1        |
| <a href="#">18203</a> | CELLS, TISSUES AND ORGANS        | 6       | FB   | 1        |
| <a href="#">18204</a> | PHYSICS                          | 6       | FB   | 1        |
| <a href="#">18205</a> | MATHEMATICS                      | 6       | FB   | 1        |
| <a href="#">18206</a> | ORGANIC CHEMISTRY                | 6       | FB   | 2        |
| <a href="#">18207</a> | GENES AND EVOLUTION              | 6       | FB   | 2        |
| <a href="#">18208</a> | INTRODUCTION TO MICROBIOLOGY     | 6       | FB   | 2        |
| <a href="#">18209</a> | APPLIED STATISTICS               | 6       | FB   | 2        |
| <a href="#">18210</a> | BASIC PRINCIPLES OF BIOCHEMISTRY | 6       | FB   | 2        |

### SECOND YEAR

| Code                  | Subject                                    | Credits | Type | Semester |
|-----------------------|--|---------|------|----------|
| <a href="#">18211</a> | METHODS IN BIOCHEMISTRY                    | 6       | OB   | 1        |
| <a href="#">18212</a> | PHYSICAL BIOCHEMISTRY                      | 6       | OB   | 1        |
| <a href="#">18213</a> | STRUCTURE OF MACROMOLECULES                | 6       | OB   | 1        |
| <a href="#">18214</a> | EXPERIMENTAL BIOCHEMISTRY I                | 6       | OB   | 1        |
| <a href="#">18215</a> | PHYSIOLOGY I                               | 6       | OB   | 1        |
| <a href="#">18216</a> | FUNCTION OF MACROMOLECULES                 | 6       | OB   | 2        |
| <a href="#">18217</a> | MOLECULAR GENETICS AND GENETIC ENGINEERING | 6       | OB   | 2        |
| <a href="#">18218</a> | BIOMEMBRANES, TRANSPORT AND BIOENERGETICS  | 6       | OB   | 2        |
| <a href="#">18219</a> | EXPERIMENTAL BIOCHEMISTRY II               | 6       | OB   | 2        |
| <a href="#">18220</a> | 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<br>BIOLOGY | 6       | OB   | 1        |
| <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>18236</u> | GENOME AND DISEASE                              | 6       | OP   | 1        |
| <u>18237</u> | EXPERIMENTAL MODELS IN MOLECULAR<br>BIOMEDICINE | 6       | OP   | 1        |
| <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>18242</u> | GLYCOBIOLOGY            | 6       | OP   | 1        |
| <u>18241</u> | MICROBIAL BIOTECHNOLOGY | 6       | OP   | 2        |

#### COMMON TO ALL ROUTES

| Code         | Subject                | Credits | Type | Semester |
|--------------|------------------------|---------|------|----------|
| <u>18243</u> | MOLECULAR NEUROBIOLOGY | 6       | OP   | 1        |

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

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