



ACADEMIC TRANSCRIPT

Ms. Natalia Castellana Vila, Attestor of Faculty of Science of the Universitat Autònoma de Barcelona

HEREBY CERTIFIES: that the following information corresponds to the documents held on-file in this office,

STUDENT DETAILS

Name and surnames: Marc Antoni Mas Rodenas

National ID/NIE/Passport: 43199883H

Place of birth: Costa de La Calma

Date of birth: 29 October 1995

INFORMATION ON ACCESS TO UNIVERSITY STUDY

Access to current degree: The studies change partially realised at Universitat Autònoma de Barcelona

University-Access Examination Result: 12,09

INFORMATION ON DEGREE STUDIES

Centre: Faculty of Science

Studies: Bachelor's Degree in Physics

Payment Issuance Degree:

Weighted Average Grade: Scale 0-10

7,87 average grade calculated on a scale of 0-10 in accordance with RD 1125/2003, Sept. 5 (GC 19/03/2015)

SUBJECTS DETAILED IN THIS ACADEMIC TRANSCRIPT



Subject (credits / type)	Academic year	Conv. 1	Conv. 2
<p>100092 Current Scientific Matters 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:</p>	2015/16	O 9,6 A	
<p>- Introduction to Nanoscience and Nanotechnology. Taken at the: Universitat Autònoma de Barcelona.</p>	2013/14	J 9,6 A	
<p>100137 Mechanics and relativity 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:</p>	2015/16	O 8,4 B	
<p>- Microscope Laboratory and Material Classification Techniques. Taken at the: Universitat Autònoma de Barcelona.</p>	2014/15	J 8,3 B	
<p>- Advanced Classical Physics. Taken at the: Universitat Autònoma de Barcelona.</p>	2014/15	F 9,1 A	
<p>- General Physics: Electricity and Magnetism. Taken at the: Universitat Autònoma de Barcelona.</p>	2013/14	J 8,1 B	
<p>- General Physics: Mechanics and Waves. Taken at the: Universitat Autònoma de Barcelona.</p>	2013/14	F 7,8 B	
<p>100138 Electricity and magnetism 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:</p>	2015/16	O 8,4 B	
<p>- Microscope Laboratory and Material Classification Techniques. Taken at the: Universitat Autònoma de Barcelona.</p>	2014/15	J 8,3 B	
<p>- Advanced Classical Physics. Taken at the: Universitat Autònoma de Barcelona.</p>	2014/15	F 9,1 A	
<p>- General Physics: Electricity and Magnetism. Taken at the: Universitat Autònoma de Barcelona.</p>	2013/14	J 8,1 B	
<p>- General Physics: Mechanics and Waves. Taken at the: Universitat Autònoma de Barcelona.</p>	2013/14	F 7,8 B	
<p>100139 Structure of matter and thermodynamics 6,0 credits (Basic studies,Second Year) Branch of knowledge: Sciences Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:</p>	2015/16	O 8,5 B	
<p>- Thermodynamics, Kinetics and Phase Transformations. Taken at the: Universitat Autònoma de Barcelona.</p>	2014/15	J 9,2 A+	
<p>- Chemistry of Elements. Taken at the: Universitat Autònoma de Barcelona.</p>	2014/15	F 7,7 B	
<p>- Organic Chemistry. Taken at the: Universitat Autònoma de Barcelona.</p>	2014/15	J 9,1 A	
<p>- Chemical Bonding and Structure of Matter. Taken at the: Universitat Autònoma de Barcelona.</p>	2013/14	F 9,5 A+	
<p>- Chemical Reactivity. Taken at the: Universitat Autònoma de Barcelona.</p>	2013/14	J 7,5 B	



Subject (credits / type)	Academic year	Conv. 1	Conv. 2
100140 Waves and optics 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	J 5,0 C	
100141 Calculus I 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:	2015/16	O 9,6 A	
- Mathematical Tools. Taken at the: Universitat Autònoma de Barcelona.	2014/15	J 9,2 A	
- Calculus. Taken at the: Universitat Autònoma de Barcelona.	2013/14	F 9,9 A+	
- Fundamentals of Mathematics. Taken at the: Universitat Autònoma de Barcelona.	2013/14	J 9,8 A+	
100142 Calculus II 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	J 7,5 B	
100143 Algebra I 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:	2015/16	O 9,6 A	
- Mathematical Tools. Taken at the: Universitat Autònoma de Barcelona.	2014/15	J 9,2 A	
- Calculus. Taken at the: Universitat Autònoma de Barcelona.	2013/14	F 9,9 A+	
- Fundamentals of Mathematics. Taken at the: Universitat Autònoma de Barcelona.	2013/14	J 9,8 A+	
100144 Algebra II 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	J 5,8 C	
100145 Introduction to experimental physics 6,0 credits (Compulsory subject,First Year) Branch of knowledge: Sciences Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:	2015/16	O 8,4 B	
- Microscope Laboratory and Material Classification Techniques. Taken at the: Universitat Autònoma de Barcelona.	2014/15	J 8,3 B	
- Advanced Classical Physics. Taken at the: Universitat Autònoma de Barcelona.	2014/15	F 9,1 A	
- General Physics: Electricity and Magnetism. Taken at the: Universitat Autònoma de Barcelona.	2013/14	J 8,1 B	
- General Physics: Mechanics and Waves. Taken at the: Universitat Autònoma de Barcelona.	2013/14	F 7,8 B	



Subject (credits / type)	Academic year	Conv. 1	Conv. 2
<p>100147 Chemistry for physicists 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences</p> <p>Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:</p> <ul style="list-style-type: none"> - Thermodynamics, Kinetics and Phase Transformations. Taken at the: Universitat Autònoma de Barcelona. - Chemistry of Elements. Taken at the: Universitat Autònoma de Barcelona. - Organic Chemistry. Taken at the: Universitat Autònoma de Barcelona. - Chemical Bonding and Structure of Matter. Taken at the: Universitat Autònoma de Barcelona. - Chemical Reactivity. Taken at the: Universitat Autònoma de Barcelona. 	2015/16	O 8,5 B	
<p>100149 Electromagnetism 10,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences</p> <p>Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:</p> <ul style="list-style-type: none"> - Microscope Laboratory and Material Classification Techniques. Taken at the: Universitat Autònoma de Barcelona. - Advanced Classical Physics. Taken at the: Universitat Autònoma de Barcelona. - General Physics: Electricity and Magnetism. Taken at the: Universitat Autònoma de Barcelona. - General Physics: Mechanics and Waves. Taken at the: Universitat Autònoma de Barcelona. 	2015/16	O 8,4 B	
<p>100150 Laboratory mechanics 5,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences</p>	2015/16	F 7,7 B	
<p>100152 Differential equations 8,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences</p>	2015/16	F 7,3 B	
<p>100153 Calculation of Variables 8,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences</p> <p>Becomes effective on 15/10/2015. Recognized on the basis of the following subjects:</p> <ul style="list-style-type: none"> - Mathematical Tools. Taken at the: Universitat Autònoma de Barcelona. - Calculus. Taken at the: Universitat Autònoma de Barcelona. - Fundamentals of Mathematics. Taken at the: Universitat Autònoma de Barcelona. 	2015/16	O 9,6 A	



Subject (credits / type)	Academic year	Conv. 1	Conv. 2
<p>100154 Quantum physics I 6,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Becomes effective on 18/05/2017. Recognized on the basis of the following subjects:</p>	2016/17	Y 8,2 B	
<p>- Quantum Phenomena I. Taken at the: Universitat Autònoma de Barcelona.</p>	2015/16	F 8,2 B	
<p>100159 Optics laboratory 5,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences</p>	2016/17	J 8,2 B	
<p>100160 Complementary Mathematics 5,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences</p>	2016/17	J 5,7 C	
<p>100164 Introduction to photonics 5,0 credits (Optional subject,Third Year) Branch of knowledge: Sciences Taught in English</p>	2016/17	J 6,2 C	
<p>100165 Introduction to biophysics 5,0 credits (Optional subject,Third Year) Branch of knowledge: Sciences Becomes effective on 18/05/2017. Recognized on the basis of the following subjects:</p>	2016/17	Y 8,5 B	
<p>- Cell Biology. Taken at the: Universitat Autònoma de Barcelona.</p>	2013/14	F 8,5 B	
<p>100175 Solid state physics 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences Becomes effective on 18/05/2017. Recognized on the basis of the following subjects:</p>	2016/17	Y 6,6 C	
<p>- Solid State. Taken in English. Taken at the: Universitat Autònoma de Barcelona.</p>	2015/16	J 6,6 C	
<p>100184 Nanomaterial physics 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences Becomes effective on 18/05/2017. Recognized on the basis of the following subjects:</p>	2016/17	Y 7,7 B	
<p>- Nanoscale Physics. Taken at the: Universitat Autònoma de Barcelona.</p>	2016/17	F 7,7 B	
<p>100187 Electronics 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences Becomes effective on 18/05/2017. Recognized on the basis of the following subjects:</p>	2016/17	Y 8,4 B	
<p>- Electronic Mechanisms. Taken in English. Taken at the: Universitat Autònoma de Barcelona.</p>	2015/16	J 8,4 B	



Subject (credits / type)	Academic year	Conv. 1	Conv. 2
<p>103948 Introduction to Materials Science 5,0 credits (Optional subject,Third Year) Branch of knowledge: Sciences Becomes effective on 18/05/2017. Recognized on the basis of the following subjects:</p> <p>- Synthesis and Structure of Crystalline and Amorphous Materials. Taken at the: Universitat Autònoma de Barcelona.</p>	2016/17	Y 9,4 A	
<p>103950 Numerical Methods I 3,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences</p>	2016/17	J 6,8 C	
<p>103951 Numerical Methods II 5,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences</p>	2016/17	F 5,5 C	
<p>100155 Quantum physics II 6,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Taught in Programa Internacional leading to an academic degree of UNIVERSITÄT WIEN.</p>	2017/18	J 8,0 B	
<p>100157 Thermodynamics and statistical mechanics 9,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Taught in Programa Internacional leading to an academic degree of UNIVERSITÄT WIEN.</p>	2017/18	J 9,3 A	
<p>100173 Electrodynamics and synchrotron radiation 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences</p>	2017/18	F 5,7 C	
<p>100174 Statistical physics 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences</p>	2017/18	F 7,0 B	
<p>100179 Fluids and superfluids 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences</p>	2017/18	F 5,2 C	
<p>104051 Bachelor's Degree Final Project: L'origen de la vida a partir de la física prebiòtica 12,0 credits (Final project,Fourth Year) Branch of knowledge: Sciences</p>	2017/18	J 8,4 B	
<p>150302 Trimester English course 3,0 credits (Optional subject,Fourth Year) Taught in Programa Internacional leading to an academic degree of UNIVERSITÄT WIEN.</p>	2017/18	J 9,5 A	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
150401 Trimester German course 4,0 credits (Optional subject,Fourth Year) Taught in Programa Internacional leading to an academic degree of UNIVERSITÄT WIEN.	2017/18	J 9,0 A	
100148 Classical mechanics 10,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences	2018/19		
100151 Electromagnetism laboratory 5,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences	2018/19		
100156 Optics 9,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2018/19		
100158 Thermodynamics laboratory 5,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2018/19		



SUMMARY OF ACADEMIC RECORD

Total Subjects Passed: 34

Total Credits Attained: 206

Examination sessions are abbreviated as follows: **F**: February, **J**: June, **O**: October, **Y**: May.

The total number of subjects detailed on this transcript is 34, from a total of 206 credits, as detailed below:

Credits Passed by Type	Passed	Remaining	Required
Optional subject	58,0	0	63,0
Compulsory subject	76,0	0	105,0
Basic studies	60,0	0	60,0
Final project	12,0	0	12,0

ADDITIONAL INFORMATION: UNIVERSITAT AUTÒNOMA DE BARCELONA

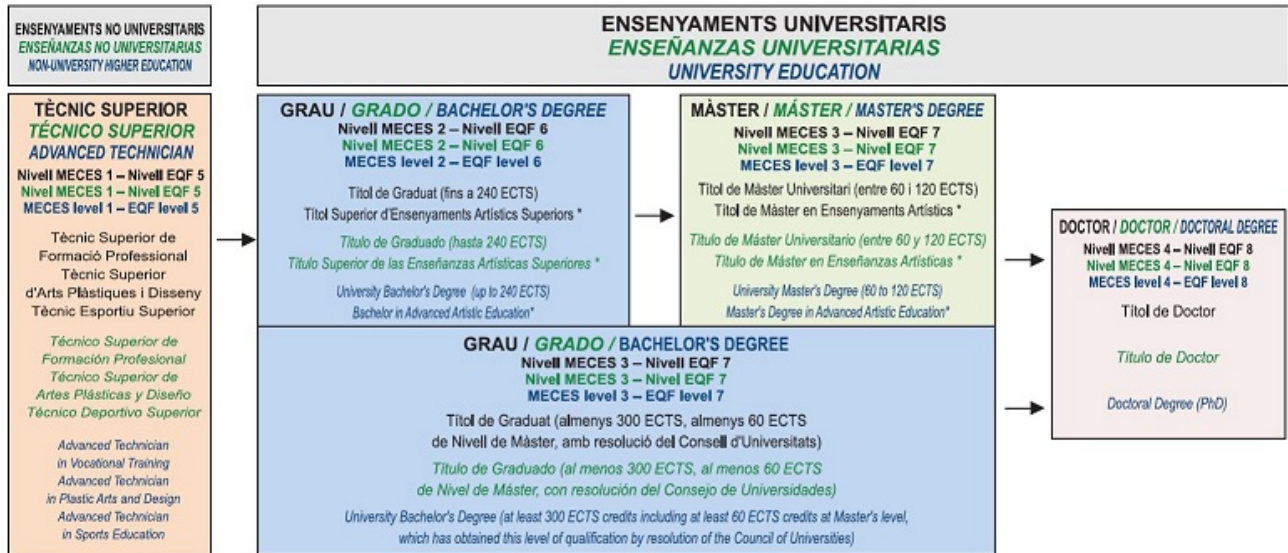
The Universitat Autònoma de Barcelona is a Catalan public university with three campus sites in the metropolitan region of Barcelona.

The university is regulated by the Spanish Universities Act; the Catalan Universities Act and the developmental regulations of these laws as established by Spain and the Government of Catalonia, through their respective powers. It is additionally regulated by its own Decree (Law 5/1968 of 6 June 1968) and its Statutes approved by Decree 237/2003 of 8 October 2003 (Article 1). The University is registered with code 22 in the Spanish

Registry of Universities, Centres and Degrees (RUCT).



ADDITIONAL INFORMATION: GRADING SYSTEM		
SRD 1125/2003 Scale 0-10	SRD 1044/2003 Scale 0-4	ECTS Scale
Absent/Not assessable	Absent/Not assessable	-
Fail: 0.0 - 4.9	Fail: 0	F
C: 5.0 - 6.9	C: 1	C
B: 7.0 - 8.9	B: 2	B
A: 9.0 - 10	A: 3	A
A with Honours: 9.0-10	A with Honours: 4	A+



* Els Ensenyaments Artístics Superiors són Ensenyaments no Universitaris dins del Sistema Educatiu espanyol d'Ensenyament Superior
 * Las Enseñanzas Artísticas Superiores son Enseñanzas no Universitarias dentro del Sistema Educativo español de Enseñanza Superior
 * Advanced Artistic Education is non-university education within the Spanish Higher Education System

And thereby, I sign this certificate at the request of the interested party.

Bellaterra, 6 February 2019

This certificate, which contains 8 pages is valid for 3 years from date of issuance.