



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: Elisabet Roda Salichs
National ID/NIE/Passport: 47277022Q
Place of birth: Barcelona
Date of birth: 4 April 1997

INFORMATION ON DEGREE STUDIES
Centre: Faculty of Science
Studies: Bachelor's Degree in Physics
Study-completion date: June-2020
Payment Issuance Degree: 21 September 2020
Weighted Average Grade: Scale 0-10
8,35 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
100092 Current Topics in Science 6,0 credits (Basic studies, First Year) Branch of knowledge: Sciences	2015/16	J 9,5 A+	
100137 Mechanics and Relativity 6,0 credits (Basic studies, First Year) Branch of knowledge: Sciences	2015/16	F 5,5 C	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
100138 Electricity and Magnetism 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	J 8,1 B	
100140 Waves and Optics 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	J 9,0 A	
100141 Calculus I 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	F 7,0 B	
100142 Calculus II 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	J 9,2 A+	
100143 Algebra I 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	F 8,5 B	
100144 Algebra II 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	J 7,3 B	
100145 Introduction to Experimental Physics 6,0 credits (Compulsory subject,First Year) Branch of knowledge: Sciences	2015/16	J 8,0 B	
100147 Chemistry for Physicists 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2015/16	F 8,0 B	
100096 Algebraic Structures 9,0 credits (Optional subject,Fourth Year) Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2016/17	J 6,4 C	
- Algebraic Structures. Taken at the: Universitat Autònoma de Barcelona	2016/17	J 6,4 C	
100139 Structure of Matter and Thermodynamics 6,0 credits (Basic studies,Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2016/17	J 7,5 B	
- Structure of Matter and Thermodynamics. Taken at the: Universitat Autònoma de Barcelona	2016/17	J 7,5 B	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
100148 Classical Mechanics 10,0 credits (Compulsory subject, Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2016/17	J 5,1 C	
- Classical Mechanics. Taken at the: Universitat Autònoma de Barcelona	2016/17	J 5,1 C	
100149 Electromagnetism 10,0 credits (Compulsory subject, Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2016/17	J 9,7 A	
- Electromagnetism. Taken at the: Universitat Autònoma de Barcelona	2016/17	J 9,7 A	
100150 Mechanics Laboratory 5,0 credits (Compulsory subject, Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2016/17	F 9,6 A+	
- Mechanics Laboratory. Taken at the: Universitat Autònoma de Barcelona	2016/17	F 9,6 A+	
100151 Electromagnetism Laboratory 5,0 credits (Compulsory subject, Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2016/17	J 8,3 B	
- Electromagnetism Laboratory. Taken at the: Universitat Autònoma de Barcelona	2016/17	J 8,3 B	
100153 Multivariable Calculus 8,0 credits (Compulsory subject, Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2016/17	F 6,9 C	
- Calculus in Many Variables and Optimization. Taken at the: Universitat Autònoma de Barcelona	2016/17	F 6,9 C	
100098 Seminar in Discrete Mathematics 6,0 credits (Optional subject, Third Year) Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2017/18	F 8,7 B	
- Seminar in Discrete Mathematics. Taken at the: Universitat Autònoma de Barcelona	2017/18	F 8,7 B	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
100101 Differential Equations and Modelling II 6,0 credits (Optional subject,Third Year) Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2017/18	J 9,1 A	
- Differential Equations and Modelling II. Taken at the: Universitat Autònoma de Barcelona	2017/18	J 9,1 A	
100152 Differential Equations 8,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2017/18	F 7,0 B	
- Differential Equations and Modelling I. Taken at the: Universitat Autònoma de Barcelona	2017/18	F 7,0 B	
100154 Quantum Physics I 6,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2017/18	F 8,5 B	
- Quantum Physics I. Taken at the: Universitat Autònoma de Barcelona	2017/18	F 8,5 B	
100155 Quantum Physics II 6,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2017/18	J 9,4 A	
- Quantum Physics II. Taken at the: Universitat Autònoma de Barcelona	2017/18	J 9,4 A	
100160 Complementary Mathematics 5,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2017/18	J 6,0 C	
- Complex and Fourier Analysis. Taken at the: Universitat Autònoma de Barcelona	2017/18	J 6,0 C	
103950 Numerical Methods I 3,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2017/18	J 9,1 A	
- Numerical Methods. Taken at the: Universitat Autònoma de Barcelona	2017/18	J 9,1 A	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
103951 Numerical Methods II 5,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2017/18	J 9,1 A	
- Numerical Methods. Taken at the: Universitat Autònoma de Barcelona	2017/18	J 9,1 A	
100104 Probability and Stochastic Modelling 8,0 credits (Optional subject,Fourth Year) Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2018/19	F 9,0 A	
- Probability and Stochastic Modelling. Taken at the: Universitat Autònoma de Barcelona	2018/19	F 9,0 A	
100105 Statistics 7,0 credits (Optional subject,Fourth Year) Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2018/19	J 10,0 A	
- Statistics. Taken at the: Universitat Autònoma de Barcelona	2018/19	J 10,0 A	
100156 Optics 9,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2018/19	J 7,5 B	
- Optics. Taken at the: Universitat Autònoma de Barcelona	2018/19	J 7,5 B	
100157 Thermodynamics and Statistical Mechanics 9,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2018/19	J 9,3 A	
- Thermodynamics and Statistical Mechanics. Taken at the: Universitat Autònoma de Barcelona	2018/19	J 9,3 A	
100158 Thermodynamics Laboratory 5,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2018/19	F 9,4 A+	
- Thermodynamics Laboratory. Taken at the: Universitat Autònoma de Barcelona	2018/19	F 9,4 A+	
100159 Optics Laboratory 5,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2018/19	J 9,6 A+	
- Optics Laboratory. Taken at the: Universitat Autònoma de Barcelona	2018/19	J 9,6 A+	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
100167 Advanced Mathematical Methods 5,0 credits (Optional subject,Third Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2018/19	F 8,6 B	
- Advanced Mathematical Methods. Taken at the: Universitat Autònoma de Barcelona	2018/19	F 8,6 B	
100171 Quantum Mechanics 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2019/20	F 8,5 B	
- Quantum Mechanics. Taken at the: Universitat Autònoma de Barcelona	2019/20	F 8,5 B	
100172 Theoretical Mechanics and Non-linear Systems 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2019/20	F 10,0 A+	
- Theoretical Mechanics and Non-linear Systems. Taken at the: Universitat Autònoma de Barcelona	2019/20	F 10,0 A+	
100180 Quantum Optics 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2019/20	F 9,5 A	
- Quantum Optics. Taken at the: Universitat Autònoma de Barcelona	2019/20	F 9,5 A	
100182 Quantum Information 6,0 credits (Optional subject,Fourth Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2019/20	J 9,5 A	
- Quantum Information. Taken at the: Universitat Autònoma de Barcelona	2019/20	J 9,5 A	
104051 Bachelor's Degree Final Project: Statistical Inference in continuously monitored quantum systems 12,0 credits (Final project,Fourth Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Adapted on the basis of the following subjects:	2019/20	F 9,7 A+	
- Bachelor's Degree Final Project. Taken at the: Universitat Autònoma de Barcelona	2019/20	F 9,7 A+	

The completion of the following subjects in other study programmes is hereby recorded:

Subject (credits / type)	Academic year	Conv. 1	Sitting 2
100087 Functions of a Real Variable 12,0 credits (Basic Training)	2016/17	O 8,1 B	
100088 Linear Algebra 12,0 credits (Basic Training)	2016/17	O 7,9 B	
100089 Foundations of Mathematics 9,0 credits (Compulsory)	2016/17	O 9,5 A+	
100091 Computational Tools for Mathematics 9,0 credits (Basic Training)	2016/17	J 6,5 C	
100095 Linear Geometry 6,0 credits (Compulsory)	2016/17	F 5,7 C	
100137 Mechanics and Relativity 6,0 credits (Basic Training)	2016/17	O 5,5 C	
100138 Electricity and Magnetism 6,0 credits (Basic Training)	2016/17	O 8,1 B	
100140 Waves and Optics 6,0 credits (Basic Training)	2016/17	O 9,0 A	
100145 Introduction to Experimental Physics 6,0 credits (Compulsory)	2016/17	O 8,0 B	
100147 Chemistry for Physicists 6,0 credits (Basic Training)	2016/17	O 8,0 B	
100094 Mathematical Analysis 9,0 credits (Compulsory)	2017/18	F 7,0 B	
100106 Topology 6,0 credits (Compulsory)	2017/18	F 6,8 C	
100102 Galois Theory 6,0 credits (Compulsory)	2018/19	F 9,0 A	
100107 Differential Geometry 12,0 credits (Compulsory)	2018/19	J 9,1 A	
70033 6,0 credits (Optional)	2019/20	L Passed	
100108 Bachelor's Degree Final Project 12,0 credits (Final project)	2019/20	J 9,4 A	
100110 Real and Functional Analysis 6,0 credits (Optional)	2019/20	F 7,8 B	
100116 Stochastic Processes 6,0 credits (Optional)	2019/20	J 9,4 A	

SUMMARY OF ACADEMIC RECORD

Total Subjects Passed: 37

Total Credits Attained: 242

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

The total number of subjects detailed on this transcript is 37, from a total of 242 credits, as detailed below:

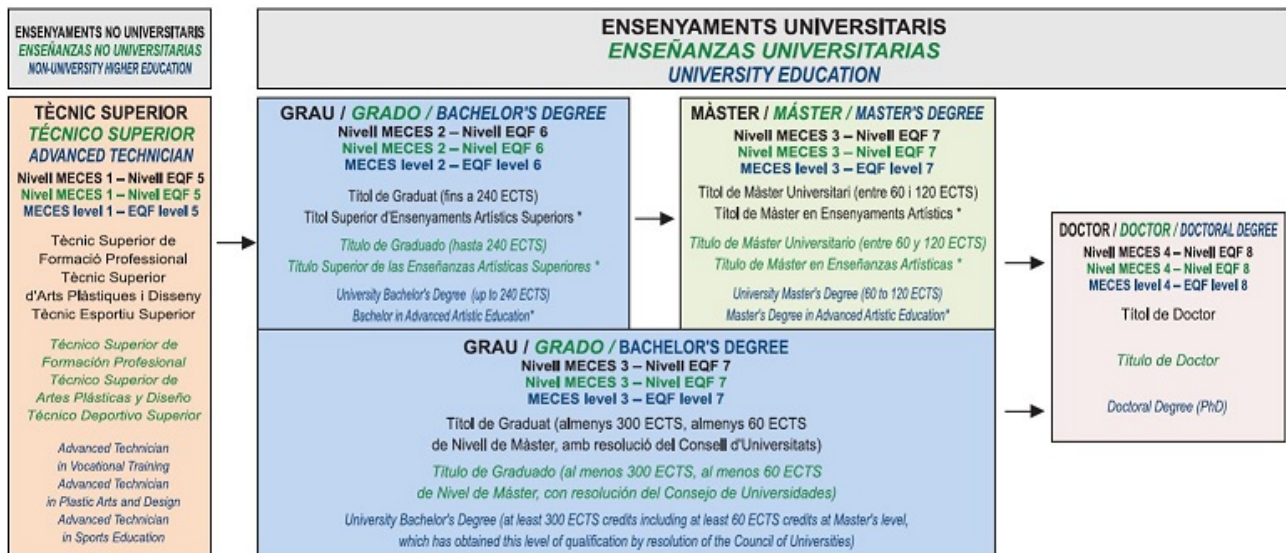
Credits Passed by Type	Passed	Remaining	Required
Basic studies	60,0	0	60,0
Compulsory subject	105,0	0	105,0
Optional subject	65,0	0	63,0
Final project	12,0	0	12,0
Academic Objective	Successfully Completed		
- Graduate in Physics	✓		

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		
Students academic performance is evaluated on a numerical scale from 0 to 10, in which 5 is the minimum grade for a pass. Correspondence with the qualitative grades approved by the UAB is the following:		
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, 29 March 2021



Document signed electronically.

This certificate, which contains 9 pages is valid for 3 years from date of issuance.



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: Elisabet Roda Salichs

National ID/NIE/Passport: 47277022Q

Place of birth: Barcelona

Date of birth: 4 April 1997

INFORMATION ON ACCESS TO UNIVERSITY STUDY

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

University-Access Examination Result: 13,164

INFORMATION ON DEGREE STUDIES

Centre: Faculty of Science

Studies: Bachelor's Degree in Mathematics

Study-completion date: July-2020

Payment Issuance Degree: 21 September 2020

Weighted Average Grade: Scale 0-10

7,97 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
100087 Functions of a Real Variable 12,0 credits (Basic studies, First Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Recognized	2016/17	O 8,1 B	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
100088 Linear Algebra 12,0 credits (Basic studies,First Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Recognized	2016/17	O 7,9 B	
100089 Foundations of Mathematics 9,0 credits (Compulsory subject,First Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Recognized	2016/17	O 9,5 A+	
100090 Physics 12,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2016/17	O 6,8 C	
100091 Computational Tools for Mathematics 9,0 credits (Basic studies,First Year) Branch of knowledge: Sciences	2016/17	J 6,5 C	
100092 Current Topics in Science 6,0 credits (Basic studies,First Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Recognized	2016/17	O 8,0 B	
100093 Calculus in Many Variables and Optimization 9,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences	2016/17	F 6,9 C	
100095 Linear Geometry 6,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences	2016/17	F 5,7 C	
100096 Algebraic Structures 9,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences	2016/17	J 6,4 C	
100099 Workshop in Modelling 9,0 credits (Basic studies,Second Year) Branch of knowledge: Sciences Becomes effective on 15/09/2020. Recognized	2016/17	O 8,0 B	
100148 Classical Mechanics 10,0 credits (Optional subject,Fourth Year)	2016/17	J 5,1 C	
100094 Mathematical Analysis 9,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences	2017/18	F 7,0 B	
100097 Numerical Methods 12,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences	2017/18	J 9,1 A	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
100098 Seminar in Discrete Mathematics 6,0 credits (Compulsory subject,Second Year) Branch of knowledge: Sciences	2017/18	F 8,7 B	
100100 Differential Equations and Modelling I 9,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2017/18	F 7,0 B	
100101 Differential Equations and Modelling II 6,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2017/18	J 9,1 A	
100103 Complex and Fourier Analysis 6,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2017/18	J 6,0 C	
100106 Topology 6,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2017/18	F 6,8 C	
100154 Quantum Physics I 6,0 credits (Optional subject,Fourth Year)	2017/18	F 8,5 B	
100155 Quantum Physics II 6,0 credits (Optional subject,Fourth Year)	2017/18	J 9,4 A	
100102 Galois Theory 6,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2018/19	F 9,0 A	
100104 Probability and Stochastic Modelling 8,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2018/19	F 9,0 A	
100105 Statistics 7,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2018/19	J 10,0 A	
100107 Differential Geometry 12,0 credits (Compulsory subject,Third Year) Branch of knowledge: Sciences	2018/19	J 9,1 A	
100157 Thermodynamics and Statistical Mechanics 9,0 credits (Optional subject,Fourth Year)	2018/19	J 9,3 A	
100108 Bachelor's Degree Final Project: Mathematical Modelling of treatment of cancer with Oncolytic viruses 12,0 credits (Final project,Fourth Year) Branch of knowledge: Sciences	2019/20	J 9,4 A	

Subject (credits / type)	Academic year	Conv. 1	Conv. 2
100110 Real and Functional Analysis 6,0 credits (Optional subject, Fourth Year) Branch of knowledge: Sciences	2019/20	F 7,8 B	
100116 Stochastic Processes 6,0 credits (Optional subject, Fourth Year) Branch of knowledge: Sciences	2019/20	J 9,4 A	
70033 Anglès nivell C1 6,0 credits (Optional subject, Fourth Year) Taken at the: . Becomes effective on 15/09/2020. Recognized	2019/20	L Passed	

SUMMARY OF ACADEMIC RECORD

Total Subjects Passed: 29

Total Credits Attained: 241

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

The total number of subjects detailed on this transcript is 29, from a total of 241 credits, as detailed below:

Credits Passed by Type	Passed	Remaining	Required
Basic studies	60,0	0	60,0
Compulsory subject	120,0	0	120,0
Optional subject	49,0	0	48,0
Final project	12,0	0	12,0
Academic Objective	Successfully Completed		
- Graduate in Mathematics	✓		

ADDITIONAL INFORMATION: UNIVERSITAT AUTÒNOMA DE BARCELONA

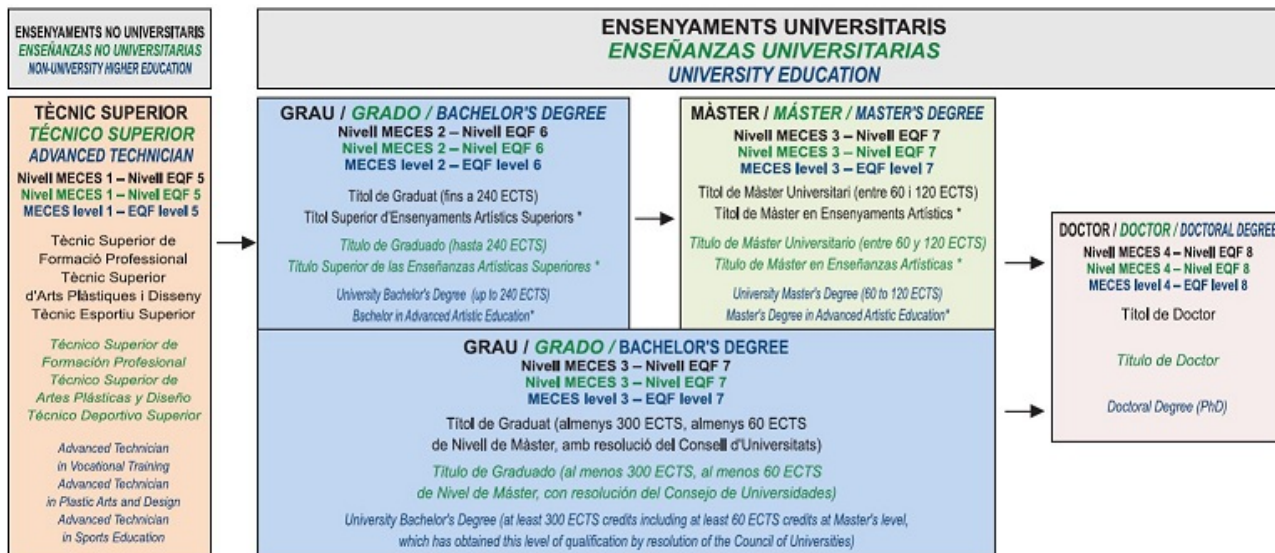
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Absent/Not assessable	Absent/Not assessable	-
Fail: 0.0 - 4.9	Fail: 0	F
C: 5.0 - 6.9	C: 1	C
B: 7.0 - 8.9	B: 2	B
A: 9.0 - 10	A: 3	A
A with Honours: 9.0-10	A with Honours: 4	A+



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* 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

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Bellaterra, 29 March 2021



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