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Tempus Project n. 517340-TEMPUS-1-2011-1-IT-TEMPUS-SMGR On-line Quality Assurance of Study Programmes (EQUASP)

Example of

Documentation for Quality Assurance of Study Programmes according to the EQUASP Model

Bachelor in Physics

Documentation File - Annexes

November 2015

Year/	Course Unit	ECTS	Locturor(c)			
Semester Course Unit		credits	Lecturer(s)			
l/1°	Physics 1	6	Bernabeu Guillermo			

Curriculum - Academic Year 2013-14

С

Curriculum - Academic Year 2013-14 Characteristics of the Course Units

Name	Physics 1
Year / Semester	1/1°
Lecturer	Bernabeu Guillermo
Specific learning	
outcomes	
Contents	
Schedule	
instructional forms of education	Face to face, 60 hours
Teaching techniques	Lectures, 35 hours Practical classes, 20 hours Laboratory sessions, 5 hours
Assessment methods	Written and oral
Assessment criteria	
Assessment metrics	Attribution of a final grade
Criteria of attribution of the final grade	
Preparatory course units	Mathematics1
Didactic material	Bernabeu G., Physics 1, Equasp Edition
Name	

	Unaracteristics of the Unaddation Exam
Workload	
Requirements to	
be fulfilled by the	
final work	
Criteria for the	
attribution of the	
graduation grade	

Characteristics of the Graduation Exam

Suitability of the curriculum to the achievement of the expected learning outcomes Academic Year 2013-14

Learning outcomes	Course units which contribute to the accomplishment of the learning outcome				
Ability to demonstrate knowledge and understanding of physics fundamentals in: classical mechanics, vibrations and waves, optics and spectroscopy, thermodynamics, electromagnetism, quantum physics. The level of this knowledge of core physics is a basic one, i.e. the level needed for working with established areas of applications but not as high as is needed for research at the frontiers of knowledge.	Physics 1 Physics 2				

Lecturer	Qualification *	Course units of the SP **	Course units of other SP
Bernabeu Guillermo	FP	Physic 1 (ID)	Physics 2 (AD)
 Musaio Angelo	PR	Experimental Physics (C)	

Teaching Staff - Academic Year 2013-14

* FP: Full Professor; AP: Associate professor; ...; PR: Professional. ** ID: Institutional Duty; AD: Additional Duty; ...; C: Contract.

BACHELOR IN PHYSICS

Teaching Support Staff - Academic Year 2013-14

Course Unit	Support Teacher	Qualification	N. of hours of didactic workload	Task
Mathematics 1	Zich Michele	PhD Student	40	Practical Training
 Experimental Physics	Holzer David	Professional	12	Lab Assistance

PHYSICS DEPARTMENT

Classrooms						
Classroom	Number of seats	Audiovisual equipment	Web connection	Surveillance Staff		
PD1	40	Multimedia projector	Yes	1 auxiliary (9.00-13.00 14.00-18.00)		

PHYSICS DEPARTMENT

	Laboratories		
Laboratory	Equipment	Work places / N. students per work place	Technical Staff
Informatics	30 PC	30/2	1 technician (9.00-13.00 14.00-18.00)
Metrology	Equipment for measuring mechanical quantities	6/4	1 technician (9.00-13.00 14.00-18.00)
			,

PHYSICS DEPARTMENT

Libraries				
	Library of the Physics Department			
Bibliographical material of interest for the didactic				
activities of the Bachelor				
in Physics				
Web Connection				
Services offered				
Opening time and access				
rules				
Librarian staff available				

Partnerships for carrying out training periods outside the University

	No. of students	No. of students	No. of students
Organization / Institution	involved	involved	involved
	A.Y. 2010/11	A.Y. 2011/12	A.Y. 2012/13

BACHELOR IN PHYSICS

Institution	No. of students in exit A.Y. 2010/11	No. of students in entrance A.Y. 2010/11	No. of students in exit A.Y. 2011/12	No. of students in entrance A.Y. 2011/12	No. of students in exit A.Y. 2012/13	No. of students in entrance A.Y. 2012/13

Partnerships for carrying out mobility periods

PHYSICS DEPARTMENT

Needs of financial resources for the didactic activities - Academic rea	1 2013-14
Expense Voices	€
Remuneration of the contract teachers	
Remuneration of the support teachers	
Updating of the equipment of the didactic laboratories	
Maintenance of the didactic laboratories	
Didactic material to be distributed to students	

Needs of financial resources for the didactic activities - Academic Year 2013-14

PHYSICS DEPARTMENT

Availability of financial resources for the didactic activities - Academic Year 2013-14

Financer Body	€	Available for					
Central Administration of the		Remuneration of the contract teachers					
University		Remuneration of the support teachers					
Students' contributes		Updating of the equipment of the didactic laboratories Maintenance of the didactic laboratories Didactic material to be distributed to students					
UBI Bank		Updating of the equipment of the didactic laboratories					

Results of the assessment of the possession of the admission requirements

	A.Y. 2010/11	A.Y. 2011/12	A.Y. 2012/13
No. of students with an admission grade between and			
No. of students with an admission grade >			

Students enrolled in t	Students enrolled in the first course year					
	A.Y. 2010/11	A.Y. 2011/12	A.Y. 2012/13			
Students enrolled in the first	course year					
New enrolments						
Provenance from other study programmes						
Students enrolled in the first course year subdivi	ded per geographical	provenance				
Residents in the same town						
Residents in the same region						
Foreign students						
Students enrolled in the first course year subdi	vided per school of pr	ovenance				
Secondary school						
Advanced secondary school						
College						
Students enrolled in the first course year subdivided per	grade of the school-le	eaving examination				
No. of students with grade of the school-leaving examination between and						
No. of students with grade of the school-leaving examination >						

Students enrolled in the first course year

Results of the tests for the assessment of the students' learning

		A.Y. 2				A.Y. 2			0	A.Y. 2	012/13	
Course units *	No. of students **	No. of students who have overcome the exam ***	Average grade	Variation	No. of students **	No. of students who have overcome the exam ***	Average grade	Variation	No. of students **	No. of students who have overcome the exam ***	Average grade	Variation

* In alphabetical order.

*** With reference to the students who had the course unit in their study plan in the year under consideration.
 *** With reference to the students who had the course unit in their study plan in the year under consideration.

Enrolments in the different course years

	A.Y. 2010/11	A.Y. 2011/12	A.Y. 2012/13
No. of students enrolled in the 1 st course year			
Students enrolled in the 2 nd course year holding to the reference cohort*			
Total number of students enrolled in the 2 nd course year			
Students enrolled in the 3 rd course year holding to the reference cohort			
Total number of students enrolled in the 3 rd course year			
Students enrolled in the 4 th course year holding to the reference cohort			
Total number of students enrolled in the 4 th course year			
Out-of-course students** holding to the reference cohort			
Total number of out-of-course students			

* Cohort: whole of the students enrolled in the first course year in the academic year of reference. ** University students who have failed to complete their course in the prescribed time.

1	Dropouts		
	A.Y. 2010/11	A.Y. 2011/12	A.Y. 2012/13
Dropouts between the 1st and 2 nd course year			
Students who have changed study programme in the same University			
Students who have changed University			
Dropouts between the 2 nd and 3 rd course year			
Students who have changed study programme in the same University			
Students who have changed University			
Dropouts between the 3 rd and 4th course year			
Students who have changed study programme in the same University			
Students who have changed University			
····			

Credits acquired by the students passing from one course year to the successive one

	· · · · · · · · · · · · · · · · · · ·	A.Y. 2010/11	A.Y. 2011/12	A.Y. 2012/13
	No. of students			
Students holding to the 2 nd course	Median of the acquired credits			
year enrolled in the reference cohort	Average value of the acquired credits			
	Variation			
	No. of students			
Students enrolled in the 3 rd course	Median of the acquired credits			
year holding to the reference cohort	Average value of the acquired credits			
	Variation			
	No. of students			
Students enrolled in the 4 th course	Median of the acquired credits			
year holding to the reference cohort	Average value of the acquired credits			
	Variation			
	No. of students			
Out-of-course students holding to the	Median of the acquired credits			
reference cohort	Average value of the acquired credits			
	Variation			

Graduates

	A.Y. 2010/11	A.Y. 2011/12	A.Y. 2012/13
No. of graduates			
Graduates holding to the cohort of A.Y. 2009/10	-	-	
Graduates holding to the cohort of A.Y. 2008/09	-		
Graduates holding to the cohort of A.Y. 2007/08			
Graduates with graduation grade $\geq \dots$			

Questionnaire for the monitoring of the students' opinion on the course units

Identification of the course unit

At least: Academic Year / Study Programme / Course Unit

Questions

a) Organization of the course unit

Timetable of the educational activities

1. Is the timetable of the educational activities (lectures, seminars, exercises, laboratory activities, etc.) compatible with the possibility to attend the lectures of all the other course units and, at the same time, with your needs of individual study? *Possible answers:* Yes / More yes than no / More no than yes / No

Prior knowledge

2. Was your prior knowledge sufficient to understand the topics covered by the course unit? *Possible answers:* Yes / More yes than no / More no than yes / No

Study materials

3. Are the indicated, recommended or provided study materials (textbooks, presentations, etc.) adequate for the study and learning of the topics covered by the course unit? *Possible answers:* Yes / More yes than no / More no than yes / No

Examination modalities

4. Have the examination modalities been clearly defined before the beginning of the course unit? *Possible answers:* Yes / More yes than no / More no than yes / No

b) Teaching activity

Respect of the timetable of the educational activities

5. Have the educational activities (lectures, seminars, exercises, laboratory activities, etc.) been carried out according to the established timetable? *Possible answers:* Yes / More yes than no / More no than yes / No

Respect of the course-unit syllabus

6. Do the topics developed in the course unit correspond to the established syllabus? *Possible answers:* Yes / More yes than no / More no than yes / No

Effectiveness of the integrative educational activities1

7. Are the integrative educational activities (seminars, exercises, laboratory activities, etc.) coordinated with the lectures?

Possible answers: There are no integrative educational activities / Yes / More yes than no / More no than yes / No

8. Are the integrative educational activities (seminars, exercises, laboratory activities, etc.) effective for the learning of the discipline covered by the course unit?

¹ Integrative educational activities: all the educational activities different from lectures (seminars, exercises, laboratory activities, etc.).

Possible answers: There are no integrative educational activities / Yes / More yes than no / More no than yes / No

Teaching skills of the lecturer

9. Does the lecturer present the topics in a clear and understandable way? *Possible answers:* Yes / More yes than no / More no than yes / No
10. Does the lecturer stimulate the interest/motivate in the discipline covered by the course unit? *Possible answers:* Yes / More yes than no / More no than yes / No

Availability of the lecturer for questions and explanations

11. Is the lecturer available for questions and explanations? *Possible answers:* Yes / More yes than no / More no than yes / No

Teaching skills of teaching support staff²

12. Does the teaching support staff present the topics in a clear and understandable way? *Possible answers:* There is no teaching support staff / Yes / More yes than no / More no than yes / No
13. Does the teaching support staff stimulate the interest/motivate in the discipline? *Possible answers:* There is no teaching support staff / Yes / More yes than no / More no than yes / No

<u>Availability of the teaching support staff for questions and explanations</u> 14. Is the teaching support staff available for questions and explanations? *Possible answers:* There is no teaching support staff / Yes / More yes than no / More no than yes / No

c) Facilities used by the course unit

Lecture rooms

15. Are the lecture rooms in which the educational activities have been carried out adequate (as for to get seated, to see well, to hear well, to write well)? *Possible answers:* Yes / More yes than no / More no than yes / No

Premises and equipment for the integrative educational activities

16. Are the premises and equipment for the integrative study activities (seminars, tutorials, laboratories, etc.) adequate?

Possible answers: Yes / More yes than no / More no than yes / No

d) Interest and usefulness of the course unit

Interest of the course unit

17. Are the topics covered by the course unit of your interest? *Possible answers:* Yes / More yes than no / More no than yes / No

Usefulness of the course unit

18. Do you think that the topics covered by the course unit will be useful for your future occupation/profession? *Possible answers:* Yes / More yes than no / More no than yes / No

e) Further observations and suggestions

² Teaching support staff: teachers in charge of exercises, teachers in charge of laboratory activities, etc..

Questionnaire for the monitoring of the students' opinion on the training periods outside the University

Information on the student

At least: Study Programme / Year of enrolment / Number of credits accumulated before the start of the training period outside University

Information on the training period

At least: Company/Organization where the training period has been carried out / Topic of the training period / Duration of the training period (from ... to ...) / Total number of training hours

Questions

Interest of the topic(s) of the training period 1. Has the topic of the training period been of your interest? *Possible answers:* Yes / More yes than no / More no than yes / No

<u>Correspondence between planned and carried out training activities</u> 2. Was there correspondence between planned and carried out training activities? *Possible answers:* Yes / More yes than no / More no than yes / No

<u>Duration and number of training hours of the training period</u> 3. Have the duration of the training period and the number of training hours been adequate? *Possible answers:* Yes / More yes than no / More no than yes / No

Effectiveness of the training period as for the improvement of the subject-area related competences³ 4. Has the training period improved your subject-area related competences? *Possible answers:* Yes / More yes than no / More no than yes / No

Effectiveness of the training period as for the improvement of the generic competences⁴ 5. Has the training period improved your generic competences? *Possible answers:* Yes / More yes than no / More no than yes / No

<u>Company/organization tutoring</u> 6. Has the company/organization tutoring been adequate? *Possible answers:* Yes / More yes than no / More no than yes / No

<u>Assessment of the hosting company/organization</u> 7. Would you carry out again the training period in the same company/organization? *Possible answers:* Yes / More yes than no / More no than yes / No

Further Observations and Suggestions

³ Subject-area related competences: competences specific to a field of study.

⁴ Generic competences: competences common to any study programme.

BACHELOR IN PHYSICS Questionnaire for the monitoring of the students' opinion on the periods of mobility

Information on the student

At least: Study Programme / Year of enrolment / Number of credits accumulated before the start of the mobility

Mobility programme

At least: University and Department where the mobility has been carried out / Duration of the mobility (from ... to ...) / Number of credits to be accumulated according to the mobility programme / Number of credits accumulated at the end of the mobility period

Questions

Language knowledge

1. Was your knowledge of the language sufficient to understand the topics covered by the course units? *Possible answers:* Yes / More yes than no / More no than yes / No

Usefulness of the course units

2. Have the course units you followed during the period of mobility been recognized as an integral part of your curriculum?

Possible answers: Yes / More yes than no / More no than yes / No

Organization of the course units

3. What is your assessment of the organization of the course units (timetable of the educational activities, workload required for the achievement of the learning outcomes, availability of study materials, definition of the examination modalities)?

Possible answers: Positive / More positive than negative / More negative than positive / Negative

Teaching activities

4. What is your assessment of the teaching activities (respect of the timetable of the educational activities, respect of the syllabus of the course units, effectiveness of the integrative educational activities⁵, teaching skills of the lecturer and of teaching support staff, availability of the lecturers and of teaching support staff for questions and explanations)?

Possible answers: Positive / More positive than negative / More negative than positive / Negative

Facilities used by the course units

5. What is your assessment of the facilities used by the course units (lecture rooms, premises and equipment for the integrative educational activities, libraries)?

Possible answers: Positive / More positive than negative / More negative than positive / Negative

Examinations organization

6. What is your assessment of the examination organization (appeals, schedules, information, reservations, etc.)?

Possible answers: Positive / More positive than negative / More negative than positive / Negative

⁵ Integrative educational activities: all the educational activities different from lectures (seminars, exercises, laboratory activities, etc.).

Support services

7. What is your assessment of the tutoring service? *Possible answers:* Positive / More positive than negative / More negative than positive / Negative

Positive aspects of the mobility period

8. What have been the positive aspects of your mobility period?

Negative aspects of the mobility period

9. What have been the negative aspects of your mobility period?

Overall assessment of the mobility period

10. What is your overall assessment of the mobility period? *Possible answers:* Positive / More positive than negative / More negative than positive / Negative

Assessment of the hosting University/Department

11. Would you carry out the mobility period in the same University/Department again? *Possible answers:* Yes / More yes than no / More no than yes / No

Further Observations and Suggestions

Questionnaire for the monitoring of the final year students' opinion on the educational process and on the student support services

Information on the graduate

At least: Age / Sex / Residence / Study Programme / Year of enrolment

Information on the carrying out of working activities Example of question: Have you worked during the lecture periods? Possible answers: Yes, full-time with continuity / Yes, part-time with continuity / Yes, but only occasionally, intermittently, seasonally/ No

Questions

a) Organization of the study programme

Individual learning and teaching path

1. Had you the possibility / have you been encouraged to design an individual learning and teaching path? Possible answers: Yes / More yes than no / More no then yes / No

Organization of the course units

2. Has the overall organization of the course units (sequence of the course units in the syllabus, coordination among the course units, timetable of the educational activities) been satisfactory? Possible answers: Yes / More yes than no / More no then yes / No

Required workload

3. Was the overall workload required by the course units for the achievement of the learning outcomes sustainable and appropriate to the duration of the SP? Possible answers: Yes / More yes than no / More no then yes / No

Examination organization

4. Has the overall organization of examinations (appeals, schedules, information, reservations, etc.) been satisfactory?

Possible answers: Positive / More positive than negative / More negative than positive / Negative

Correspondence between the examination results and the student's preparation 5. Have the results of the examinations reflected your actual preparation? Possible answers: Yes / More yes than no / More no then yes / No

Assistance to the preparation of the graduation exam

6. Has the assistance received during the preparation of the graduation exam been satisfactory? Possible answers: Yes / More yes than no / More no then yes / No

b) Facilities used by the study programme

Logistic of the facilities used by the SP

7. What is your overall assessment of the logistic of facilities (lecture rooms, premises available for individual study, laboratories, including computer rooms) used by the SP?

Possible answers: Positive / More positive than negative / More negative than positive / Negative

Library services

8. What is your overall assessment of the library services (in particular: opening hours, access to lending and consultation, access to databases, availability and professionalism of the staff)? *Possible answers:* Positive / More positive than negative / More negative than positive / Negative

c) Student support services

Service offered by the student administrative office/dean's office6

9. What is your overall assessment of the service offered by the student administrative office/dean's office (in particular, access times, clarity of forms, availability and professionalism of the staff)? *Possible answers:* I have not used this service / Positive / More positive than negative / More negative than positive / Negative

Orienteering service for students in entrance/service offered by the Admission Office

10. What is your overall assessment of the orienteering service for students in entrance/service offered by the Admission Office?

Possible answers: I have not used this service / Positive / More positive than negative / More negative than positive / Negative

Tutoring service

11. What is your overall assessment of the tutoring service?

Possible answers: I have not used this service / Positive / More positive than negative / More negative than positive / Negative

Service for carrying out training periods outside University7

12. What is your overall assessment of the service for carrying out training periods outside University? *Possible answers:* I have not used this service / Positive / More positive than negative / More negative than positive / Negative

Service for students' mobility⁸

13. What is your overall assessment of the service for students' mobility? *Possible answers:* I have not used this service / Positive / More positive than negative / More negative than positive / Negative

Job placement service

14. What is your overall assessment of the job placement service?

Possible answers: It was not present / I have not used this service / Positive / More positive than negative / More negative than positive / Negative

Website of the University/Department/SP

15. What is your overall assessment of the University/Department/SP website (in particular as for ease of navigation, completeness and update of information on the study programme, etc.)? *Possible answers:* I have not used the website / Positive / More positive than negative / More negative than positive / Negative

d) Overall assessments

⁶ Student administrative office/Dean's office: Office that manage the students' career (enrolments in the different course years, management of the administrative practices, etc.).

⁷ Training periods in national and/or international public and/or private bodies.

⁸ Mobility periods in national and/or international Higher Education Institutions.

Assessment of the SP

16. Are you satisfied of the SP you attended? *Possible answers:* Yes / More yes than no / More no than yes / No

Assessment of the University experience

17. If you could go back in time, would you enrol in University again?

Possible answers: Yes, in the same SP of this university / Yes, but in another SP of this university / Yes, in the same SP but in another university / Yes, but in another SP in another university / No, I would not enrol in university

Questionnaire for the monitoring of the graduates' job placement and of the employed graduates' opinions on the education received

Information on the employed graduate

Name and Surname / Age / Sex / Residence / Study Programme / Year of enrolment / Year of graduation

Questions

Graduate's current position/occupation

1. Which is your current position/occupation?

Possible answers: I am working in an area consistent with my qualification / I am working in a sector other than that of my qualification / I am looking for job / I am continuing or I intend to continue my studies / I am not looking for job and I do not intend to continue my studies / Other (military service, maternity leave, etc.)

Necessity of an educational qualification

2. Does your current position require an educational qualification equivalent to yours? *Possible answers:* Yes, it is a requirement by law / It is not a requirement by law, but it is necessary / It is not a requirement by law, but it is still useful / It is not a requirement by law and is not useful

Utilization of the competences acquired at University

3. Are you using/Have you used the competences acquired at University in the activities you are carrying out/have carried out?

Possible answers: Yes / More yes than no / More no than yes / No

Time to full operativeness / profitability

4. How much time was needed to become fully operative / profitable? *Possible answers:* Up to 3 months / Up to 6 months / Up to 1 year / More than 1 year

Usefulness of the training periods outside University9

5. Have the training periods carried out outside University helped you to enter the work environment? *Possible answers:* I have not carried out any training period outside University /Yes / More yes than no / More no than yes / No

Usefulness of the mobility periods¹⁰

6. Have the carried out mobility periods helped you to enter the work environment? *Possible answers:* I have not carried out any mobility period /Yes / More yes than no / More no than yes / No

Usefulness of the job placement service

7. Has the job placement service offered by the University been useful for finding a job? *Possible answers:* A job placement service was not provided / I did not use the job placement service / Yes / More yes than no / More no than yes / No

Satisfaction on the acquired subject-area related competences11

⁹ Training periods in national and/or international public and/or private bodies.

¹⁰ Mobility periods in national and/or international Higher Education Institutions.

¹¹ Subject-area related competences: competences specific to a field of study.

8. According to your working experience, what is your assessment of the education received by the attended SP as for the acquired subject-area related competences?

Possible answers: Positive / More positive than negative / More negative than positive / Negative

Missing subject-area related competences

9. If your assessment is not 'Positive', please list the main subject-area related competences that would have served you according to your working experience and that you have not acquired during your studies.

Satisfaction on the acquired generic competences12

10. According to your working experience, what is your assessment of the education received by the attended SP as for the acquired generic (making judgment, communication, team-working/leadership, lifelong learning) competences?

Possible answers: Yes / More yes than no / More no than yes / No

Missing generic competences

11. If your assessment is not 'Positive', please list the main generic competences that would have served you according to your working experience and that you have not acquired during your studies.

Main strengths of the attended SP

12. List the main strengths of the attended SP according to your opinion

Main weaknesses of the attended SP

13. List the main weakness of the attended SP according to your opinion

Overall assessment of the University experience

14. If you could go back in time, would you enrol in University again?

Possible answers: Yes, in the same SP of this University / Yes, but in another SP of this University / Yes, in the same SP but in another University / Yes, but in another SP in another University / No, I would not enrol in University

¹² Generic competences: competences common to any study programme.

Processes and responsibilities for study programme management

Standards	Quality Requirements	Fundamental Processes	Sub-processes	Responsible/s of the process / sub-process	Position/s of responsibility collaborating in the process/ sub-process management (optional)	Document/s of registration of the activities and/or the results of the process / sub- process
	A1 - Educational needs of the labour market and other	of the labour t and other	Definition of the organisations representative of labour market to be consulted Definition of the methods and schedule of consultation	Council of the Physics Department		Minutes of the Council of the Physics Department
ojectives			Identification of the educational needs of the labour market	University / Labour Market Committee of the Physics Department		Minutes of the University / Labour Market Committee of the Physics Department
A - Needs and Objectives			Identification of the educational needs of other stakeholders	Council of the Physics Department		Minutes of the Council of the Physics Department
A - N	A2 - Educational objectives	A2 - Definition of the educational objectives		Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department / Student's Guide
	A3 - Learning outcomes	A3 - Definition of the learning outcomes	Definition of the learning outcomes	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department / Student's Guide
			Comparison with the learning outcomes of other SPs of the same typology	Council of the Bachelor in Physics	Didactic Commission of the Bachelor in Physics	Minutes of the Council of the Bachelor in Physics
			Definition of the curriculum Definition of the characteristics of the course units	Council of the Physics Department	Didactic Commission of the Bachelor in Physics/ Council of the Bachelor in Physics	Minutes of the Council of the Physics Department / Student's Guide
Educational process	B1 - Design and	B1 - Design and	Definition of the characteristics of the graduation exam	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department / Student's Guide
B - Educatio	planning of the educational process	planning of the educational process	Documentation of the suitability of the curriculum to the achievement of the learning outcomes	Council of the Bachelor in Physics	Didactic Commission of the Bachelor in Physics	Minutes of the Council of the Bachelor in Physics
			Definition of calendar and timetable of course units and exams	Council of the Physics Department	Didactic Commission of the Bachelor in Physics/ Council of the	Calendar and timetable of course units and exams available on the

				Bachelor in Physics	website of the Physics Department
B2 - Admission, recognition, progression and attestation	B2 - Admission, recognition, progression and attestation	Definition of qualifications and requirements for the admission to the SP Assessment of the possession of the admission requirements Definition of the criteria of admission Definition of the rules for the recognition of higher education qualifications, periods of study and prior learning	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department / Student's Guide
		Definition of the management criteria of the students' progression in their studies	Council of the Physics Department	Didactic Commission of the Bachelor in Physics/ Council of the Bachelor in Physics	Minutes of the Council of the Physics Department / Student's Guide
		Definition of the documentation provided to graduates after the completion of their studies	Council of the Physics Department		Minutes of the Council of the Physics Department / Student's Guide
	B3 - Realization of the educational process	Definition of the control modalities of the correspondence of the development of the educational process with the designed and planned development	Council of the Physics Department		Minutes of the Council of the Physics Department
B3 - Realization of the educational process		Control of the correspondence of the development of the educational process with the designed and planned development	Didactic Commission of the Bachelor in Physics		Minutes of the Council of the Bachelor in Physics
		Definition of the control modalities of the assessment tests and of the final work/thesis in order to check their adequacy to the assessment of the achievement of the learning outcomes by students and the correctness of the evaluation of the	Council of the Physics Department		Minutes of the Council of the Physics Department

			studente' loorning]
			students' learning Control of the			
			adequacy of the assessment tests and of the final work/thesis in order to check their adequacy to the assessment of the achievement of the learning outcomes by students and the	Didactic Commission of the Bachelor in Physics		Minutes of the Council of the Bachelor in Physics
			correctness of the evaluation of the students' learning Identification of the needs of teaching	Council of the		Minutes of the Council of the
			staff	Bachelor in Physics		Bachelor in Physics
		C1 - Identification and assignment of the teaching staff	Definition of the criteria of choice or selection of the teaching staff Assignment of the teaching staff	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department
	C1 - Teaching staff		Organization of the activities for improving the didactic skills of the teaching staff	Quality Committee of the Physics Department		Annual Report of the Quality Committee of the Physics Department
			Identification of the needs of teaching support staff	Council of the Bachelor in Physics		Minutes of the Council of the Bachelor in Physics
C - Resources			Definition of the criteria of choice or selection of the teaching support staff Assignment of the teaching support staff	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department
			Identification of the needs of lecture rooms and surveillance/assista nce staff	Council of the Bachelor in Physics		Minutes of the Council of the Bachelor in Physics
		C2 - Identification and allocation of	Allocation of lecture rooms and surveillance/assista nce staff	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department
	C2 - Facilities and support staff	d facilities (in particular: lecture and study rooms, laboratories, libraries) and support staff	Identification of the needs of study rooms	Council of the Bachelor in Physics		Minutes of the Council of the Bachelor in Physics
			Allocation of study rooms	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department
			Identification of the needs of laboratories and technical staff	Council of the Bachelor in Physics		Minutes of the Council of the Bachelor in Physics
			Allocation of	Council of the	Council of the	Minutes of the

			laboratories and technical staff	Physics Department	Bachelor in Physics	Council of the Physics Department
			Identification of the needs of libraries and librarian staff	Council of the Bachelor in Physics		Minutes of the Council of the Bachelor in Physics
			Allocation of libraries and librarian staff	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department
			Organisation and management of the student administrative office	Student Administrative Office of the University - Sector Physics		Annual Report of the Student Administrative Office of the University - Sector Physics
			Organisation and management of the orienteering service for incoming students	Orienteering Service for Incoming Students of the School of MPN Sciences		Annual Report of the Orienteering Service for Incoming Students of the School of MPN Sciences
		C3 - Organisation and management of	Organisation and management of the tutoring service	Tutoring Service of the Physics Department		Annual Report of the Tutoring Service of the Physics Department
	C3 - Student support services	student support (orienteering, tutoring and assistance) services	Organisation and management of the service for carrying out training periods outside the University	Service for carrying out training periods outside the University of the School of MPN Sciences		Annual Report of the Service for the carrying out of training periods outside the University of the School of MPN Sciences
			Organisation and management of the mobility service	Mobility Service of the School of MPN Sciences		Annual Report of the Service for the students' mobility of the School of MPN Sciences
			Organisation and management of the job placement service	Job Placement Service of the School of MPN Sciences		Annual Report of the Job Placement Service of the School of MPN Sciences
		C4 - Establishment of partnerships with national and international businesses, research institutions and other Higher Education Institutions for carrying out students' external education and mobility	Definition of the partnerships for carrying out training periods outside the University	Council of the Physics Department		Minutes of the Council of the Physics Department
	C4 - Partnerships		Monitoring of the training periods outside the University	Service for carrying out training periods outside the University of the School of MPN Sciences		Annual Report of the Service for the carrying out of training periods outside the University of the School of MPN Sciences
			Definition of the partnerships for carrying out mobility periods	Council of the Physics Department		Minutes of the Council of the Physics Department
			Monitoring of the mobility periods	Mobility Service of the School of MPN		Annual Report of the Service for the

				Sciences		students' mobility of the School of MPN Sciences
	C5 - Financial resources	C5 - Identification of the needs and allocation of financial resources	Identification of the needs of financial resources Allocation of financial resources	Council of the Physics Department	Council of the Bachelor in Physics	Minutes of the Council of the Physics Department
	D1 - Incoming students	D1 - Monitoring of the incoming students	Monitoring of the assessment of the possession of the admission requirements (only first cycle and integrated second cycle SPs) Monitoring of the enrolments at the first course year	Quality Committee of the School of MPN Sciences		Annual Report of the Quality Committee of the School of MPN
	D2 - Students' learning	D2 - Monitoring of the students' learning				Sciences
	D3 - Students' progression in their studies	D3 - Monitoring of the students' progression in their studies				
D - Monitoring and Results		D4 Manifering of	Definition of the monitoring instrument and schedule of the students' opinion on the course units Monitoring of the students' opinion on the course units Definition of the monitoring instrument of the students' opinion on the training periods outside the University	Quality Committee of the School of MPN Sciences		Annual Report of the Quality Committee of the School of MPN Sciences
	opinion on the opinion on the		Monitoring of the students' opinion on the training periods outside the University	Service for carrying out training periods outside the University of the School of MPN Sciences		Annual Report of the Service for the carrying out of training periods outside the University of the School of MPN Sciences
			Definition of the monitoring instrument of the students' opinion on the periods of mobility	Quality Committee of the School of MPN Sciences		Annual Report of the Quality Committee of the School of MPN Sciences
			Monitoring of the students' opinion on the periods of mobility	Mobility Service of the School of MPN Sciences		Annual Report of the Service for the students' mobility of the School of MPN Sciences

		Definition of the monitoring instrument and schedule of the opinion of the final year students on the educational process and on the student support services Monitoring of the opinion of the final year students on the educational process and on the student support services	Quality Committee of the School of MPN Sciences	Annual Report of the Quality Committee of the School of MPN Sciences
D5 - Graduates' placement	D5 - Monitoring of the graduates' placement	Definition of the monitoring instrument and schedule of the graduates' job placement Monitoring of the graduates' job placement Monitoring of the continuation of the studies in second cycle programmes (only for first cycle SPs) Monitoring of the continuation of the studies in PhD programmes (only for second cycle SPs)	Quality Committee of the School of MPN Sciences	Annual Report of the Quality Committee of the School of MPN Sciences
D6 - Employed graduates' and employers' opinion on the graduates' education	D6 - Monitoring of the employed graduates' and employers' opinion on the graduates' education	Definition of the monitoring instrument and schedule of the employed graduates' opinions on the education received Monitoring of the employed graduates' opinions on the education received	Quality Committee of the School of MPN Sciences	Annual Report of the Quality Committee of the School of MPN Sciences
		Definition of the monitoring instrument and schedule of the employers' opinion on the graduates' education	(Sub-processes not yet managed)	

	E1 - Policy and organization for	E1- Definition of the policy and organization for	Monitoring of the employers' opinion on the graduates' education Definition of the policy for quality assurance of study programmes	Academic Senate		Document 'Policy for QA of SPs' available on the University Website Document
	quality assurance of study programmes	quality assurance of study programmes	Definition of the organization for quality assurance of study programmes	Academic Senale		'Organization for QA of SPs' available on the University Website
Management System	E2 - Management system of the study programme	E2 - Definition of the management system of the study programme		Council of the Physics Department		Document 'Management System of SPs' available on the Website of the Physics Department
E - Manaç	E3 - Review	E3 - Review	Definition of the management modalities of the review process	Council of the Physics Department		Minutes of the Council of the Physics Department
			Review process	Review Commission of the Bachelor in Physics		Review Report available on the Website of the Physics Department
	E4 - Publicly availability of information	E4 - Provision of public access to information on the study programme		Didactic Commission of the Bachelor in Physics	Didactic Manager of the Bachelor in Physics	Information on the study programme available on the website of the Physics Department

Positions of responsibility

Positions of responsibility *	Composition **	Duties ***
Ministry of Education, University	·	
and Research	-	-
Academic Senate	See Statute, art. 15	See Statute, art. 15
Academic Senale	http://www.unieguasp.it/statute	http://www.uniequasp.it/statute
Quality Presidium	 Vice Rector for the Didactics, who chairs it; one representative per School; the persons in charge of the following administrative departments: Planning, Assessment, Management Control and Statistics Department; Education, Higher Education and Student Services Department. 	 Definition of a QA system of the SPs consistent with the institution's policy and the support to the operational managers of the SPs as for its implementation. Verification of the compliance with the procedures and timing of the QA system by the SPs and the monitoring of their results (Incoming students, etc.). Monitoring of the student support services. Promotion of the improvement of the SPs' quality wherever required.
Evaluation Committee	See Statute, art. 23 http://www.unieguasp.it/statute	See Statute, art. 23 http://www.unieguasp.it/statute
School of Mathematics, Physics		
and Natural Sciences	-	-
Council of the Physics Department		
President of the Council of the		
Bachelor in Physics		
Quality Committee of the School of MPN Sciences		
University / Labour Market		
Committee of the Physics		
Department		
Council of the Bachelor in Physics		
Didactic Commission of the Bachelor in Physics		
Review Commission of the Bachelor in Physics		
Student Administrative Office of the University - Sector School of MPN		
Sciences Orienteering Service for Incoming Students of the School of MPN Sciences		
Tutoring Service of the Physics Department		
Service for carrying out training periods outside the University of the		

School of MPN Sciences	
Mobility Service of the School of	
MPN Sciences	
Job Placement Service of the	
School of MPN Sciences	

* List all the positions of responsibility for the QA and the management of the SP. ** Provide the composition of the position of responsibility under consideration (only in case of positions of responsibility composed by more people) or indicate the document and the web site where it is available. *** List the duties of the position of responsibility under consideration or indicate the document and the web site where they are

available.

Revision Report - Year 2013

Standard A - Needs and Objectives				
Quality Requirement A1 - Educational needs of the labour market and other stakeholders				
Are the consulted stakeholders, in particular those of the labour market of reference, and the methods and	Strength and weakness points			
schedule of consultation adequate in order to identify	Improvement actions			
their educational needs?				
Have the educational needs of the stakeholders, in	Strength and weakness points			
particular of those of the labour market of reference,	· · · ·			
been identified in a way useful to the definition of the	Improvement actions			
educational objectives of the SP (i.e. in terms of	· · · ·			
professional profiles and/or functions/roles/activities				
expected for the graduates and of the associated				
required competences)?				
Quality Requirement A2 - Educational objectives				
Have the educational objectives of the SP been	Strength and weakness points			
established in terms of professional profiles of the				
graduates and/or roles/activities students are to be	Improvement actions			
prepared for and associated competences to be				
developed and obtained by the students during the learning process?				
	Strength and weakness points			
Are the educational objectives of the SP consistent				
with the mission of the institution the SP belongs to	Improvement actions			
and the identified educational needs?	· · · ·			
Quality Requirement A3 - Learning outcomes				
Have the learning outcomes of the SP been	Strength and weakness points			
established in terms of what students are expected to				
know, understand and/or be able to demonstrate after	Improvement actions			
completion of the educational process?				
	Strength and weakness points			
Are the learning outcomes of the SP consistent with				
the established educational objectives?	Improvement actions			
	 Strongth and weakness points			
Are the learning outcomes of the SP comparable with	Strength and weakness points			
the learning outcomes of other SPs of the same	Improvement actions			
typology?				
Standard B - Educational process				
Quality Requirement B1 - Design and planning of the				
· · · · · · · · · · · · · · · · · · ·	Strength and weakness points			
Is the curriculum consistent with the established				
learning outcomes?	Improvement actions			
Does the curriculum embed a student-centred learning	Strength and weakness points			
and teaching approach that enables flexible learning				

paths and encourages students to take an active role in co-creating the learning process?	Improvement actions 			
Is the curriculum formally approved by another body besides the one composed by the only teaching staff of the SP?	Strength and weakness points Improvement actions			
Do the assessment methods and criteria provide evidence of their capacity to check the effective achievement of the intended learning outcomes by the students and ensure trust that the level of achievement by the students is assessed in a credible way?	Strength and weakness points Improvement actions 			
Has the development of the educational process been planned in such a way that students are able to achieve the SP learning outcomes in the expected time, according to a gradual process and activities coherent and coordinated with each other?	Strength and weakness points Improvement actions 			
Quality Requirement B2 - Admission, recognition, p	rogression and attestation			
Are the qualifications and requirements for the admission to the SP adequate for a profitable participation of students in the established educational activities, in particular of the first course year?	Strength and weakness points Improvement actions			
Do the methods of assessment allow to check the effective possession of the admission requirements by the students?	Strength and weakness points Improvement actions			
Are the criteria of admission objective?	Strength and weakness points Improvement actions			
Has the SP established appropriate rules for the recognition of higher education qualifications, periods of study and prior learning?	Strength and weakness points Improvement actions			
Has the SP established appropriate management criteria of the students' progression in their studies?	Strength and weakness points			
Does the SP provide graduates with appropriate attestation of the successfully completed studies?	Strength and weakness points Improvement actions 			
Quality Requirement B3 - Realization of the educational process				
Has the SP defined effective modalities of control of the development of the educational process, in order to check its correspondence with the designed and planned development and resolve any urgent and	Strength and weakness points Improvement actions 			

immediate problem?	
Has the SP developed the educational process	Strength and weakness points
coherently with the designed and planned development?	Improvement actions
Has the SP defined effective modalities of control of the assessment tests and the final work/thesis, in	Strength and weakness points
order to check their adequacy to the assessment of the achievement of the learning outcomes by students and the correctness of the evaluation of the students' learning?	Improvement actions
Do the results of the control of the assessment tests and the final work/thesis provide evidence of their adequacy to the assessment of the ashievement of	Strength and weakness points
adequacy to the assessment of the achievement of the learning outcomes and of the correctness of the evaluation of the students' learning?	Improvement actions
Standard C	- Resources
Quality Requirement C1 - Teaching staff	Other with an dama during a mainte
Has the SP established adequate criteria for the	Strength and weakness points
identification of the teaching staff?	Improvement actions
Is the teaching staff assigned assorting to productivity	Strength and weakness points
Is the teaching staff assigned according to pre-definite criteria of choice or selection?	Improvement actions
Are the quantity and qualification of the teaching staff adequate for the achievement of the established	Strength and weakness points Improvement actions
learning outcomes by students?	
Do the SP or the structure the SP belongs to offer the teaching staff the opportunity to improve their teaching	Strength and weakness points
skills, also in the use of new technologies, and achieve acceptable standards?	Improvement actions
Has the SP established adequate criteria for the	Strength and weakness points
identification of the teaching support staff?	Improvement actions
Is the teaching support staff assigned according to	Strength and weakness points
pre-definite criteria of choice or selection?	Improvement actions
Is the qualification of the teaching support staff adequate for the achievement of the established	Strength and weakness points Improvement actions
learning outcomes by students?	
Quality Requirement C2 – Facilities and support stat	
Are the facilities (in particular: lecture and study rooms, laboratories, libraries) at disposal of the SP, with the associated equipment, quantitatively and	Strength and weakness points

qualitatively adequate for the development of the established educational activities with the established educational methods?	Improvement actions 				
Are the quantity and qualification of the support (surveillance/assistance, technical, librarian) staff adequate for the development of the established educational activities as designed and planned?	Strength and weakness points Improvement actions 				
Has the SP at disposal other resources (transports, canteens, student accommodations, sports facilities, etc.) useful to the effectiveness of the educational process?	Strength and weakness points Improvement actions 				
Do the SP or the structure it belongs to undertake special initiatives (cultural initiatives, recreational activities, etc.) useful to the effectiveness of the educational process?	Strength and weakness points Improvement actions 				
Quality Requirement C3 - Student support services					
Has the SP at disposal student support (orienteering, tutoring and assistance) services relevant to the educational process and able to make students' learning and progression in their studies easier?	Strength and weakness points Improvement actions				
Are the quantity and qualification of the administrative staff adequate for an effective management of the student support services?	Strength and weakness points Improvement actions				
Quality Requirement C4 - Partnerships					
Are the quantity and quality of the partnerships with national and/or international public and/or private bodies for carrying out training periods outside the University adequate to the achievement of the intended learning outcomes?	Strength and weakness points Improvement actions 				
Can the number of students who have carried out training periods outside the University be considered satisfactory?	Strength and weakness points Improvement actions				
Are the quantity and quality of the partnerships with other national and/or international Higher Education Institutions for the students' mobility adequate to the achievement of the intended learning outcomes?	Strength and weakness points Improvement actions				
Can the number of students who have carried out periods of mobility in exit and in entrance be considered satisfactory?	Strength and weakness points				
Quality Requirement C5 - Financial resources					
Has the SP identified the needs of financial resources?	Strength and weakness points Improvement actions 				
Are the available financial resources adequate for the development of the educational process according to	Strength and weakness points				

the designed and planned activities?	Improvement actions			
Standard D - Monitoring and Results				
Quality Requirement D1 - Incoming students				
Do the results of the monitoring of the possession of the admission requirements provide evidence of the	Strength and weakness points			
SP attractiveness? (only for the first cycle and integrated second cycle SPs)	Improvement actions			
Do the results of the monitoring of the incoming students provide evidence of the SP attractiveness?	Strength and weakness points Improvement actions			
Quality Requirement D2 - Students' learning				
Do the results of the monitoring of the students'	Strength and weakness points			
learning provide evidence of the effectiveness of the course units?	Improvement actions			
Quality Requirement D3 - Students' progression in t				
Do the results of the monitoring of the students'	Strength and weakness points			
progression in their studies (in particular: enrolments				
at the different course years and dropouts, number of credits acquired at the end of each course year, time	Improvement actions			
to graduation) provide evidence of the effectiveness of				
the educational process?				
Quality Requirement D4 - Students' opinions on the	educational process			
Has the SP defined effective instruments and	Strength and weakness points			
schedules for the monitoring of the students' opinion				
on the educational process (in particular: students'	Improvement actions			
opinion on the course units, on the training periods				
outside the University, on the periods of mobility; final				
year students' opinion on the educational process and				
on the student support services), in order to check the				
perceived adequacy and effectiveness?	Strongth and weakness points			
Do the results of the monitoring of the students' opinion on the educational process provide evidence	Strength and weakness points			
of the adequacy and effectiveness of the educational	Improvement actions			
process and of the student support services?				
Quality Requirement D5 - Graduates' placement				
Has the SP defined effective instruments and schedules for the monitoring of the graduates'	Strength and weakness points			
placement (in particular: graduates' job placement,	Improvement actions			
continuation of the studies in second cycle				
programmes (only for first cycle programmes),				
continuation of the studies in PhD programmes (only				
for second cycle graduates)), in order to check the				
demand of the granted qualification and the				
correspondence of the educational objectives and				
learning outcomes of the SP to the educational needs				
of the labour market? Do the results of the monitoring of the graduates	Strongth and weakness points			
placement provide evidence of the demand of the	Strength and weakness points			
	···			

granted qualification and of the correspondence of the	Improvement actions
educational objectives and learning outcomes of the	
SP to the educational needs of the labour market?	
Quality Requirement D6 - Employed graduates' and	employers' opinion on the graduates' education
Has the SP defined effective instruments and	Strength and weakness points
schedules of monitoring of the employed graduates'	
opinions on the education received, in order to check	Improvement actions
the correspondence of the educational objectives and	
learning outcomes of the SP to the educational needs	
of the labour market?	
Do the results of the monitoring of the employed	Strength and weakness points
	Strength and weakness points
graduates' opinions on the education received provide	
evidence of the correspondence of the educational	Improvement actions
objectives and learning outcomes of the SP to the	
educational needs of the labour market?	
Has the SP defined effective instruments and	Strength and weakness points
schedules of monitoring of the employers' opinions on	
the graduates' education, in order to check the	Improvement actions
correspondence of the educational objectives and	· · · ·
learning outcomes of the SP to the educational needs	
of the labour market?	
Do the results of the monitoring of the employers'	Strength and weakness points
opinions on the graduates' education provide evidence	
of the correspondence of the educational objectives	Improvement actions
and learning outcomes of the SP to the educational	
needs of the labour market?	
	nagement system
Quality Requirement E1 - Policy and organization fo	
	Strength and weakness points
Has the institution the SP belongs to an adequate and	
public policy for the QA of SPs?	Improvement actions
	Strength and weakness points
Has the institution the SP belongs to an effective	
organization	Improvement actions
••• ga=a•	
Quality Requirement E2 - Management system of the	e study programme
Has the SP implemented an adequate and effective	Strength and weakness points
	Suchylli and weakness points
management system, through the identification of the	
QA processes and the definition of an adequate	Improvement actions
organisational structure?	
Quality Requirement E3 - Review	L -
Has the SP defined effective modalities of	Strength and weakness points
management of the review process, involving teaching	
staff, students and interested parties from the labour	Improvement actions
market?	·
Does the review process guarantee the constant	Strength and weakness points
adequacy and effectiveness of needs and objectives,	
educational process, resources, results and	Improvement actions
	•
management system, and promote the improvement	
of the effectiveness of the processes for the SP	

management and of the associated results?				
Quality Requirement E4 - Publicly availability of information				
Does the SP make available on the web site of the SP or of the structure the SP belongs to full, up to date, easily acquired information, both quantitative and qualitative, on SP objectives, educational process, resources, results and management system?	Strength and weakness points Improvement actions 			