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UNIVERSITÀ DI BOLOGNA



School of Agriculture and Veterinary Medicine – Cesena Campus  
**LAUREA (FIRST CYCLE DEGREE/  
BACHELOR - 180 ECTS)  
IN AQUACULTURE AND  
ICHTHYOPATHOLOGY A.Y. 2013/2014**  
Programme Director Prof. Albamaria Parmeggiani

REPORT

Study Programme Report  
Aquaculture and Ichthyopathology  
Programme ex D.M. 270/04 - Code 8520 - Class L-38  
School of Agriculture and Veterinary Medicine – Cesena Campus  
Programme Director Prof. Albamaria Parmeggiani

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# INDICE

<b>What is the Study Programme Report?</b> .....	1
<b>A. Presentation and prospects</b> .....	2
A.1. Presentation .....	2
A.2. Admission requirements .....	2
A.3. Learning outcomes .....	2
A.4. Career opportunities .....	3
A.5. Opinion of social partners and potential employers .....	4
A.6. Further studies .....	4
<b>B. Teaching and Learning</b> .....	5
B.1. Course Structure Diagram .....	5
B.2. Calendar and lecture timetable .....	5
<b>C. Resources and services</b> .....	6
C.1. Teachers .....	6
C.2. Student services: offices .....	6
C.2.1. Future students .....	6
C.2.2. Enrolled students .....	6
C.2.3. International students .....	6
C.2.4. Graduates .....	6
<b>D. The Study Programme in figures</b> .....	7
D.1. Students starting their university careers .....	7
D.1.1. Enrolments and registrations .....	7
D.1.2. Additional data on students' starting their university careers .....	9
D.1.2.1. Candidates registered for the entrance exam .....	9
D.1.2.2. Incoming students .....	9
D.1.2.3. Additional Learning Requirements .....	11
D.2. Regularity of studies .....	12
D.2.1. Students leaving the Programme between years 1 and 2 .....	12
D.2.2. Regular graduates .....	14
D.2.3. Additional data on regularity of studies .....	15
D.2.3.1. Credits obtained by students in the 1st year .....	15
D.2.3.2. Exams passed and average grade .....	16
D.3. Opinions of graduates and attending students .....	18
D.3.1. Opinion of graduates .....	18
D.3.2. Additional data on opinions of students .....	19
D.3.2.1. Opinion of attending students .....	19
D.4. Entry into the world of work .....	20
D.4.1. Employment situation .....	20
D.5. Information on pre-reform programmes (DM 509/99) .....	21
D.5.1. Students starting their university careers .....	21
D.5.1.1. Enrolments and registrations .....	21
D.5.1.2. Additional data on students' starting their university careers .....	21
D.5.1.2.1. Candidates registered for the entrance exam .....	21
D.5.1.2.2. Incoming students .....	21
D.5.2. Regularity of studies .....	21
D.5.2.1. Students leaving the Programme between years 1 and 2 .....	21
D.5.2.2. Regular graduates .....	22
D.5.2.3. Additional data on regularity of studies .....	22
D.5.2.3.1. Credits obtained by students in the 1st year .....	22
D.5.2.3.2. Exams passed and average grade .....	22

D.5.3. Opinions of attending students and graduates .....	23
D.5.3.1. Opinion of graduates .....	23
D.5.3.2 Additional data on opinions of students .....	23
D.5.3.2.1. Opinion of attending students .....	24
D.5.4. Entry into the world of work .....	24
D.5.4.1. Employment situation .....	24
<b>E. Find out more: the quality of your Study Programme .....</b>	<b>26</b>
<b>F. Glossary terms .....</b>	<b>29</b>

# WHAT IS THE STUDY PROGRAMME REPORT?

## **What is the Study Programme Report?**

The Study Programme Report provides updated information which is important for the purposes of Quality Assurance and is published annually by the University of Bologna.

The main aspects of the teaching programme are described in detail, with a view to assuring the principle of transparency and promoting self-assessment and continuous improvement processes.

The document provides a concrete overview of the features and results of the Study Programme for students, families, employers and so on.

For example, regarding the current issue of employment, it describes the learning outcomes and career opportunities; it also includes statistics on the percentage of employed graduates (D.4. Employment situation).

The document is organised into five sections and a glossary:

## **A. Presentation and prospects**

Key information on the Study Programme, including the expected learning outcomes, career opportunities and further studies.

## **B. Teaching and Learning**

The updated course structure diagram with the full titles and listings of the course units and the latest published lecture timetable.

## **C. Resources and services**

The list of teaching staff and their relative curricula, the offices (secretariats), services (work placements) and infrastructures (libraries, laboratories) available to students.

## **D. The Study Programme in Figures**

Key data shows how many students are enrolled, how many have been assigned additional learning requirements, how many drop out after the first year, how many graduate in line with the programme schedule, the opinions of attending and graduating students on the teaching programmes and information concerning graduate employment.

## **E. Find out more: the quality of your Study Programme**

How the quality system applied to your Study Programme works. The quality system of your Study Programme is a set of processes and responsibilities adopted to guarantee the quality of all Study Programmes at the University of Bologna.

## **NOTES:**

- Reports are available for all Study Programmes for which it is possible to enrol in the first year in academic year 2012/2013: the information and data provided is as updated as possible.
- Sections A, B and C provide data for the academic year 2012/2013.
- Section D presents data regarding the Study Programmes in the last three academic years.
- The information and data were taken from the University databases and the reports published by the [Statistical Observatory of the University of Bologna](#) and [AlmaLaurea](#), and are updated to **15 June 2012**.

## A. PRESENTATION AND PROSPECTS

*This section presents the key information concerning the Study Programme, including the expected learning outcomes, career opportunities and further studies, updated to the academic year 2013/2014.*

### A.1. PRESENTATION

*This paragraph provides information on the specific learning outcomes of the Study Programme and the curriculum.*

Graduates operate professionally on all aspects pertaining to the farming of aquatic animals, such as the technical, hygienic and economic management of agriculture-zootechnic companies of the fish-farming sector, as well as of those supplying the technical means and services and of those operating in the transformation and marketing of fish products. In particular, graduates are involved in:

- 1) production and breeding of aquatic organisms, in particular with reference to the qualitative and quantitative improvements of fish productions;
- 2) health, welfare and eco-compatibility of farmed aquatic animals, in particular fish, shellfish and mollusks
- 3) food hygiene, quality and safety of fish products verified also through veterinary biomedical laboratory techniques
- 4) managing aquaculture companies in relation to the production, transformation, distribution and marketing of fish products.

### A.2. ADMISSION REQUIREMENTS

*This paragraph provides information on the knowledge required for admission to the Study Programme.*

This information is not available in English at this time.

### A.3. LEARNING OUTCOMES

*This paragraph provides information on the knowledge and skills students will have acquired by the end of the Programme.*

#### KNOWLEDGE AND UNDERSTANDING ABILITY

Graduates:

- will know and understand the basic biological, applicative technological and economic scientific disciplines pertaining to the farming of aquatic animals and production of fish products.
- will know the basic scientific disciplines for the transformation and preservation of fish products;
- will have basic knowledge of general and inorganic chemistry, organic chemistry, biological macromolecules, biochemical concepts of cell structural organisation and metabolic processes in aquatic organisms as well as elementary knowledge of basic mathematics;
- will understand the taxonomy and organisation of living beings, with special reference to aquatic vertebrates, molluscs and shellfish, Mendel's and quantitative genetics and morphological assessment methods of aquatic animals;
- will have the basic knowledge of veterinary cytology and histology, of anatomy of aquatic animals of veterinarian interest in particular regarding the anatomy of Teleostei;
- will know the physiology of cells and body fluids, of the respiratory, cardio-circulatory, digestive and emunctory apparatus of the Teleostei and their sexual and metabolic endocrinology pertaining to the methods of controlling reproduction;
- will know of the structural and metabolic organisation of bacterial micro-organisms and viral pathogens, and the techniques of diagnosis;
- will have knowledge of the ecology of micro-organisms within animal populations and the spreading and trend over time of diseases;
- will have sound knowledge of the biological cycles and pathogenic mechanisms of etiological agents of the principal aquatic animal parasites and correct management of the aquarium;
- will have basic knowledge of hydraulics, hydrodynamics and water-earth relation, water treatment and purification plants;
- will know the principal types of plants, equipment and materials used in farming aquatic animals;
- will know the zootechnical and veterinary legislation for the production and marketing, autocontrolling and labelling of the fish products.

The above-listed knowledge and understanding abilities are achieved not only through lectures supplied during the course units based on methodological strictness inherent to scientific subjects, but also based on a fair amount of student home study.

Assessment is accomplished mainly through oral and written exams, as well as through the assessment of personal written papers requested as part of some course units.

#### ABILITY TO APPLY KNOWLEDGE AND TO UNDERSTAND:

Graduates:

- will know how to analyse experimental data through techniques inherent to the biomedical disciplines and will be capable of assessing models;

- will know how to face the principal problems pertaining to company management, marketing operations and estimates of agricultural-zootechnical companies;
- will know how to prepare feeding rations suitable for a specific type of breeding;
- will know how to calculate production costs and draw up a budget;
- will know how to plan/develop market surveys and will know how to calculate estimates;
- will have a good command over the post-mortem techniques and histocytopathological diagnostic methodologies of Teleostei, Shellfish and Molluscs;
- will be expert on environmental impact in relation to the types of aqua cultivation and biochemical processes that may alter fish products post-mortem;
- will know how to work in groups and execute a project on a pre-established subject.

Achieving the ability to apply the above-listed knowledge and understanding is accomplished mainly through attending lectures and a fair amount of practical work, consisting in laboratory and practical activities, often conducted in groups, as well as during a practical internship. A considerable portion of elaborating upon and processing knowledge takes place additionally during student home study, which requires revision of the acquired information thus leading to a greater command over the knowledge.

Assessment is based on oral and written exams, as well as on the assessment of personal papers, on which the student demonstrates control over instruments and methods, which are supplied during the course of studies.

#### JUDGEMENT SKILLS:

Graduates:

- will, independently, know how to interpret designs and protocols processed by experts such as engineers, surveyors and technologists;
- will know how to express and summarise both in writing or orally, reports, planning projects, estimates of agricultural-zootechnical companies, formulation of rations and feed for the fish species being farmed;
- will have own judgment skills in the sectors of breeding, design of buildings and plants for aqua cultivation and marine cultivation and choosing, based on the situation, the most appropriate solutions.

Judgement skills are especially developed through laboratory and practical activities, group activities and the writing of the final paper.

Assessment is accomplished through the evaluation of the degree of autonomy and ability to work, also in groups, and the evaluation of the personal papers.

#### COMMUNICATION SKILLS:

Graduates:

- will know how to communicate effectively in writing and orally at least in one European Union language, in addition to Italian;
- will be able to communicate in writing and discuss a subject of own interest pertaining to aquaculture and fish-pathology;
- will know how to communicate the results, comments and elements of planning in the field of development, research and evaluation of animal breeding and transformation of the relative products;
- will know how to operate within work-group situations as consultant and interacting also with various professional figures such as engineers, biologists and technologists.

Written and oral communication skills are especially developed during the writing of the final paper, its presentation and discussion.

English is learned through course units and e-learning activities and assessed through a pass/fail test.

Acquisition of written and oral communication skills is assessed during oral exams and evaluation of the written papers.

#### LEARNING SKILLS:

Graduates:

- will possess the instruments to independently perform continuous updating of knowledge related to: regulations, new technologies in the zootechnical and transformation sector;
- will have an adequate study and learning method for independently managing updating and any specialisation related to the subjects of particular professional interest.

Learning skills are acquired by the student during the study course as a whole, especially in the individual home study activities, practical and seminar activities and the final paper

Learning skills are assessed continuously during course units, integrating the knowledge acquired during specific activities with those achieved through home study, evaluating the critical contribution demonstrated during the practical and seminar activities, as well as through the student self-learning matured during the activity in preparation of the final paper.

## A.4. CAREER OPPORTUNITIES

*This paragraph provides information on the occupational profile, functions and fields of employment available to graduates of this Programme.*

Graduates will be able to perform the following professional roles and functions in the areas of employment here indicated :

Technician in seafood production

Functions

- Managing the technical, hygienic and economic aspects of aquaculture and mariculture companies.

- Supervising and managing hatcheries, breeding tanks and fisheries.
- Managing the hygienic and qualitative aspects of animal production and controlling any pathologies in the fisheries at large breeding companies.
- Planning, surveillance, assistance and verification of products of animal origin and of those being transformed.
- Technician in companies transforming products of animal origin.

Career opportunities:

employee, manager, freelance/consultant operating individually or associated to:

- Agricultural-zootechanical companies in the fish-farming sector;
- Industries of the sector: Industrial and commercial companies in the fish-farming sector;
- Organisations (associations, local institutions, etc) as Officer managing corporate planning and developing and accessing facilitated funding;
- Territorial public bodies (provinces, etc), private bodies, national and international (FAO) as laboratory technician controlling raw materials and c.i. feed for aquatic animals and fish products.

The degree programme project has been submitted to selected external stakeholders in order to receive their opinions and feedbacks on the learning outcomes and the professional profiles.

## A.5. OPINION OF SOCIAL PARTNERS AND POTENTIAL EMPLOYERS

*This paragraph describes the outcome of the consultation with the representative employment and trade organisations.*

This information is not available in English at this time.

## A.6. FURTHER STUDIES

It gives access to second cycle studies (laurea specialistica / magistrale) and master universitario di primo livello.



## B. TEACHING AND LEARNING

*This section describes the updated course structure diagram (for academic year 2013/2014), with the full titles and listings of the course units and the latest published lecture timetable.*

### B.1. COURSE STRUCTURE DIAGRAM

*The link takes you to the Study Programme course structure diagrams. You can also access to each course unit content.*

- [Study plan: all course units in the programme](#)

### B.2. CALENDAR AND LECTURE TIMETABLE

*The links take you to the teaching calendar (exam session and final examination session) and the lecture timetable (in Italian).*

- [Lecture timetable](#)
- [Exam sessions](#)
- [Final examination sessions](#)

## C. RESOURCES AND SERVICES

*This section provides a list of teaching staff and their relative curricula and and description of the services available to students for the academic year 2013/2014.*

### C.1. TEACHERS

*The paragraph lists the lecturers who teach in the Study Programme: from here you can access the personal web pages of each one.  
Information updated to 28 May 2013 (in Italian).*

#### **Permanent teaching staff:**

<a href="#">Adinolfi, Felice</a>	<a href="#">Caffara, Monica</a>	<a href="#">Mancini, Maurizio</a>	<a href="#">Pirini, Maurizio</a>
<a href="#">Aragrande, Maurizio</a>	<a href="#">Carpené, Emilio</a>	<a href="#">Mandrioli, Luciana</a>	<a href="#">Roncada, Paola</a>
<a href="#">Badiani, Anna</a>	<a href="#">Ciulli, Sara</a>	<a href="#">Mordenti, Oliviero</a>	<a href="#">Serratore, Patrizia</a>
<a href="#">Barazzoni, Anna Maria</a>	<a href="#">Dalla Rosa, Marco</a>	<a href="#">Ostanello, Fabio</a>	<a href="#">Servizi, Graziano</a>
<a href="#">Biagi, Giacomo</a>	<a href="#">Fioravanti, Marialetizia</a>	<a href="#">Pagliuca, Giampiero</a>	<a href="#">Zaccaroni, Annalisa</a>
<a href="#">Bombardi, Cristiano</a>	<a href="#">Gatta, Pier Paolo</a>	<a href="#">Parmeggiani, Albamaria</a>	<a href="#">Zaghini, Anna</a>
<a href="#">Bonaldo, Alessio</a>	<a href="#">Guarniero, Ilaria</a>	<a href="#">Peli, Angelo</a>	<a href="#">Zanoni, Renato Giulio</a>

#### **Contract teaching staff:**

[Giampieri, Enrico](#)  
[Mosconi, Giuseppe](#)

### C.2. STUDENT SERVICES: OFFICES

#### C.2.1. FUTURE STUDENTS

*The link take you to the webpage which provides specific information about the offices and the services for the future students (in Italian).*

- [Future students](#)

#### C.2.2. ENROLLED STUDENTS

*The link take you to the webpage with the information on the offices and the services for the enrolled students (in Italian).*

- [Enrolled students](#)

#### C.2.3. INTERNATIONAL STUDENTS

*The link take you to the webpage with the information on the offices and the services for the international students (in Italian).*

- [International students](#)

#### C.2.4. GRADUATES

*The link take you to the webpage with the information on the offices and the services for the graduates (in Italian).*

- [Graduates](#)

## D. THE STUDY PROGRAMME IN FIGURES

Information on students' starting their university careers, how many students are in line with the regular programme, opinions of students and graduates on the teaching programmes and information concerning graduate employment.

This section provides the data of the last academic years for the Study Programme (SP) and a comparison with similar Study Programmes. The University of Bologna has divided its Study Programmes into four groups:

- **BIOMEDICAL** group: Study Programmes of the Schools of Pharmacy, Biotechnology and Sport Science; Medicine; Agriculture and Veterinary Medicine
- **SCIENTIFIC-TECHNOLOGICAL** group: Study Programmes of the Schools of Engineering and Architecture; Sciences
- **SOCIAL SCIENCES** group: Study Programmes of the Schools of Economics, Management, and Statistics; Law, Political Sciences
- **HUMANITIES** group: Study Programmes of the Schools of Arts, Humanities, and Cultural Heritage; Foreign Languages and Literatures, Interpreting and Translation; Psychology and Education

The section presents the results of the Study Programme for the last three academic years.

Main data shows how many students enrolled, the number of students assigned OEA, how many drop out after the first year, how many graduate in line with the programme schedule, the opinions of attending and graduating students on the teaching programmes and information concerning graduate employment.

The information and data presented in this section, updated to 28 May 2013, were taken from University databases and [AlmaLaurea](#).

Study Programmes may be subject to degree programme system modifications from one academic year to the next, and the data provided in this section may refer to a programme with a slightly different system to the one currently running (such as programme title, course structure diagram and list of lecturers). However, indicatively the data presents the general trend of the Study Programme over the past three years.

Most of the Study Programmes running at the University of Bologna have been reformed in compliance with DM 270/04, most of them from the academic year 2008/2009. In the reports provided for these Programmes, paragraph D.5. refers to the Study Programmes as they were presented prior to the reform.

### D.1. STUDENTS STARTING THEIR UNIVERSITY CAREERS

Characteristics of incoming students at the beginning of their university careers. Tables and graphs provide information on the number of **registered students**, focusing on the characteristics of the students, results of any entrance tests and the students assigned any **additional learning requirements**.

#### D.1.1. ENROLMENTS AND REGISTRATIONS

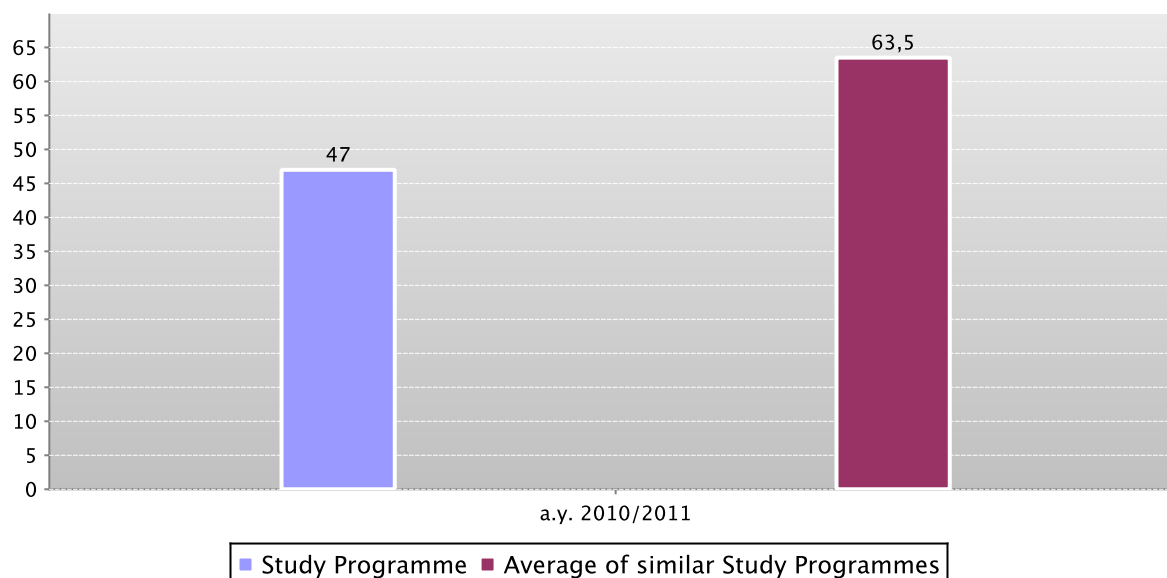
The **graph** shows the number of **students enrolled in the 1st year** compared with the **average of similar Study Programmes** (which belong to the same group).

In addition, the **table** shows the total number of **registered students** and the total number of enrolled students.

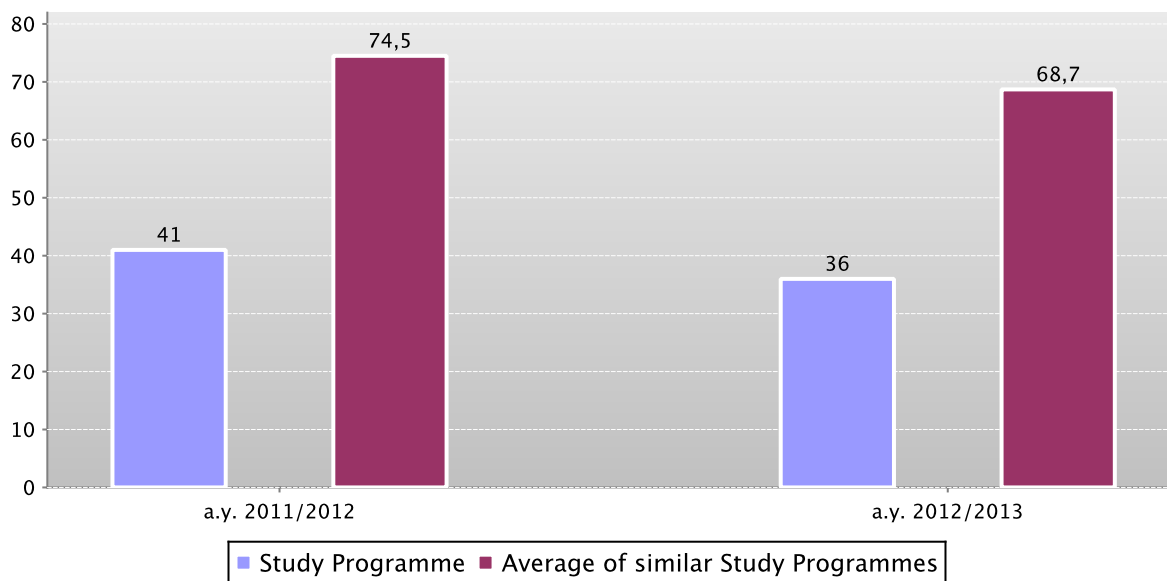
Data of the Study Programme is compared with the average of the Study Programmes of **average of similar Study Programmes** (which belong to the same group) for the indicated academic years.

First year enrolments

Data of the Study Programme D.M. 270/04 **AQUACULTURE AND ICHTHYOPATHOLOGY** (code 0986)



Data of the Study Programme D.M. 270/04 Aquaculture and Ichthyopathology (code 8520)



Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)

	a.y. 2010/2011		
	Registered students	N. first year enrolments	Total N. enrolled students
Study Programme	36	47	99
Average of similar Study Programmes	48,9	63,5	136,8

Data of the Study Programme D.M. 270/04 Aquaculture and Ichthyopathology (code 8520)

	a.y. 2011/2012			a.y. 2012/2013		
	Registered students	N. first year enrolments	Total N. enrolled students	Registered students	N. first year enrolments	Total N. enrolled students
Study Programme	36	41	102	30	36	100
Average of similar Study Programmes	58,1	74,5	106,6	51,8	68,7	104,4

## D.1.2. ADDITIONAL DATA ON STUDENTS' STARTING THEIR UNIVERSITY CAREERS

### D.1.2.1. CANDIDATES REGISTERED FOR THE ENTRANCE EXAM

In academic year 2012/2013 access to this Study Programme was not restricted.

### D.1.2.2. INCOMING STUDENTS

Geographic origin, type of high school certificate, age and gender of students.

Data shows a homogeneous group of students (*cohort*) which started together their academic career. Students which have passed to an other Study Programme, transferred from an other university, or registered to a 2nd degree are not included.

The **tables** show the number, geographic origin, gender, age, type and grade of high school certificate of students enrolling in the degree programme.

Data of the Study Programme is compared with the average of the Study Programmes of *average of similar Study Programmes (which belong to the same group)* for the indicated academic years.

Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)

		Registered students	Geographic origin					Gender		Average age of registered students		
			Students coming from the province of the Study Programme site	Students coming from other provinces where Unibo has a site	Students coming from other provinces of Emilia Romagna region	Students coming from other Italian regions	Students coming from abroad	M	F	19 or less	20 - 24	25 or more
Students 2010/2011	Study Programme	36	22,2%	27,8%	11,1%	36,1%	2,8%	38,9%	61,1%	63,9%	27,8%	8,3%
	Average of similar Study Programmes	48,9	37,0%	25,5%	7,9%	27,5%	2,1%	44,1%	55,9%	62,3%	28,7%	9,1%

		High school certificate					Grade of High school			
		Vocational schools	Technical Colleges	High school specializing in education and in psycho-pedagogical science	High schools specializing in classical studies, modern languages, science education	Other Italian or foreign high schools	Grade ranging from 60 to 69	Grade ranging from 70 to 79	Grade ranging from 80 to 89	Grade ranging from 90 to 100
Students 2010/2011	Study Programme	16,7%	22,2%		52,8%	8,3%	27,8%	25,0%	33,3%	13,9%
	Average of similar Study Programmes	9,7%	27,6%	4,5%	49,6%	8,6%	28,2%	33,3%	21,6%	14,8%

		Registered students	Geographic origin					Gender		Average age of registered students		
			Students coming from the province of the Study Programme site	Students coming from other provinces where Umbro has a site	Students coming from other provinces of Emilia Romagna region	Students coming from other Italian regions	Students coming from abroad	M	F	19 or less	20 - 24	25 or more
Students 2011/2012	Study Programme	36	11,1%	41,7%	8,3%	36,1%	2,8%	38,9%	61,1%	66,7%	19,4%	13,9%
	Average of similar Study Programmes	58,1	36,9%	22,9%	9,7%	27,4%	3,0%	41,8%	58,2%	65,1%	29,1%	5,9%
Students 2012/2013	Study Programme	30	30,0%	26,7%	13,3%	26,7%	3,3%	53,3%	46,7%	76,7%	20,0%	3,3%
	Average of similar Study Programmes	51,8	35,6%	23,4%	10,3%	28,3%	2,4%	48,4%	51,6%	63,7%	29,7%	6,5%

		High school certificate					Grade of High school			
		Vocational schools	Technical Colleges	High school specializing in education and in psycho-pedagogical science	High schools specializing in classical studies, modern languages, science education	Other Italian or foreign high schools	Grade ranging from 60 to 69	Grade ranging from 70 to 79	Grade ranging from 80 to 89	Grade ranging from 90 to 100
Students 2011/2012	Study Programme	8,3%	25,0%	13,9%	47,2%	5,6%	36,1%	38,9%	13,9%	8,3%
	Average of similar Study Programmes	8,1%	24,2%	9,5%	50,5%	7,7%	26,6%	32,3%	21,6%	17,7%
Students 2012/2013	Study Programme	13,3%	26,7%	10,0%	50,0%		26,7%	43,3%	16,7%	13,3%
	Average of similar Study Programmes	8,6%	23,2%	7,2%	54,0%	7,0%	22,1%	34,6%	23,1%	15,0%

### D.1.2.3. ADDITIONAL LEARNING REQUIREMENTS

Students on the programme assigned **additional learning requirements** (OFA). OFA are learning requirements assigned to enrolled students who have not demonstrated the full possession of the entrance requirements. The assessment methods of students' initial preparation and the fulfilment of the OFA are described in the Study Programme Regulations, and may change each year. Students not completing the additional learning requirements are obliged to re-enrol in year 1 as repeating students.

The **table** shows the number of **registered students**, the number of students assigned OFA, the number who fulfilled them, the percentage of students assigned the OFA compared to the number of enrolled students and the percentage fulfilling the OFA compared to those assigned them.

Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)

	Registered students (a)	Students assigned OFA (b)	Students who fulfilled OFA (c)	% of students assigned OFA compared to the number of enrolled students (b/a)	% of students fulfilling the OFA compared to number of students assigned (c/b)
Students 2010/2011	36	4	0	11,1%	0,0%

Data of the Study Programme D.M. 270/04 Aquaculture and Ichthyopathology (code 8520)

	Registered students (a)	Students assigned OFA (b)	Students who fulfilled OFA (c)	% of students assigned OFA compared to the number of enrolled students (b/a)	% of students fulfilling the OFA compared to number of students assigned (c/b)
Students 2011/2012	36	1	0	2,8%	0,0%
Students 2012/2013	30	0			

\*Note: At the time of publication of this report the number of students fulfilling the OFA can be measured for a.y. 2009/2010 and a.y. 2010/2011 only.

## D.2. REGULARITY OF STUDIES

*Insight into the regularity with which the students pass their exams.*

*Graphs and tables provide information on the number of students who leave the programme after the first year and the number of regular graduates, focusing on the number of credits obtained at the end of the first year, on the exams passed and average grade achieved for each course unit.*

### D.2.1. STUDENTS LEAVING THE PROGRAMME BETWEEN YEARS 1 AND 2

Here the number of students leaving the Study Programme is shown.

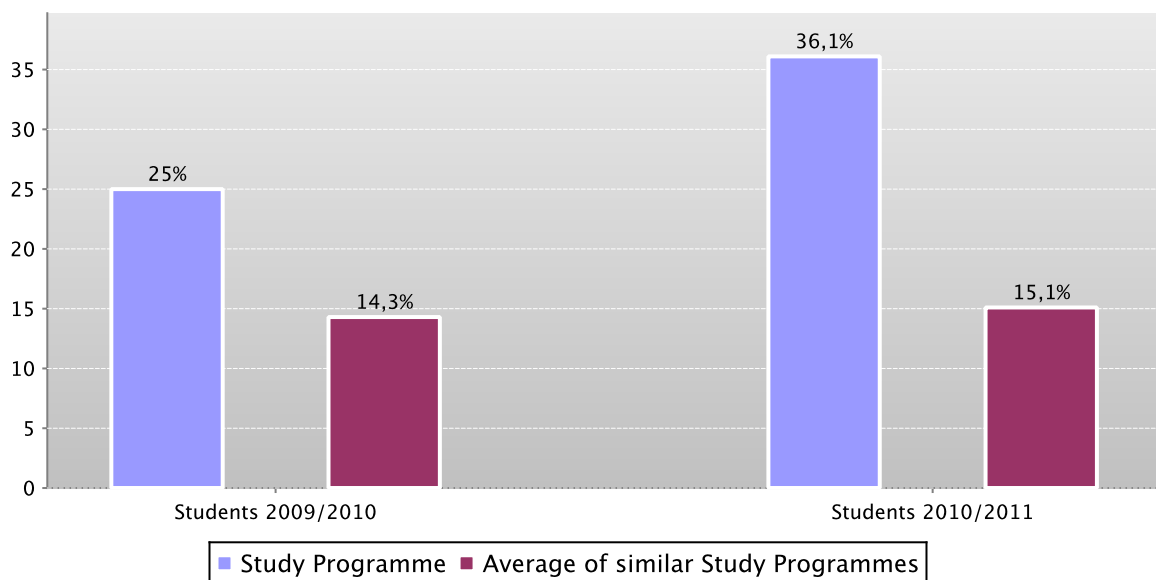
The **graph** shows the percentage of students who leave the programme after the first year compared to the average of similar Study Programmes (belonging to the same group).

The **table** shows the registered students, the percentage of students leaving the programme who pass to a different Study Programme in the same university, transfer to another university or withdraw from studies, as well as the enrolled repeating students and those enrolled in the second year.

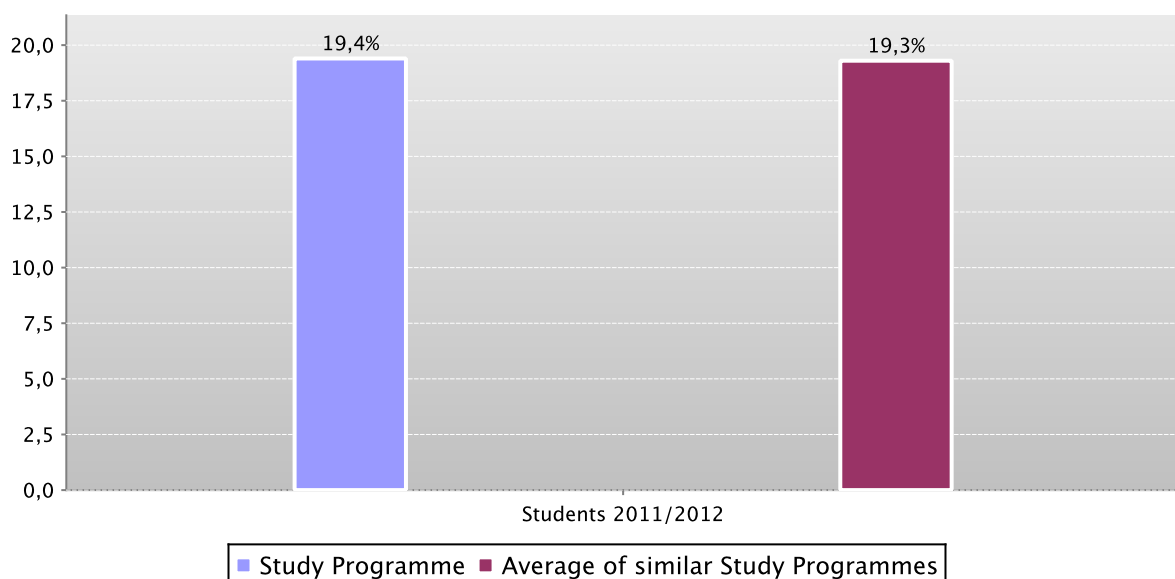
The Study Programme data is compared with the average of similar Study Programmes of (which belong to the same group), for students registered in the indicated academic years.

Percentage of withdrawals between years 1 and 2

*Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)*



*Data of the Study Programme D.M. 270/04 Aquaculture and Ichthyopathology (code 8520)*





Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)

		Registered students	% withdrawals	% passages and transfers	% repeating students	Students enrolled in the second year
Students 2009/2010	Study Programme	44	25,0%	6,8%	0,0%	30
	Average of similar Study Programmes	46,1	14,3%	6,8%	0,3%	36,3
Students 2010/2011	Study Programme	36	36,1%	19,4%	0,0%	16
	Average of similar Study Programmes	48,9	15,1%	9,4%	0,4%	36,8

Data of the Study Programme D.M. 270/04 Aquaculture and Ichthyopathology (code 8520)

		Registered students	% withdrawals	% passages and transfers	% repeating students	Students enrolled in the second year
Students 2011/2012	Study Programme	36	19,4%	19,4%	0,0%	22
	Average of similar Study Programmes	58,1	19,3%	12,9%	0,4%	39,1

### D.2.2. REGULAR GRADUATES

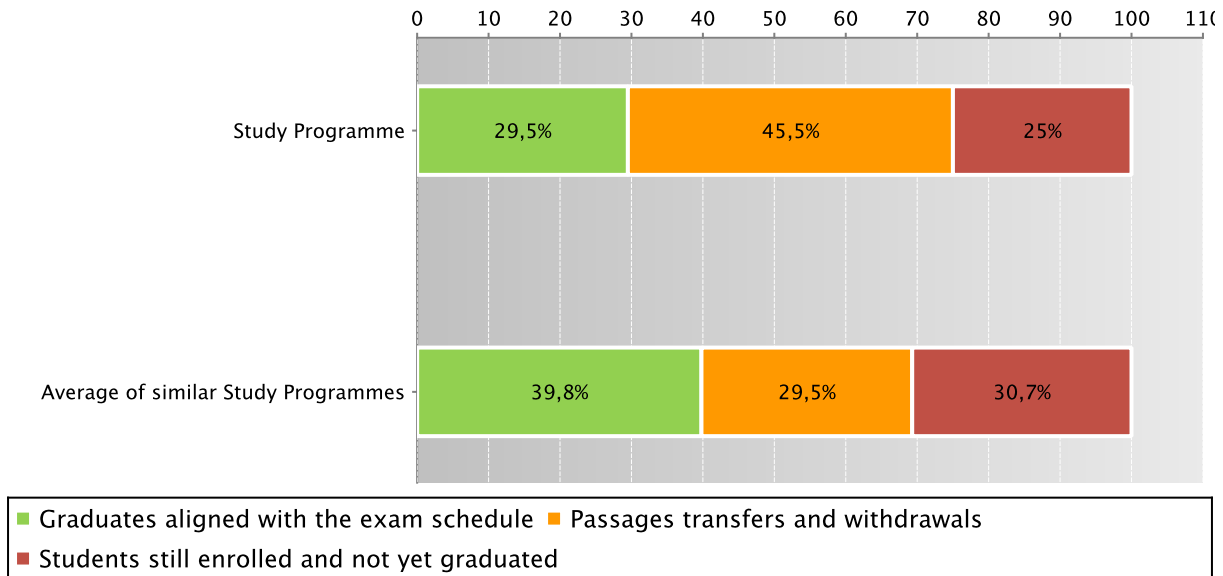
Here you will find information on regular graduates, on how many students, at the end of the regular programme duration, left the programme and how many are still enrolled but **not aligned to the exam schedule**.

The **graph** and the **table** show the situation concerning **registered students** for the indicated academic year, at the end of the regular duration of the Study Programme, highlighting the percentage of regular graduates, the number of students still enrolled (**not aligned to the exam schedule** and **repeating students**), students who have left the programme (including **passages**, **transfers** and **withdrawals**).

The Study Programme data is compared with the average of **similar Study Programmes** (which belong to the same group) for students registered in the indicated academic years.

Situation of students 2009/2010 at the end of regular duration of the study programme

Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)



Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)

	Registered students	Regular graduates		Passages transfers and withdrawals		Students still enrolled and not yet graduated		
		N.	%	N.	%	N.	%	
Students 2008/2009	Study Programme	31	3	9,7%	23	74,2%	5	16,1%
	Average of similar Study Programmes	42,7	16,4	38,4%	12,8	30,1%	13,4	31,4%
Students 2009/2010	Study Programme	44	13	29,5%	20	45,5%	11	25,0%
	Average of similar Study Programmes	46,1	18,3	39,8%	13,6	29,5%	14,2	30,7%

See data of previous academic years – Study Programme D.M. 509/99 Aquaculture and Ichthyopathology (code 0403) paragraph D.5.2.2.

### D.2.3. ADDITIONAL DATA ON REGULARITY OF STUDIES

#### D.2.3.1. CREDITS OBTAINED BY STUDENTS IN THE 1ST YEAR

This offers an insight into how regularly students pass their exams.

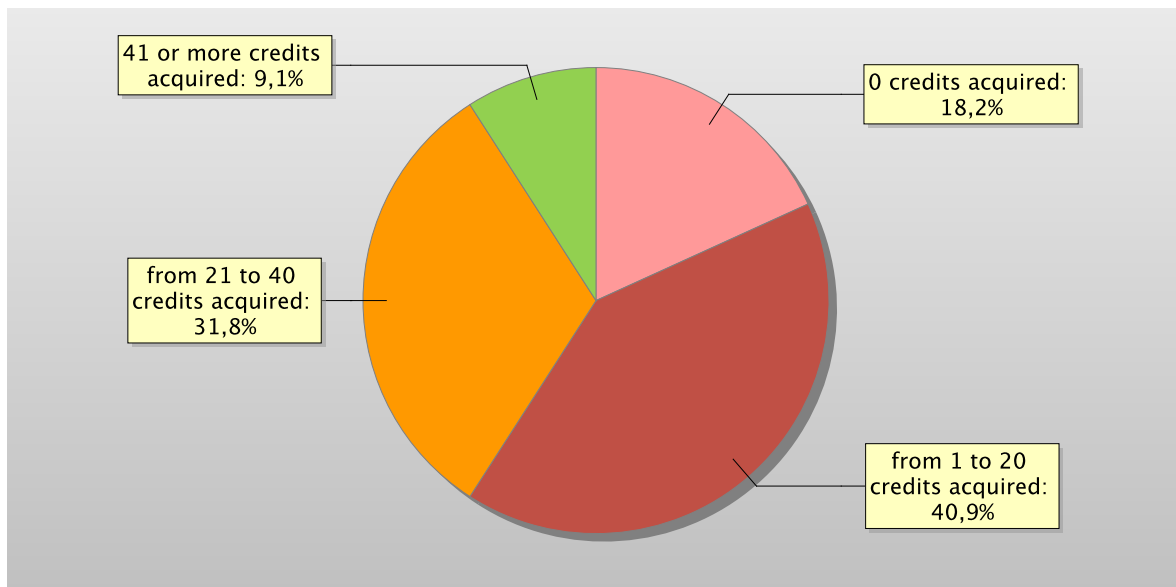
The **graph** shows the distribution of the students according to the number of **credits** obtained at the end of the first year.

In addition, the **table** shows the number of students registered at the second year and average **credits** obtained during the first year.

The Study Programme data is compared with the average of **similar Study Programmes** (which belong to the same group) for the indicated academic years.

Distribution of the students in 2011/2012 according to the number of credits obtained at the end of the first year\*

Data of the Study Programme D.M. 270/04 Aquaculture and Ichthyopathology (code 8520)



Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)

		Students enrolled in the 2nd year	% students with *				Average credits per student
			0 credits acquired	from 1 to 20 credits acquired	from 21 to 40 credits acquired	41 or more credits acquired	
Students 2009/2010	Study Programme	30	6,7%	40,0%	23,3%	30,0%	25,3
	Average of similar Study Programmes	36,3	3,4%	18,7%	40,7%	37,2%	33,4
Students 2010/2011	Study Programme	16	6,3%	43,8%	25,0%	25,0%	25,2
	Average of similar Study Programmes	36,8	2,3%	17,5%	40,2%	40,0%	34,8

Data of the Study Programme D.M. 270/04 *Aquaculture and Ichthyopathology (code 8520)*

	Study Programme	Students enrolled in the 2nd year	% students with *				Average credits per student
			0 credits acquired	from 1 to 20 credits acquired	from 21 to 40 credits acquired	41 or more credits acquired	
Students 2011/2012	Study Programme	22	18,2%	40,9%	31,8%	9,1%	19,7
	Average of similar Study Programmes	39,1	4,9%	18,5%	35,9%	40,7%	33,5

\*Note: by convention, credits are considered to be obtained by students by 31st October of the year following the year of enrolment.

#### D.2.3.2. EXAMS PASSED AND AVERAGE GRADE

The **table** shows number of exams passed and average grade achieved for each course unit in the calendar year 2011. Marks for the exams passed are expressed out of thirty.

The data refers to the course unit code and therefore includes the various branches of the programme divided into channels or sub-groups, divided by letter.

It considers all subjects for which a grade is assigned, and therefore excludes all those to which a pass/fail score is allocated.

Data of the Study Programmes D.M. 270/04 *Acquacultura e igiene delle produzioni ittiche (code 0986), Acquacultura e igiene delle produzioni ittiche (code 8520)*

	N. of exams passed	Average grade *
00061 BIOCHIMICA	5	
00088 CHIMICA	1	
05095 BIOLOGIA	12	23,2
08397 NUTRIZIONE E ALIMENTAZIONE ANIMALE	20	26,4
16621 MICROBIOLOGIA ED EPIDEMIOLOGIA VETERINARIA	5	
17698 BIOCHIMICA APPLICATA ALL'AMBIENTE E AGLI ALIMENTI	16	26,8
17705 MALATTIE PARASSITARIE DEGLI ANIMALI ACQUATICI	15	26,7
27832 MATEMATICA FISICA (C.I.)	6	25,2
27836 BIOLOGIA (C.I.)	4	
27839 ANATOMIA E FISIOLOGIA ANIMALE (C.I.)	5	
27856 ECONOMIA ED ESTIMO (C.I.)	19	26,7
30445 MICROBIOLOGIA ED EPIDEMIOLOGIA VETERINARIA (C.I.)	8	25
30498 FISIOLOGIA ED ECOTOSSICOLOGIA (C.I.)	14	28,2
30503 IDRAULICA, COSTRUZIONI E IMPIANTI PER L'ACQUACOLTURA (C.I.)	18	27,7
30505 IGIENE E ANALISI DI LABORATORIO DEI PRODOTTI ITTICI (C.I.)	13	26,8
30518 PATOLOGIA GENERALE E ITTIOPATOLOGIA (C.I.)	12	28,2
30533 TECNOLOGIE ALIMENTARI E QUALITÀ DEI PRODOTTI ITTICI (C.I.)	15	27,4
30541 ACQUACOLTURA (C.I.)	23	27,1

	N. of exams passed	Average grade *
30546 IGIENE E LEGISLAZIONE (C.I.)	17	27,5
30553 MALATTIE INFETTIVE DEGLI ANIMALI ACQUATICI E IGIENE VETERINARIA (C.I.)	12	27,7
37905 FARMACOLOGIA E TOSSICOLOGIA VETERINARIA APPLICATA (C.I.)	9	27,7
37909 I GRANDI VERTEBRATI MARINI (C.I.)	15	29,5
37910 ACQUARIOLOGIA	15	29,4
38836 GENETICA	21	25,1
42100 STUDIO E GESTIONE DELLA FAUNA ITTICA D'ACQUA DOLCE	13	28,5
58207 ALIMENTAZIONE DEGLI ANIMALI ACQUATICI E TECNICA MANGIMISTICA	15	26,5
65965 MATEMATICA, STATISTICA E FISICA	14	24,7
65967 CHIMICA E BIOCHIMICA (C.I.)	9	27,2
66264 ANATOMIA E FISIOLOGIA ANIMALE (C.I.)	18	24,9

\* Note: no average grade is given if the number of exams passed is less than or equal to 5.

## D.3. OPINIONS OF GRADUATES AND ATTENDING STUDENTS

*Opinions of graduates on the Study Programme.*

*Tables and graphs provide information on the number of graduates who expressed positive opinions on the Study Programme, focusing on opinions expressed by attending students on course units.*

### D.3.1. OPINION OF GRADUATES

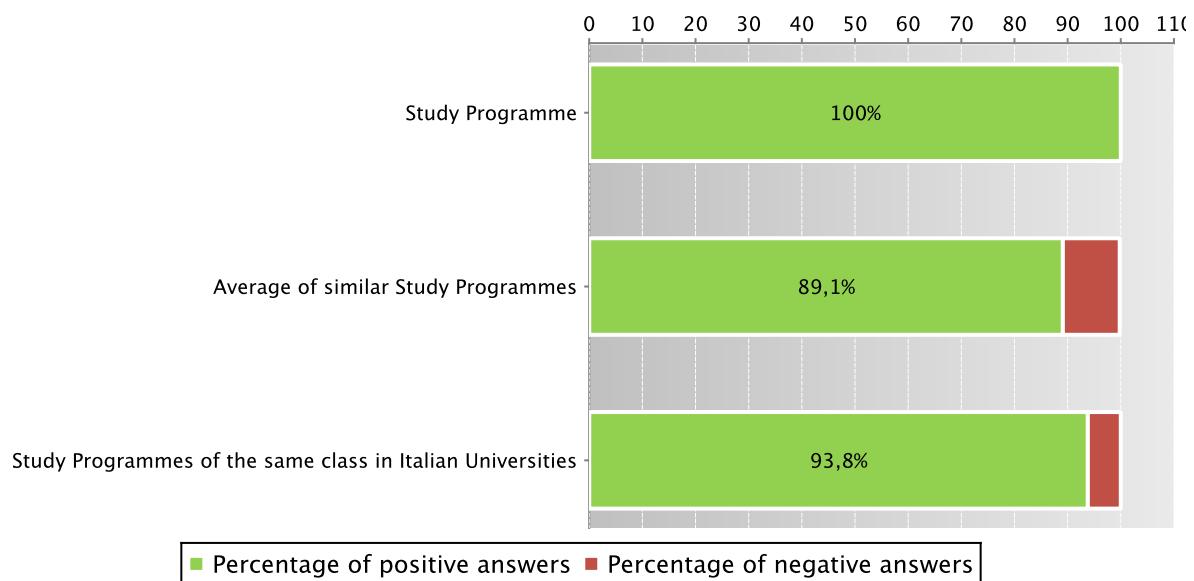
The **graph** shows the percentage of graduates (*AlmaLaurea* survey) who responded positively to the question: “**Are you generally satisfied with the Study Programme**”.

In addition, the **table** shows the percentage of students who answered “Yes, to the same programme at the university” to the question “Would you register again to the university?”.

The Study Programme data is compared with the average of **similar Study Programmes (which belong to the same group)**, and the average of Study Programmes of the same **class** of other Italian universities for the graduates of the indicated years.

Graduates in 2012 who responded positively to the question: “Are you generally satisfied with this Study Programme?”

*Data of the Study Programme D.M. 270/04 Acquacoltura e igiene delle produzioni ittiche (code 0986)*



*Data of the Study Programme D.M. 270/04 Acquacoltura e igiene delle produzioni ittiche (code 0986)*

		N. graduates	Completed Questionnaires	% of positive answers to the question: “Are you generally satisfied with this Study Programme?”	% of answers “yes to the same Programme in the same University” to the question “Would you register again to the University”
2011	Study Programme	3	3		
	Average of similar Study Programmes	21,2	19,8	89,2%	72,1%
	Study Programmes of the same class in Italian Universities	58	55	89,1%	61,8%
2012	Study Programme	10	9	100,0%	55,6%
	Average of similar Study Programmes	25,4	24,3	89,1%	73,0%
	Study Programmes of the same class in Italian Universities	105	97	93,8%	72,2%

Symbols:

(\*) The opinions of the Study Programmes with less than 5 graduates are not shown.

Further information on [Graduates' Profile Report](#).

See data of previous academic years – Study Programme D.M. 509/99 Aquaculture and Ichthyopathology (code 0403) [paragraph D.5.3.1](#).

### D.3.2 ADDITIONAL DATA ON OPINIONS OF STUDENTS

#### D.3.2.1. OPINION OF ATTENDING STUDENTS

The **graph** shows the percentage of attending students who responded positively to the question in the questionnaire: “Are you generally satisfied with this course unit?” in academic year 2011/2012.

The **table** also shows the number of completed questionnaires.

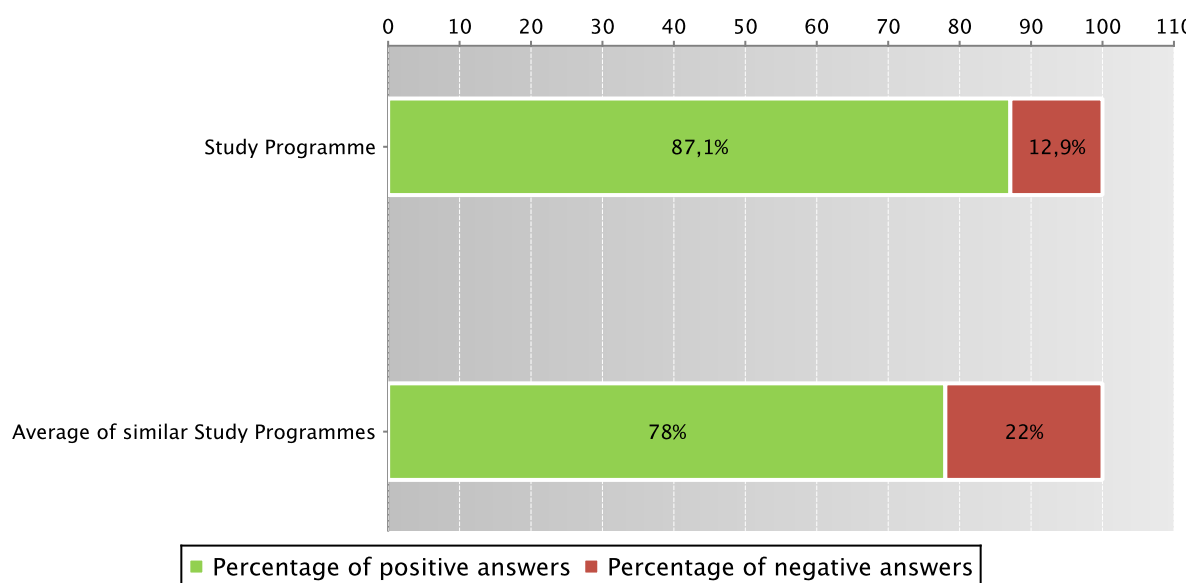
The Study Programme data is compared with the [average of similar Study Programmes \(which belong to the same group\)](#), for the indicated academic years.

The data concerning the students' opinion refers to the opinions of those attending lessons, whether they are enrolled in the current programme or a Study Programme running under pre-reform regulations (under D.M. 509).

For the University of Bologna the survey and subsequently analysis of the opinions of students attending the course is cared by Academic Affairs Division - Quality Assurance Department and Control and Finance Division - Support Planning and Evaluation Department. The overall results and the methods of collection and analysis are described in the document published online on the [Statistical Observatory of the University of Bologna](#) (see the note in the glossary).

Students who responded positively to the question: “Are you generally satisfied with this course unit?” in academic year 2011/2012

*Data of the Study Programmes D.M. 270/04 Acquacoltura e igiene delle produzioni ittiche (code 0986), Acquacoltura e igiene delle produzioni ittiche (code 8520) and of the Study Programme D.M. 509/99 Acquacoltura e ittiopatologia (code 0403)*



Data of the Study Programmes D.M. 270/04 *Acquacoltura e igiene delle produzioni ittiche (code 0986)*, *Acquacoltura e igiene delle produzioni ittiche (code 8520)* and of the Study Programme D.M. 509/99 *Acquacoltura e ittiopatologia (code 0403)*

		Number of completed questionnaires	% of positive answers concerning the general satisfaction with the course unit – Question 19
a.y. 2009/2010	Study Programme	421	86,6%
	Average of similar Study Programmes	1059,4	77,4%
a.y. 2010/2011	Study Programme	504	84,9%
	Average of similar Study Programmes	1222	76,8%
a.y. 2011/2012	Study Programme	639	87,1%
	Average of similar Study Programmes	1289,9	78,0%

Symbols:

(\*) When there is a small number of questionnaires, the percentage of positive opinions on overall satisfaction is not presented.

Further information on [Rapporto Opinione degli studenti frequentanti sulle attività didattiche](#) (the content is in Italian).

## D.4. ENTRY INTO THE WORLD OF WORK

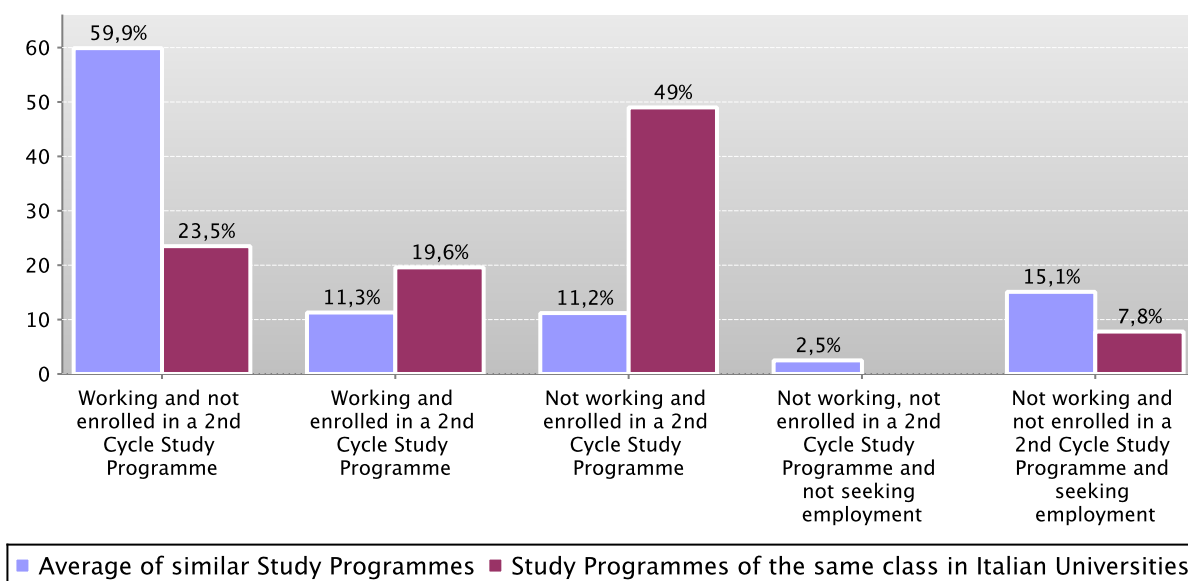
*Employment situation of graduates of the Study Programme.*

*Tables and graphs provide information on the employment situation of graduates one year after graduating.*

### D.4.1. EMPLOYMENT SITUATION

Employment situation of graduates in 2011 one year after graduating

Data of the Study Programme D.M. 270/04 *AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)*





Data of the Study Programme D.M. 270/04 AQUACULTURE AND ICHTHYOPATHOLOGY (code 0986)

		N. graduates interviewed	Employment and education situation (1)					Not working, not seeking employment, but following a university programme/traineeship (2)	Degree's appropriateness for the job (referred to the graduates who just work) (3)	
			Working and not enrolled in a 2nd Cycle Study Programme	Working and enrolled in a 2nd Cycle Study Programme	Not working and enrolled in a 2nd Cycle Study Programme	Not working, not enrolled in a 2nd Cycle Study Programme and not seeking employment	Not working and not enrolled in a 2nd Cycle Study Programme and seeking employment		Effective / very effective	Quite effective
Graduation Year 2011	Study Programme	1								
	Average of similar Study Programmes	18,9	59,9%	11,3%	11,2%	2,5%	15,1%	9,9%	73,3%	11,7%
	Study Programmes of the same class in Italian Universities	51	23,5%	19,6%	49,0%		7,8%	31,4%	42,9%	33,3%

See data of previous academic years – Study Programme D.M. 509/99 Aquaculture and Ichthyopathology (code 0403) [paragraph D.5.4.1.](#)

## D.5. INFORMATION ON PRE-REFORM PROGRAMMES (DM 509/99)

### D.5.1. STUDENTS STARTING THEIR UNIVERSITY CAREERS

*Characteristics of incoming students at the beginning of their university careers. Tables and graphs provide information on the number of registered students, focusing on the characteristics of the students, results of any entrance tests and students assigned additional learning requirements.*

#### D.5.1.1. ENROLMENTS AND REGISTRATIONS

Data of enrolments and registrations of the last three academic years are shown in [paragraph D.1.1.](#)

#### D.5.1.2. ADDITIONAL DATA ON STUDENTS' STARTING THEIR UNIVERSITY CAREERS

##### D.5.1.2.1. CANDIDATES REGISTERED FOR THE ENTRANCE EXAM

Data of candidates registered for the entrance exam are shown in [paragraph D.1.2.1.](#)

##### D.5.1.2.2. INCOMING STUDENTS

Data of incoming students of the last three academic years are shown in [paragraph D.1.2.2.](#)

### D.5.2. REGULARITY OF STUDIES

*Insight into the regularity with which the students pass their exams.*

*Graphs and tables provide information on the number of students who leave the programme after the first year and the number of regular graduates, focusing on the number of credits obtained at the end of the first year, the number of exams passed and the average grade achieved for each course unit.*

#### D.5.2.1. STUDENTS LEAVING THE PROGRAMME BETWEEN YEARS 1 AND 2

Data of students leaving the Study Programme of the last three academic years are shown in [paragraph D.2.1.](#)

### D.5.2.2. REGULAR GRADUATES

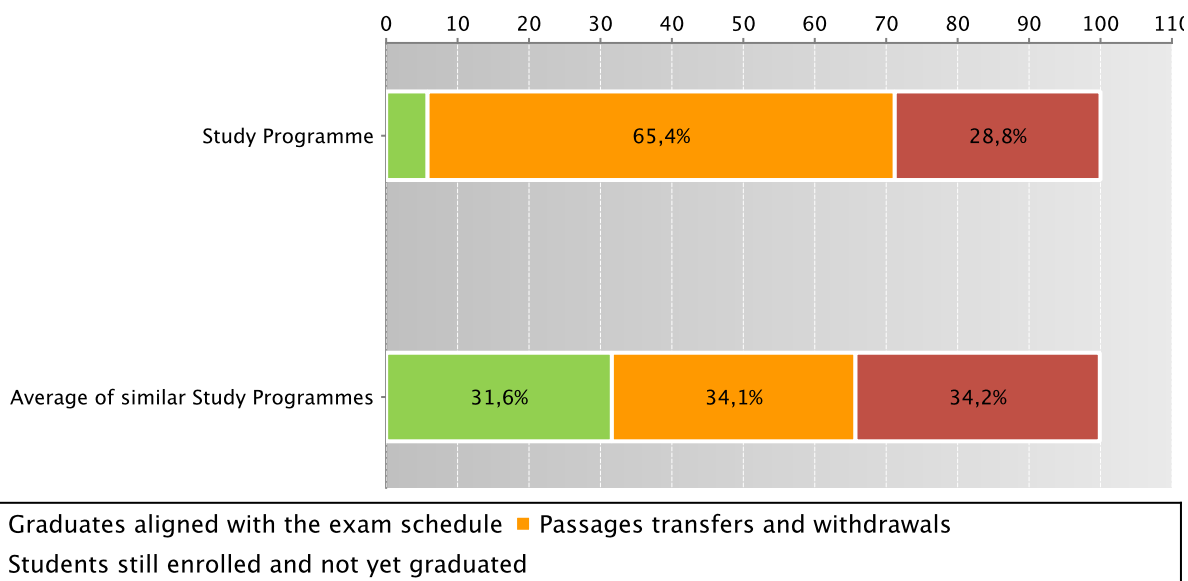
Here you will find information on regular graduates, on how many students, at the end of the regular programme duration, left the programme and how many are still enrolled but not aligned to the exam schedule.

The **graph** and the **table** show the situation concerning **registered students** for the indicated academic year, at the end of the regular duration of the Study Programme, highlighting the percentage of regular graduates, the number of students still enrolled (**not aligned to the exam schedule** and **repeating** students), students who have left the programme (including **passages**, **transfers** and **withdrawals**).

The Study Programme data is compared with the average of **similar Study Programmes** (which belong to the same group) for students registered in the indicated academic years.

Situation of students 2007/2008 at the end of regular duration of the study programme

Data of the Study Programme D.M. 509/99 Aquaculture and Ichthyopathology (code 0403)



Data of the Study Programme D.M. 509/99 Aquaculture and Ichthyopathology (code 0403)

	Registered students	Regular graduates		Passages transfers and withdrawals		Students still enrolled and not yet graduated		
		N.	%	N.	%	N.	%	
Students 2007/2008	Study Programme	52	3	5,8%	34	65,4%	15	28,8%
	Average of similar Study Programmes	38,5	12,2	31,6%	13,1	34,1%	13,2	34,2%

Go back to [D.2.2. Regular graduates](#)

### D.5.2.3. ADDITIONAL DATA ON REGULARITY OF STUDIES

#### D.5.2.3.1. CREDITS OBTAINED BY STUDENTS IN THE 1ST YEAR

Data of credits obtained by students in the 1st year of the last three academic years are shown in paragraph [D.2.3.1.](#)

#### D.5.2.3.2. EXAMS PASSED AND AVERAGE GRADE

Data of exams passed and average grade are shown in paragraph [D.2.3.2.](#)

### D.5.3. OPINIONS OF ATTENDING STUDENTS AND GRADUATES

Opinions of graduates on the Study Programme.

Tables and graphs provide information on the number of graduates who expressed positive opinions on the Study Programme, focusing on opinions expressed by attending students on course units.

#### D.5.3.1. OPINION OF GRADUATES

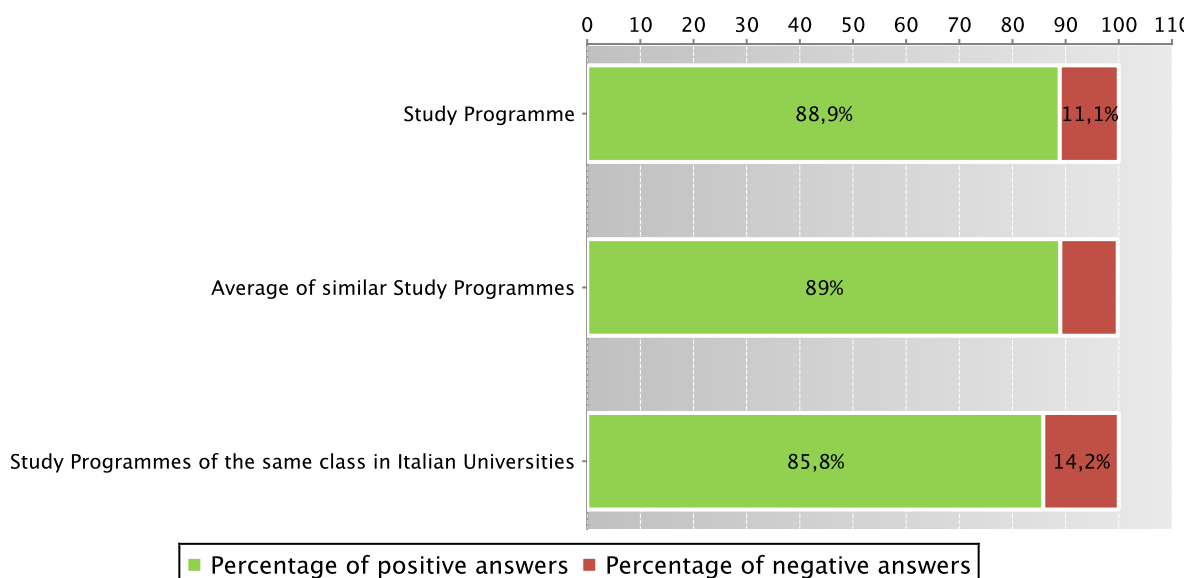
The **graph** shows the percentage of graduates (AlmaLaurea survey) who responded positively to the question: “**Are you generally satisfied with the Study Programme**”.

In addition, the **table** shows the percentage of students who answered “Yes, to the same programme at the university” to the question “Would you register again to the university?”.

The Study Programme data is compared with the average of similar Study Programmes (which belong to the same group), for the indicated years.

Graduates in 2010 who responded positively to the question: “Are you generally satisfied with this Study Programme?”

Data of the Study Programme D.M. 509/99 Acquacoltura e ittiopatologia (code 0403)



Data of the Study Programme D.M. 509/99 Acquacoltura e ittiopatologia (code 0403)

		N. graduates	Completed Questionnaires	% of positive answers to the question: “Are you generally satisfied with this Study Programme?”	% of answers “yes to the same Programme in the same University” to the question “Would you register again to the University”
2010	Study Programme	21	18	88,9%	72,2%
	Average of similar Study Programmes	31,7	29,2	89,0%	72,8%
	Study Programmes of the same class in Italian Universities	294	268	85,8%	63,4%

Symbols:

(\*) The opinions of the Study Programmes with less than 5 graduates are not shown.

Further information on [Graduates’ Profile Report](#).

Go back to [D.3.1. Opinion of graduates](#)

#### D.5.3.2 ADDITIONAL DATA ON OPINIONS OF STUDENTS

### D.5.3.2.1. OPINION OF ATTENDING STUDENTS

Data of opinion of attending students of the last three academic years are shown in paragraph D.3.2.1.

## D.5.4. ENTRY INTO THE WORLD OF WORK

*Employment situation of graduates of the Study Programme.*

*Tables and graphs provide information on the employment situation of graduates one year after graduating.*

### D.5.4.1. EMPLOYMENT SITUATION

The paragraph shows the employment situation of graduates one year after graduating.

The data is taken from the [AlmaLaurea](#) reports on the employment situation of graduates.

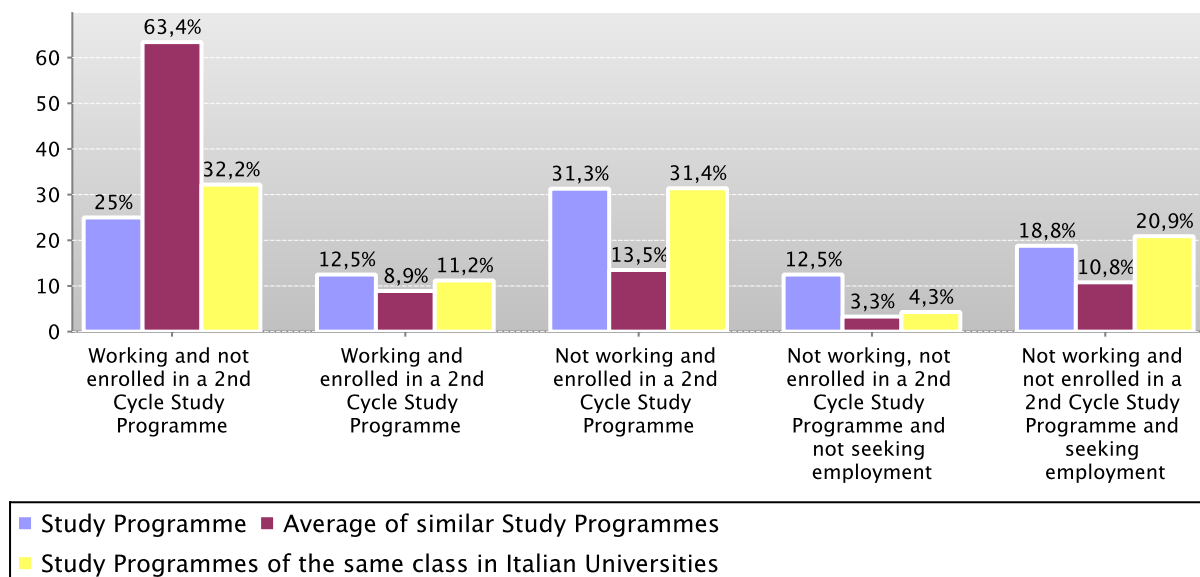
The **graph** shows who is working, who is not working but has enrolled in a Second Cycle study programme, who is not working and is not seeking employment, who is not working but is seeking employment.

In addition, the **table** shows the number of graduates interviewed, the number involved in internships and traineeships and the appropriateness of their degree to the job.

The Study Programme data is compared with the average of **similar Study Programmes (which belong to the same group)** and the average of Study Programmes of the same faculty of other Italian universities for the graduates of the indicated years.

Employment situation of graduates in 2010 one year after graduating

*Data of the Study Programme D.M. 509/99 Aquaculture and Ichthyopathology (code 0403)*



Data of the Study Programme D.M. 509/99 Aquaculture and Ichthyopathology (code 0403)

		N. graduates interviewed	Employment and education situation (1)					Not working, not seeking employment, but following a university programme/traineeship (2)	Degree's appropriateness for the job (referred to the graduates who just work) (3)	
			Working and not enrolled in a 2nd Cycle Study Programme	Working and enrolled in a 2nd Cycle Study Programme	Not working and enrolled in a 2nd Cycle Study Programme	Not working, not enrolled in a 2nd Cycle Study Programme and not seeking employment	Not working and not enrolled in a 2nd Cycle Study Programme and seeking employment		Effective / very effective	Quite effective
Graduation Year 2009	Study Programme	18	44,4%	22,2%	33,3%		22,2%	41,7%	25,0%	
	Average of similar Study Programmes	26	66,8%	8,5%	13,7%	2,8%	8,2%	11,1%	77,6%	10,2%
	Study Programmes of the same class in Italian Universities	265	36,6%	15,8%	25,7%	5,7%	16,2%	18,1%	38,7%	23,4%
Graduation Year 2010	Study Programme	16	25,0%	12,5%	31,3%	12,5%	18,8%	31,3%	33,3%	16,7%
	Average of similar Study Programmes	26,6	63,4%	8,9%	13,5%	3,3%	10,8%	12,2%	74,7%	10,6%
	Study Programmes of the same class in Italian Universities	258	32,2%	11,2%	31,4%	4,3%	20,9%	22,1%	37,3%	23,6%

Symbols:

(\*) The opinions of the Study Programmes with less than 5 graduates are not shown.

### Notes on the AlmaLaurea report on the employment situation of graduates

**(1) "Employment and education situation":** the number of employed graduates is the sum of those working and those working who are also enrolled in a 2nd cycle degree programme. The number of those enrolled in a 2nd cycle degree programme is the sum of those who are working and studying and those who are only studying.

**(2) "Number of those who do not work, who are not seeking employment but who are following a university programme/traineeship":** the definition includes those who are enrolled in traineeships, PhD degrees, specialisation schools, Italian "master universitari" (first and second level). The presentation of this data complies with article 2 of D.M. 544 of 31st October 2007, as later provided for in Management Decree no. 61 of 10th June 2008 (transparency requirements).

**(3) The evaluation of the appropriateness of the degree is obtained by a combination of the requirement of the relative qualification for the job held and the level of usage of the skills learned at university.**

Further information on [Graduates' Employment report](#).

[Go back to D.4.1. Employment situation](#)

## E. FIND OUT MORE: THE QUALITY OF YOUR STUDY PROGRAMME

The University of Bologna has identified its objectives as the *personal, cultural and professional growth of students and the improvement of the quality of learning, also in relation to the needs of society* (Strategic Plan 2010-2013).

Students, employers and society as a whole, have the right to effective learning for individual and intellectual growth, to develop critical sense and to prepare for the world of work.

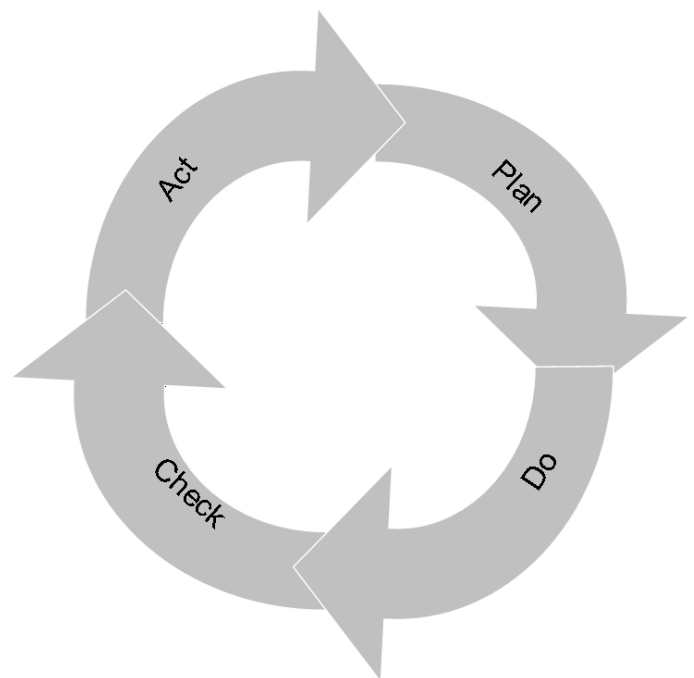
In the Statute and the Strategic Plan 2010-2013 the University of Bologna acknowledges its responsibility in guaranteeing the quality of its study programmes, and for this purpose adopts an "internal quality assurance system".

### The Internal Quality Assurance system

The internal quality assurance system is a set of processes and responsibilities adopted to guarantee the quality of Study Programmes at the University of Bologna.

The guarantee of the quality of a Study Programme is the correspondence of the results achieved with the set objectives, in the following phases:

- Plan: defining the objectives
- Do: implementing the planned actions
- Check: checking that the objectives have been achieved
- Act: planning improvement action



This path responds to the expectations of students, guides teaching behaviour and provides indicators for the assessment of results. Self-assessment is based on the analysis of significant data (for example, the number of students graduating in line with the exam schedule, students' opinions and the employment rates of graduates) and highlights strengths and weaknesses in order to reflect on the achieved results, critically consider one's own working methods and take steps for the continual improvement of the Programme. This path involves all educational stakeholders, including students, in order to make use of the contributions of everyone with first-hand knowledge of the Study Programme. Improvement is therefore a day to day development, concerning all aspects of teaching: from the lesson timetable to the publication of on-line programmes, from classroom management to exam methods, and the actual design of the Programme.

This is what happens in each phase:

- **Planning:** the Study Programme is the result of a proposal from the teaching structures and approved by the Academic Bodies.
- **Management:** Schools, Departments and Study Programmes manage the activities required to ensure teaching. The activities are organised as follows:

What we do	Who does what				
	Professors	Study Programme	Schools	Departments	General Administration
Teaching calendar, lessons programme and exam schedules			x		
Management of financial resources			x	x	
Classroom teaching	x				
Management of classrooms and laboratories			x	x	
Libraries and study rooms			x	x	
Approval of individual study plans		x			
Communication and information		x	x		Academic Affairs Division
Guidance service		x	x		Academic Affairs Division
Internships		x	x		Academic Affairs Division
Administrative services: Student Administration Office					Academic Affairs Division
Administration services: Degree programme office			x		Academic Affairs Division
Study grants and loans ad honorem					Academic Affairs Division
Student mobility: university subsidies and programmes					International Relations Division
Mobility: study grants for dissertations abroad			x		
Mobility: authorisations and recognitions		x			
Other students support services		x	x		x

- Internal assessment:** every Study Programme periodically assesses its own results, evaluating, for example, the number of enrolled students, the number of withdrawing students, student opinions etc.; in this way, the strengths and weaknesses, as well as any implemented improvement actions, are highlighted. This phase is organised as follows:

What we do	Who does what
<p><b>Definition, gathering and publication of evaluation data</b> According to the general guidelines of the University and national and international standards, are defined the tools through which should be evaluated the results (indicators). The survey data to be evaluate are published every year on the Report of the Study Program.</p>	Academic Bodies
<p><b>Self-Assessment</b> The Schools and Study Programmes assess the effectiveness of the previously adopted solutions, analyse the progress of their learning activities and draw up proposals for improvement.</p>	Schools and Study Programmes
<p><b>Internal audit</b></p> <p>The results of the self-assessment process are reviewed in the following phases:</p> <ul style="list-style-type: none"> <li>• <b>Analysis:</b> the University Quality Manager analyses the review documents, considering the ability to identify problems, propose solutions and the overall development of the internal quality assurance system.</li> <li>• <b>Review:</b> The observations on the results obtained and the good practices adopted are examined together with the persons in charge of the Schools and Study Programmes in meetings organised by scientific-disciplinary field. The persons in charge receive the observations and inputs on the areas for development and the actions to be adopted in future to improve results.</li> <li>• <b>Sharing:</b> the conclusions of the review activities are submitted to the Academic Bodies and the University Evaluation Board.</li> </ul>	<p>Quality Manager</p> <p>Vice Rector for Teaching and Education</p> <p>Academic Bodies</p>
<ul style="list-style-type: none"> <li>• <b>Improvement:</b> on the basis of the results of the internal audit, the Schools and Study Programmes plan improvement activities, to ensure that the Study Programmes increasingly respond to the needs of society. The cycle then starts over again, with the definition of actions to be implemented, the results of which are in turn verified, in a continuous path that guarantees the quality of education.</li> </ul>	



## F. GLOSSARY TERMS

### Additional Learning Requirements

Students enrolling in the first year of a first cycle or single cycle degree and who, following the results of the entrance exams established for each study programme, do not possess the knowledge required for access to the programme, are assigned additional learning requirements (OFA).

The OFA are fulfilled by passing an assessment test defined by the programme.

The non-fulfilment of the requirements by the date set by the Academic Bodies and published on the University Portal will lead to the re-enrolment in the first year of the programme.

### AlmaLaurea

AlmaLaurea is an innovative in-line database service of graduates' curriculum vitae (1,620,000 CVs, from 53 Italian universities as of 05/07/2012), which offers a link between graduates, universities and businesses.

Created in 1994 on the initiative of the Statistical Observatory of the University of Bologna, managed by a consortium of Italian universities with the support of the Ministry of Education, University and Research, the purpose AlmaLaurea is to act as a point of contact between businesses and graduates, a reference within universities for anyone (students, businesses, etc...) working in the field of university studies, employment and the condition of young people at different levels.

### Average of similar study programmes (belonging to the same group)

Average of the Study Programmes (which belong to the subject group)

Calculated average which refers to all study programmes of the same cycle which belong to the subject group.

There are four groups, composed as follows:

- **BIOMEDICAL** group: Study Programmes of the Schools of Pharmacy, Biotechnology and Sport Science; Medicine; Agriculture and Veterinary Medicine
- **SCIENTIFIC-TECHNOLOGICAL** group: Study Programmes of the Schools of Engineering and Architecture; Sciences
- **SOCIAL SCIENCES** group: Study Programmes of the Schools of Economics, Management, and Statistics; Law, Political Sciences
- **HUMANITIES** group: Study Programmes of the Schools of Arts, Humanities, and Cultural Heritage; Foreign Languages and Literatures, Interpreting and Translation; Psychology and Education

### CFU University Learning Credits

University Learning Credits (CFU) were introduced under Italian Ministerial Decree no. 509/99 to comply with European legislation, and are a measurement of the volume of learning, including individual study, required of students; generally 1 CFU corresponds to 25 hours of a student's "overall learning effort".

### Class

Degree classes group together study programmes of the same level and with the same key learning outcomes and available learning activities for a given number of credits and in sectors which are identified as indispensable. The features of the classes are set nationally, by Ministerial Decree, and are therefore common to all universities.

### Cohort

Cohort refers to a group of students enrolled in the same academic year.

### Enrolment status

In terms of enrolment, students may be:

- **Regularly enrolled:** students enrolled for as many or fewer years than the legal duration of the study programme, who do not fall into any of the following categories;
- **Not aligned with the exam schedule:** students who, without having graduated, have enrolled in all the years of the study programme and which, for programmes with compulsory attendance, have obtained all attendance certificates;
- **Repeating:** students re-enrolling in the same year of a programme again. Starting from academic year 2009-2010, students who have not fulfilled the assigned additional learning requirements within the deadline have to enrol in the 1st year as repeating students.

### Entrance exam

Enrolment in a study programme may be free access or restricted access.

For all programmes with restricted access, candidates are required to sit an entrance exam and there are a limited number of places available. The entrance exam is a test which is used to draw up a graded list of candidates; students may enrol in the programme according to their place in the list. The methods of managing the call for applications and the list of candidates, including the methods for filling any unclaimed places, may vary from year to year. The test may be specific to a Degree Programme or may be part of a single exam covering several programmes from the same university or from other universities (during the registration the students should indicate their first choice).

The following definitions apply:

**Available places** = the number of places laid down in the call for applications to the Study Programme, or determined by subsequent legal provisions; these exclude any additional places reserved according to special provisions of the programme (e.g. for international study programmes, they do not include places for foreign students selected from other universities; for all programmes with restricted access regulated nationally, these do not include the places reserved for transferring students).

**Number of candidates for the exam** = number of students registered for the exam indicating the study programme as their first choice;

**Number of participants in the exam** = number of students participating in the exam indicating the study programme as their first choice;

**Number of participants in the exam for every available place** = number of students participating in the exam who indicated the study programme as their first choice as a ratio of the number of places available on the programme.

#### First year enrolments

This includes all students enrolled in the first year, including those joining the study programme in its first year through transferrals, as well as those enrolled in the first year but not for the first time (e.g. repeating students).

#### New Careers

Students who start a new university career (excluding transfers) from year one in a second cycle programme.

#### Passages and transfers

**Passage:** when a student applies to move to a different study programme from the one enrolled in the previous year, within the same university.

**Transfer:** when a student transfers from a study programme in one university to any programme in another university.

#### Registered students

Students who begin a career in the Italian University System for the first time and who enrol in the first year (i.e. for whom no previous university careers are recorded) of a First Cycle (L509, L) or Single Cycle programme (LSCU, LMCU)

#### Statistical Observatory of the University of Bologna

The Statistical Observatory was founded in 1997 in order to “provide the university governing bodies with a reliable and timely documentary and monitoring database aiming to promote decision-making processes and planning, particularly of learning activities and other services targeting the student population” (art.1 of the Founding and Operational Regulation). Following the disabling of the Statistical Observatory, as resolved by the Board of Governors on 14 December 2010, from the second semester of academic year 2010-11 the survey and subsequently analysis of the attending students opinion is cared for the University of Bologna by Academic Affairs Division - Quality Assurance Department and Control and Finance Division - Support Planning and Evaluation Department. The overall results and the methods of collection and analysis are described in the document published online on the [Statistical Observatory of the University of Bologna](#).

#### University DataWarehouse

In information service for the managers of the University of Bologna organisational departments which gathers, integrates and reorganises data from various sources and makes it available for analysis and evaluation for the purposes of planning and decision-making.

#### Withdrawal

Suspension of studies by students who do not register in the next academic year, or who drop out from the degree programme.