Laurea Magistrale (Second cycle degree/Two year Master - 120 ECTS) in Advanced Automotive Electronic Engineering
a.y. 2017/2018
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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 services 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 2017/18: the information and data provided is as updated as possible.
• Sections A, B and C provide data for the academic year 2017/18.
• The section D presents data regarding the Study Programmes in the last three academic years. 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. When Study Programme data are not available for three academic years, for some information the data of the previous Study Programme are available, too (as for example, the number and the opinion of the graduates, the employment situation). Graphs and tables about attending students opinions and exchange students mobility refers to students whether they are enrolled/graduated in the current programme or in the Study programme running under previous reform regulations (D.M. 509).
• The information and data were taken from the University databases and the reports published by AlmaLaurea, and are updated to 3 May 2017.
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 2017/18.

A.1. PRESENTATION

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

This content is not currently available

A.2. LEARNING OUTCOMES

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

This information is not available in English at this time.

A.3. CAREER OPPORTUNITIES

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

This content is not currently available

A.4. 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.
B. TEACHING AND LEARNING

This section describes the updated course structure diagram (for academic year 2017/18), 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 (exams session and final examination session) and the lecture timetable (in Italian).

- Course timetable
- Examination sessions
- Final examination sessions
C. RESOURCES AND SERVICES

This section provides a list of teaching staff and their relative curricula and a description of the services available to students for the academic year 2017/18.

C.1. TEACHERS

The link takes you to the webpage which provides the personal web pages of each one of the lecturers teaching in the Study Programme.

• Faculty

C.2. STUDENT SERVICES: OFFICES

C.2.1. FUTURE STUDENTS

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

• Prospective students

C.2.2. ENROLLED STUDENTS

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

• Current students

C.2.3. INTERNATIONAL STUDENTS

The links take you to the reference Work Placement and International Relations office for the Study Programme, where available.

• Exchange students

C.2.4. GRADUATES

• Graduates
D. THE STUDY PROGRAMME IN FIGURES

The Programme was run for the first time in a.y. 2017/2018; for this reason no data are available for the past academic years.
E. FIND OUT MORE: THE QUALITY OF YOUR STUDY PROGRAMME

The University of Bologna has identified its objectives as to promote the quality of the programme catalogue and invest in distinctive and multidisciplinary fields related to people’s needs and society’s needs (Strategic Plan 2016/2018).

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 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 Study 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 Study 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:
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<th>What we do</th>
<th>Professors</th>
<th>Study Programme</th>
<th>Schools</th>
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<th>General Administration</th>
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<tr>
<td>Teaching calendar, lessons programme and exam schedules</td>
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<td>Management of financial resources</td>
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<td>Classroom teaching</td>
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<td>Management of classrooms and laboratories</td>
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<td>Libraries and study rooms</td>
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<td>Approval of individual study plans</td>
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<td>Mobility: study grants for dissertations abroad</td>
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**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

Definition, gathering and publication of evaluation data
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 evaluated are published every year on the Report of the Study Program and other documentation. Since 2017, the National Agency for Evaluation of the University and Research System (ANVUR) provides a set of homogeneous indicators for all the Italian Universities and for all the Study Programme, which is alongside the University’s statistical data.

Who does what

Academic Bodies
Since 2017 also ANVUR

Self-Assessment
The teaching structures and Study Programmes assess the effectiveness of the previously adopted solutions, analyse the progress of their learning activities and draw up proposals for improvement.

Schools and Study Programmes

Internal audit
The results of the self-assessment process are reviewed in the following phases:

- Analysis: the University "Presidio di Qualità" analyses the review documents, considering the ability to identify problems, propose solutions and the overall development of the internal quality assurance system.

- Review: 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 the results.

- Sharing: the conclusions of the review activities are submitted to the Academic Bodies and the University Evaluation Board.

- Improvement: on the basis of the results of the internal audit, the teaching structures 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.
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 online database service of graduates’ curriculum vitae (2,280,000 CVs, from 73 Italian universities as of 24/02/2016), 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.

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

Group of students beginning their students career on the same academic year. Students which have been transferred or which enrolled to pass to another Study Programme, or enrolled to a second degree are not included.

From the publication of this study programme report is updated the procedure of the selection of the cohorts: the student belongs to the cohort of the study programme on which one has been enrolled on 31 December of the year of the beginning of student career.

First year enrolments

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

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.

Repeating

Student 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.

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 from studies

Suspension of studies by students who do not enroll in the next academic year or who drop out from the studies.