Art. 1
DEFINITION

1. The aims of the research doctorate are training in research, through teaching and research activities in the course’s area of discipline and other related fields. This activity will lead to original contributions to scientific knowledge and will be the subject of the student’s final thesis.

2. The training consists of a research programme combined with advanced training aimed at increasing the student’s scientific knowledge and methodological and planning skills, as well as training relevant to the international arena.

Art. 2
AIMS AND TRAINING ACTIVITIES

1. The PhD course is organised in two curricula:
   a. Industrial and environmental molecular biotechnology
   b. Applied biotechnology

2. The aims of the PhD course are to provide:

   - theoretical and experimental competences necessary for training in biotechnology;
   - guidance and motivation necessary to ensure that investigative efforts are directed towards issues relevant for either industry, the agroalimentary sector, public health or the environment.

The curriculum in MOLECULAR, INDUSTRIAL AND ENVIRONMENTAL BIOTECHNOLOGY allows students to acquire theoretical bases and methodological knowledge which will enable them to perform research in various sectors of biotechnology, in chemical, biochemical, physiological, genetic, microbiological, bioinformatics and engineering disciplines, specifically the main areas of investigation concerning the processes for the production of bio-energy and bio-fuels from both photosynthetic organisms and domestic and industrial waste; the study of the structure and function of proteins for the understanding of biological processes and the development of applications and analysis of the regulation of the proteomes of living organisms; the characterisation of the response of microbial and plant organisms to environmental factors with the aim of improving their productivity and stress resistance as well as their use in reclamation processes.

The curriculum in APPLIED BIOTECHNOLOGY provides the scientific bases and laboratory experience necessary for biotechnological research in the exploration of the structure, function and regulation of the genome of microbial, plant, animal and human organisms; developing models to assess the effects of interactions between environmental and genetic factors; the study of the structure / function of biological macromolecules; food quality control and safety, microbiological applications in the agroalimentary sector, the development of innovative biotechnological processes through the use of plants and microorganisms. The course has an established relationship with the wine industry.

3. To this end, the research project is complemented by a wide range of methodological training activities co-ordinated by the relevant School, with relevance to foreign collaborations, including research management, research systems and financing, research results exploitation and intellectual property.
4. Possible career opportunities include academia, public and private research centres, all levels of the industrial sector, research and development and quality control management, product processing and storage including waste product disposal and transformation, business consultation and technology transfer.

Art. 3
DOCTORATE COURSE ADMINISTRATIVE BODIES

These are:
1) the Co-ordinator
2) the Teaching Staff Council

Art. 4
COORDINATOR

The PhD Coordinator is a full professor (or associate professor if necessary) elected by full-time Teaching Staff Council members who performs the duties prescribed by the Regulations of the University of Verona.

Art. 5
TEACHING STAFF COUNCIL

The Coordinator schedules Teaching Staff Council meetings (possibly via teleconferencing) in order to ensure the Council is complying with its duties as set out in the University General Regulations and in accordance with the Doctorate School’s wishes.

The Teaching Staff Council has the following functions:

a) planning and running of doctorate courses;
b) verifying the proper conduct of scheduled activities and, in case of non-compliance, implementation of appropriate corrective actions;
c) defining course admission procedures, including an indication of evaluation criteria and their scores;
d) where necessary, deliberating on the value of course applicants’ foreign studies to judge whether they are admissible for the course;
e) defining training and research credits;
f) defining the training activity calendar by the beginning of the current year’s PhD cycle;
g) approving teachers’ and researchers’ teaching activities for the PhD course;
h) submitting an annual report in accordance with the University’s regulations;
i) appointing student tutors and thesis commissions;
j) authorising student requests to work externally for periods of over six months;
k) authorising student work requests on the condition that these do not interfere with their studies or course attendance as per Art 12 of the University Regulations;
l) authorising activities external to the doctorate course but which are essential for the candidate’s thesis;
m) in the case of conventions aimed at developing doctorates in collaboration with companies: defining methods of conducting research and deciding on the level of commitment of the doctoral student
n) recommending the exclusion of students to the Rector as per Art. 18 para 5 of the University Regulations;
o) authorising post-student suspension activities;
p) admitting doctoral students to the following years and the final exam after obtaining, for the latter, the binding opinion of external evaluators;
q) authorising students who have with good reason been unable to submit their theses to do so in the following cycle;
r) nominating internal evaluation commissions for admission to following years and the final examination;
s) appointing external evaluators for the final thesis;
t) defining procedures to be implemented in the event of a negative assessment of the thesis by the evaluators;
u) submitting to the Rector nominations for the thesis commission that grants the titles of “Doctor of Research” and “Doctor Europaeus”;
v) suggesting further work to students whose theses have failed the final examination.

These rules are binding for admission to the Teaching Staff Council.

**Art. 6**

**PhD STUDENT REPRESENTATIVES**

Student representatives form part of the Teaching Staff Council when convened as per Art.5 paragraphs a, b, e and f.

Each cycle of PhD students elects a Representative from among their own ranks. The election of Representatives is convened by the PhD course Co-ordinator within sixty days of the start of the PhD cycle.

**Art. 7**

**COURSE CREDITS**

As per Art. 9 of the Regulations of the Course’s relevant Doctorate School, the Course consists of 180 credits (CFU) of which:

a) at least 10 CFU from the School’s teaching activities;
b) at least 30 CFU from the Course’s teaching activities;
c) at least 90 CFU from research.

Teaching and research activities are defined by the Teaching Staff Council following the proposals of the School.

The acquisition of CFUs from activities different from the PhD course shall be verified annually in order to decide on admission to the subsequent year. The number of CFUs necessary for admission to the final exam shall be verified at the end of the final year of the course.

**Art. 8**

**ADMISSION TO SUBSEQUENT YEARS**

1. The student presents a report at the end of each year of the course setting out the learning and research activities he has taken part in.
2. Admission to following years is dependent on:
   a) the presentation of the thesis proposal by the end of the first year;
   b) the presentation of the progress of the thesis by the end of the second year.

The presentation, in the form of a seminar, is held before at least three members of the Teaching Staff Council. The candidate is evaluated on the quality of research, presentation, argumentation and handling of questions from the audience and the commission. This presentation can take place by conference call should the candidate be abroad for research activities.

3. The Teaching Staff Council decides on admission to the following year based on the report on learning and research activities, the Tutor’s evaluation and the marks awarded for the seminar by the judging commission.
Art. 9
ATTAINMENT OF PhD

1. Before the end of the course, the candidate must present a seminar before at least three members of the Teaching Staff Council which serves to determine whether he or she will be admitted to the final examination.

2. Before the end of the course, based on learning and research activities, the Tutor’s evaluation and the marks awarded for the seminar by the judging commission, the Teaching Staff Council draws up a list of candidates whose theses can be evaluated by external evaluators.

3. Before the end of the course, the Teaching Staff Council nominates members of Judging Commissions who will confer the title of “Doctor of Research” to the Rector, as well as nominating external evaluators, at least two professors with proven academic backgrounds who do not belong to the staff of the University of Verona and may be members of foreign institutions, for each thesis.

2. By thirty days before the end of the course, the candidate sends external evaluators a preliminary version of the thesis which has been approved by the Tutor, with a report detailing all activities performed and publications made as an attachment. Within one month of receiving this, the evaluators give an analytical written opinion of the thesis and either approve its submission to public discussion or suggest additions or corrections to be made within a maximum period of six months, after which they, the same evaluators, must give another written judgment based on these corrections and additions.

3. By three months before the end of the course, the Teaching Staff Council deliberates on the admission to the final examination of each candidate, based on the judgment of the evaluating commission (para. 1) and the opinion of external evaluators and tutors.

4. Within fifteen days of the publication of the list of examinees, candidates must register for the examination and deposit their registration form along with the original thesis frontispiece signed by the Coordinator, tutor and candidate.

4. Students admitted to the final exam must deposit their thesis with the University library (U-GOV) up to fifteen days prior to the discussion. The thesis will be made public within thirty days of the discussion subject to any embargos due to information protected by trade secrets and / or publishing rights. Failure to deposit the thesis with the University library will lead to exclusion from the thesis discussion.

5. The public discussion of the thesis takes place no later than four months following the end of the course. After the discussion the thesis, by means of a joint written judgment, is approved or rejected. The commission, by a unanimous vote, has the right to give an honours award to a thesis it judges to be of particular scientific importance.

Art. 10
TEMPORARY AND FINAL PROVISIONS

1. Matters not covered by this Regulation are covered by the rules of law, ministerial regulations, statutory provisions and the General Regulations of the University.

2. These Regulation shall come into force on the fifteenth day following its publication by the University.