



UNIVERSITÀ
di **VERONA**

Master's Degree in
Medical Bioinformatics
LM-18 Second-cycle degree class in Computer Science

**DIDACTIC REGULATIONS OF THE DEGREE
PROGRAMME**

ACADEMIC YEAR 2026/27
COHORT 2026/27

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GENERAL INFORMATION

1.	WEBSITE	The web pages of the degree programme provide an overview of the course, its organization, the regulations governing its functional aspects, and other University regulations on topics useful to the student community. The quality assurance system and orientation services for future freshmen are also described. Information regarding the practical organization of the course, the conduct of teaching activities, educational opportunities, and useful contacts throughout the entire study path up to the final graduation can be found here. Procedures and methods for enrolling in the degree programme, the entry requirements, and support services for students, including international ones, are illustrated. Furthermore, contacts, FAQs, notices, services, and opportunities offered by the University are available.
2.	CONTACT PERSON	Prof.ssa Rosalba Giugno Chairs the Quality Assurance (QA) Group, which oversees the design and self-assessment of the degree programme according to the guidelines provided by the Quality Assurance Board.
3.	CHAIR OF THE TEACHING COMMITTEE	Prof. Carlo Combi The Teaching Committee provides for the planning, organization, coordination, verification, and quality assurance of teaching activities; it proposes potential changes to the degree system and regulations of the degree programme, and decides on requests from students regarding their educational path.
4.	REFERENCE STUDENT SECRETARIAT	Operational Unit - Science and Engineering Student Secretariat
5.	FACULTY, SYLLABI, AND OFFICE HOURS	Each professor has their own web page where they publish information related to teaching and research activities. Professors' pages can be accessed from the degree programme website. Syllabi are published on the web page of each course. Office hours are published on the web page of each professor.
6.	DURATION	2 years
7.	LOCATION	Strada Le Grazie 15, 37134 Verona
8.	AFFILIATED DEPARTMENT/SCHOOL	Department of Computer Science
9.	CURRICULA	Single curriculum
10.	LANGUAGE OF INSTRUCTION	English
11.	MODE OF DELIVERY	Conventional
12.	TEACHING MATERIALS	Students have the right to use any teaching materials made available for the course. If the professor has activated the Moodle e-learning platform, the materials contained therein remain available to students for a number of years equal, at most, to the standard duration of the degree programme. If the professor has provided video recordings of the lectures, the videos remain available to students on the Panopto platform for the current and the previous academic year.
13.	ADMISSION	Open access
14.	DEGREE REQUIRED FOR ADMISSION	Bachelor's degree or three-year university diploma, or another qualification acquired abroad and recognized as suitable
15.	CURRICULAR REQUIREMENTS AND ADEQUATE PERSONAL PREPARATION	Reference web page for curricular requirements and personal preparation

16.	ENROLMENT	Reference web page for enrolment
17.	UNIVERSITY EDUCATIONAL CREDITS (CFU)	Each CFU normally corresponds to 25 hours of total student workload, which includes contact hours/teaching activities and autonomous study time, corresponding to the difference between the total hours per CFU and the contact hours. The different types of teaching activities provide the following CFU/HOURS ratios: - Lecture: 1 CFU/6 Hours - Exercise/Laboratory: 1 CFU/ 12 HOURS - Professional Internship/Traineeship: 1 CFU/ 25 HOURS

COURSES		
18.	STUDY PLAN	The study plan is the list of courses and other educational activities that must be completed during one's university career.
19.	COURSES BY PERIOD	This is the list of courses offered in the reference academic year, divided by period and year of enrolment

RULES ON THE TRAINING PATH		
20.	ASSESSMENT METHODS	For each educational activity, the learning objectives, the syllabus, reference texts, teaching materials, and assessment methods are defined. The "course syllabi" are published on the website of each degree programme under the path "Studiare" > "Insegnamenti".
21.	PREREQUISITES	An exam is defined as a prerequisite if it must necessarily be passed before another exam. The course does not have any prerequisites.
22.	BARRIERS	A barrier refers to a requirement necessary to enrol in the subsequent year of the course. The course does not feature any progression barriers

23.	CHOICE OF CURRICULUM	The study plan does not include alternative curricula
24.	ELECTIVE ACTIVITIES (D)	12 CFUs are reserved for the student's elective activities under Type D. Of these, 6 CFUs must obligatorily be used for an elective course that is: • a) offered within the educational syllabus of the degree programme in Medical Bioinformatics (i.e., among the residual courses within the alternative exam options provided by the study plan); • b) offered within the supplementary teaching activities listed on the dedicated page under the path "Studiare" > "Ulteriori attività formative"; • c) offered within the general educational syllabus of the University of Verona; • d) taught at other Italian Universities. If the chosen courses fall under points a) and b), they can be automatically added to the study plan by the student and are therefore recognized. If the chosen courses fall under points c) and d), they must not be characterized by elementary computer science content, and the student is required to submit their choice to the Student Procedures Committee for evaluation and approval. The remaining 6 CFUs can be used for further courses (from the previous list: points a, b, c, d) or for: • courses organized by the Teaching and Learning Center (TaLC); • University initiatives approved by the Teaching Committee; • additional language skills compared to those provided by the study plan, up to a maximum of 6 total CFUs; • other activities useful for entry into the workforce or for refining the training path, subject to prior positive evaluation by the Student Procedures Committee. Within TAF D, it is not possible to recognize CFUs deriving from internship/professional traineeship activities.
25.	TRANSVERSAL FORMATIVE ACTIVITIES (F), STAGE, INTERNSHIPS, OTHER	6 CFUs are reserved for other formative activities (Type F activities), of which 3 CFUs are bound by the study plan to the acquisition of an additional language proficiency (a C1 level in English is suggested).

		The remaining 3 CFUs, which must obligatorily be acquired through internship activities, are aimed at enabling the student to acquire direct knowledge in sectors of particular utility for entry into the workforce and for the acquisition of specific skills of professional interest. Such activities must be carried out in the context of laboratory or seminar courses under the direct responsibility of an individual professor, or through periods of professional internship/traineeship at companies accredited with the University of Verona, Public Administration bodies, or public or private Research Laboratories (laboratories of the Science and Engineering Area are automatically included in this category). For the recognition of credits earned through internships, the University Student Regulations apply. If the number of credits earned is higher than the credits provided in TAF F (i.e., 3 CFUs for this specific option), those in excess will be recognized exclusively as extracurricular credits. Professional internship/traineeship activities are agreed upon in advance, and subsequently certified, by the responsible professor or tutor, together with the evaluation of the targeted educational objectives and the acquisition of the related credits. Some internship proposals may be published under the section "List of Thesis and Internship Proposals" on the final examination page of the degree programme website. Recognition of Work Activity: The working student can obtain recognition for a maximum of 3 Type F credits provided by their study plan by submitting an application to the student secretariat (carriere.scienze@ateneo.univr.it) indicating their employment status (employee or self-employed/VAT registered) and a project they are developing or have developed during their work activity, the workload of which corresponds to the number of credits to be certified. The request will be submitted to the judgment of the Student Procedures Committee, which will verify its consistency with the training path.
26.	TRANSVERSAL SKILLS	These are training paths aimed at the acquisition of transversal skills useful both from a personal and professional perspective, as well as for civic engagement, promoted by the University's Teaching and Learning Center, on whose web page all useful information for registration is published
27.	RULES FOR SUBMITTING STUDY PLANS	The study plan is completed through an online procedure where the student selects the courses they want to take from the educational offerings of their programme, based on specific choice rules. More information is available on the general University web page and the dedicated page.
28.	INDIVIDUAL STUDY PLAN	Upon request, it is possible to obtain the degree according to an individual study plan that includes educational activities different from those provided for in the didactic regulations, provided they are consistent with the degree system of the programme for the academic year of matriculation. The application for an individual plan is submitted to the competent teaching body, which evaluates its consistency.
29.	ATTENDANCE	Not compulsory
30.	TUTORING FOR STUDENTS	To guide and assist students throughout their training path, tutoring duties are assigned to certain professors, as indicated on the information page. Furthermore, a tutoring service carried out by

		senior students already enrolled at the University is established to share their university experience in support of future freshmen and fellow peers.
31.	TRANSFER FROM ANOTHER DEGREE PROGRAMME	"Internal transfer" (<i>passaggio</i>) refers to changing the degree programme within the University of Verona. "External transfer" (<i>trasferimento</i>), on the other hand, concerns students coming from another University to the University of Verona. Please refer to the Academic Calendar to consult the dedicated time windows. A student who wishes to transfer from another Master's Degree Programme must first submit an application for admission to verify possession of the entry requirements. Following this verification, they can request an external transfer (from another University) or an internal transfer (from another course of this University). The Student Procedures Committee is competent for validating credits earned, with respective scores, in other degree courses, in Italy or abroad. In the case of a transfer from another degree course, validation can take place only upon detailed documentation issued by the course/institution of origin (acquired officially), certifying the exams taken with the respective grade obtained and credits earned. The Student Procedures Committee will carry out validations applying the following criteria: • For activities for which a reference to a specific scientific-disciplinary sector is provided, the credits acquired will be validated by evaluating the content of the educational activities and the achievement of the learning objectives of the degree programme on a case-by-case basis. To supplement any credit deficiencies, the Student Procedures Committee can identify the most appropriate supplementary activities necessary to reach the credits provided for the single activity in relation to one or more active courses within the degree programme. Courses for which a number of credits lower than 40% of the total credits of the course have been earned cannot be supplemented with additional activities. In this case, it is necessary to retake the exam in its entirety; • In the case of activities for which reference to a scientific-disciplinary sector is not provided, the Student Procedures Committee will evaluate the content of the educational activities and their consistency with the objectives of the degree programme on a case-by-case basis, considering the amount of acquired credits that can be validated within the educational activities provided in the degree programme; • In the event that a particular educational activity is the result of multiple activities that led to different grades, the final evaluation will be determined by the weighted average of the marks reported, rounded up to the nearest whole number. Following the above evaluations, the Student Procedures Committee will determine the year of enrolment.
32.	RECOGNITION OF PRIOR CAREER	This refers to the evaluation of a previous academic career for the purposes of an internal transfer, an incoming external transfer, or a withdrawal from studies, through the partial or total recognition of previously acquired CFUs, depending on the correspondence between the two educational paths. Please refer to the Academic Calendar to consult the dedicated time windows.

33.	DOUBLE ENROLMENT RECOGNITION	Students enrolled simultaneously in two different degree programmes may request the competent teaching body to recognize the credits acquired in the other degree programme in which they are concurrently enrolled, up to a maximum of one-third of the total credits required by the programme in which recognition is requested.
34.	NUMBER OF EXAM SESSIONS	Five exam dates (<i>appelli</i>) per academic year (two delivered in the exam session immediately following the semester in which the course is taught, two in the following session, and one in the final session). At the professor's discretion, partial/midterm exams may be provided during the lecture periods in weeks defined by the Teaching Committee.
35.	FLEXIBLE PATHS FOR SPECIFIC NEEDS	Career management takes into account the specific needs of certain categories of students. • Disabilities, Specific Learning Disorders (SLD/DSA), and Special Educational Needs (SEN/BES): With particular attention to disabilities and specific learning disorders (SLD), the degree programme and the dedicated structure pursue the university inclusion of students with disabilities and specific learning disorders. To this end, it promotes the removal of material and immaterial obstacles that prevent full inclusion, and also promotes the adoption of mutually agreed accommodations for participation in lectures, exams, other teaching activities, and university life in general, in compliance with applicable legislation and without prejudice to the teaching autonomy of professors. In particular, the degree programme facilitates accessibility to structures and teaching materials, and promotes the use of distance learning methods (synchronous or asynchronous) to meet specific needs expressed by students with disabilities or specific learning disorders. Within the limits of applicable regulations, it favors the university inclusion of students with special educational needs. • Part-time Enrolment: The part-time status regulates exclusively the duration of the university career and the related financial fees, allowing students to obtain their degree without falling into the "delayed graduation" (<i>fuori corso</i>) status, for twice the standard duration of the course itself. • Enrolment in Single Courses: It is possible to follow individual courses offered within bachelor's and master's degree programmes for an academic year and take the related profit exams, receiving regular certification, including an indication of the CFUs earned. • Student-Athlete: Those who possess sports merits of particular competitive significance may access the student-athlete status. Annually, a specific notice regulates the access and retention requirements of student-athletes for the dual-career path, allowing them to successfully complete an academic career combined with their sports career.
36.	FINAL EXAMINATION	24 CFUs are dedicated to the master's thesis, representing a workload that should not exceed 4–5 months of full-time dedication for the student. The master's thesis will be written and discussed in

		English, also with the aid of multimedia supports such as slides, videos, images, and sounds. The methods and deadlines for submitting the graduation application are established by the Teaching Committee of Computer Science and the competent secretariats. Purpose of the Master's Thesis: The purpose of the thesis is to develop an original study that can culminate in an application project, a theoretical result connected to specific design problems, or a critical review of the state of the art in a given field of study. During the development of the thesis, the graduating student must, under the guidance of the supervisor and any co-supervisors, address the study and in-depth analysis of the chosen topics, as well as acquire skills of synthesis and creative application of the knowledge acquired. The content of the thesis must relate to topics in bioinformatics and medical informatics or strictly related disciplines. The thesis consists of the presentation in written form of activities that can be structured as: • design and development of applications or systems; • critical analysis of contributions taken from scientific literature; • original research contributions. Procedure and Evaluation: The final exam consists of the development of a master's thesis that engages the student in research, formalization, design, or development work; this work will substantially contribute to the completion of their technical-scientific education. Each thesis can be internal or external depending on whether it is carried out at the University of Verona or in collaboration with another body. Each thesis involves a supervisor, possibly joined by one or more co-supervisors, and a co-examiner (<i>controrelatore</i>). The co-examiner is appointed by the Teaching Committee at least 20 days before the discussion of the thesis, after verifying the student's eligibility to take the Master's graduation exam. Regarding legal aspects (e.g., intellectual property of the results) linked to the thesis and the results contained therein, reference is made to current legislation and University Regulations. Evaluation of the Thesis: The criteria on which the supervisor, any co-supervisors, and the co-examiner are called to express their opinion are the following: 1. Level of in-depth study of the work carried out, in relation to the state of the art of the computer science disciplinary sectors, with emphasis on applications to medical and biological fields; 2. Knowledge or technological advancement brought by the thesis; 3. Critical commitment expressed by the graduating student; 4. Experimental and/or formal development commitment expressed by the graduating student; 5. Autonomy of work expressed by the graduating student; 6. Significance of the methodologies employed; 7. Accuracy of performance and writing. The co-examiner is not called to express an opinion on point 5. Graduation Grade: The graduation grade (expressed out of 110) is an integer value between 66/110 and 110/110 and is formed by the sum, rounded to
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	the nearest whole number (e.g., 93.50 becomes 94, 86.49 becomes 86), of the following addends: 1. Weighted average based on credits and converted out of 110 of the grades obtained in the profit exams; 2. Evaluation of the graduation interview and the thesis according to the following methods: a) allocation of a coefficient between 0 and 1 (fractional with one decimal digit) for each of points 1–7 listed previously; b) allocation of a coefficient between 0 and 1 (fractional with one decimal digit) for the quality of the presentation; c) sum of the coefficients assigned to points a and b. The presence of any honors obtained in the exams taken, participation in internships officially recognized by the Teaching Committee of Computer Science, passing extracurricular exams, and reaching the degree within a short timeframe compared to the legal duration of the study course can be used by the Graduation Committee to allocate a further increase of one point. If the sum obtained reaches 110/110, the Committee can decide to award honors (<i>laude</i>). Honors are proposed and discussed by the Committee, without the adoption of particular automatic calculation mechanisms. Based on current regulations, honors are awarded only if the opinion is unanimous. External Theses: An external thesis is carried out in collaboration with an entity other than the University of Verona. In this case, the graduating student must previously agree on the topic of the thesis with a supervisor from the University. Furthermore, at least one co-supervisor belonging to the external body is provided as an immediate reference for the student during the performance of the thesis activity. The supervisor and co-supervisors must be indicated in the thesis assignment application. The insurance arrangements for the student's stay at the external entity are regulated by the rules in force at the University of Verona. If the thesis takes the form of a training period at such an entity, then it is necessary to stipulate an agreement between the University and said entity. The results contained in the thesis are the shared property of all people and entities involved. In particular, the contents and results of the thesis are to be considered public. For everything regarding non-strictly scientific aspects (e.g., agreements, insurances), reference is made to the Academic Senate resolution of January 12, 1999. Supervisor, Co-Supervisors, Co-Examiners: The Master's Thesis is presented by a supervisor who is an academic staff member of the University holding the role of Full Professor, Associate Professor, Junior or Senior Assistant Professor (RTDa/RTDb), or Tenure Track Assistant Professor (RTT). The professor must satisfy at least one of the following three requirements: i. member of the Teaching Committee to which the degree programme belongs; ii. member of the Department of Computer Science; iii. tenured within a scientific-disciplinary sector (SSD) present in the study plan of the Master's Degree in Medical Bioinformatics. In addition to those who meet the requirements indicated with respect to the role of supervisor (as indicated above), researchers operating in extra-university research institutes, research fellows,
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		post-doctoral scholarship holders, PhD students, technical staff of the Department, subject experts (<i>cultori della materia</i>) appointed by an Italian University and still in force, and expert company representatives in the sector considered in the thesis can also act as co-supervisors. Any professor or researcher of the Department of Computer Science of the University of Verona who is particularly competent in the specific field of study of the thesis can be appointed as a co-examiner. The co-examiner is proposed by the supervisor, communicated to the graduating student for entry into ESSE3, and appointed by the Chair of the Teaching Committee. The names of the co-examiners are published as soon as possible on the dedicated page following the deadline for submitting the graduation application. Procedures and Deadlines: The student approaching the end of their studies must identify a thesis topic proposed or approved by a supervisor and any co-supervisors. The student must submit the graduation application according to the methods and timelines identified and made public by the student secretariat; the application must contain the title (even provisional) of the thesis, the name of the supervisor, of any co-supervisors (only for external theses), and of the co-examiner. Subsequently, on dates established by the Secretariat and in any case no later than 20 days before the graduation exam, the student must proceed with uploading the thesis into ESSE3. The co-examiner can consult the Master's Thesis in PDF format only after its approval by the supervisor. In order to be admitted to the graduation exam, the student must have acquired the credits in the disciplinary sectors provided for by the regulations and study plan of the Master's Degree Course according to the degree class chosen by them during enrolment, and be up to date with the payment of tuition fees and contributions. Graduation Final Examination Committee: The committee for the final examination must include 5 faculty members (Full Professors, Associate Professors, Tenure Track Assistant Professors, Senior or Junior Assistant Professors), of whom at least 3 are among the professors with a teaching assignment within the Master's Degree Course in Medical Bioinformatics; the other 2 must be tenured within scientific-disciplinary sectors (SSD) present in the study plan of the course itself. In light of the number of graduating students, the Teaching Committee of Computer Science will identify the most appropriate organizational methods for conducting the exam and make the schedule of the exams public at least one week before they take place. Students holding a Master's degree in Medical Bioinformatics can access second-level Master's programmes and PhD courses in Italy and abroad. Lectures may be held in both Italian and English.
37.	FURTHER INFORMATION	Academic Calendar: All information regarding the Academic Calendar can be found at this link. Foreign Qualifications and Periods of Study Spent Abroad: The Student Procedures Committee is competent for the recognition of credits and qualifications earned abroad by the student, with the respective score. Following the evaluations, the Committee will determine the year of enrolment. The recognition of credits earned by students enrolled in the Master's Degree Course in Medical Bioinformatics during study periods abroad, within international

		programmes to which the University of Verona adheres, is submitted to the evaluation of the Student Procedures Committee.
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