



UNIVERSITÀ
di **VERONA**

Bachelor of Science in
Robotic and Intelligent Systems Engineering

L-8 Class of Bachelor's Degrees in Information Engineering

DIDACTIC REGULATIONS OF THE
COURSE OF STUDY

ACADEMIC YEAR 2026/27
COHORT 2026/27

Index of topics

GENERAL INFORMATION

1. WEBSITE
2. CONTACT PERSON
3. PRESIDENT OF THE ACADEMIC BOARD
4. SECRETARIAT OF THE RELEVANT DEGREE PROGRAMME
5. TEACHERS, PROGRAMS AND OFFICE HOURS
6. DURATION
7. VENUE
8. DEPARTMENT/SCHOOL
9. CURRICULUM
10. LANGUAGE OF DELIVERY
11. TEACHING METHODS
12. TEACHING MATERIALS
13. ACCESS
14. QUALIFICATION REQUIRED FOR ENROLMENT
15. REQUIRED KNOWLEDGE, ASSESSMENT METHODS AND ADDITIONAL LEARNING OBLIGATIONS (OFA)
16. REGISTRATION
17. UNIVERSITY CREDITS

COURSES

18. DIDACTIC PLAN
19. COURSES BY PERIOD

RULES ON THE TRAINING PATH

20. ASSESSMENT METHODS
21. PREREQUISITES
22. BARRAGES
23. STUDENT'S ELECTIVE ACTIVITIES (D)
24. TRANSVERSAL TRAINING ACTIVITIES (F), INTERNSHIPS, TRAINEESHIPS, OTHER
25. SOFT SKILLS
26. RULES FOR THE SUBMISSION OF STUDY PLANS
27. INDIVIDUAL STUDY PLANS
28. FREQUENCY
29. TUTORING FOR STUDENTS
30. CHANGE/TRANSFER FROM ANOTHER COURSE OF STUDY
31. RECOGNITION OF PREVIOUS CAREER
32. DOUBLE ENROLLMENT RECOGNITION
33. NUMBER OF EXAM SESSIONS
34. FLEXIBLE PATHS FOR SPECIFIC NEEDS
35. FINAL EXAM
36. MORE INFORMATION

GENERAL INFORMATION

In these regulations, the terms declined in the masculine are intended to refer to all genders.

1.	WEBSITE	On the web pages of the Degree Programme it is possible to view a presentation of the course, how it is organised, the regulations governing its functional aspects and the other university regulations on topics useful for the student community. The orientation services for future freshmen and the Quality Assurance (QA) system are described. It is possible to find information regarding the practical organization of the course, the performance of teaching activities, training opportunities and useful contacts throughout the course of study, up to the achievement of the final degree. The procedures and procedures for enrolling in the course of study, the entry requirements and the services to support students, including international students, are illustrated. Contacts, FAQs, notices, services and opportunities offered by the University are also available. CDS page
2.	CONTACT	Prof. Marco Cristani. He chairs the QA Group that takes care of the design and self-assessment of the Course of Study according to the indications provided by the Quality Assurance Committee.
3.	PRESIDENT OF THE ACADEMIC BOARD	Prof. Graziano Pravadelli The Academic Board provides for the planning, organization, coordination, verification and quality assurance of teaching activities; it proposes any changes to the regulations of the Degree Course and deliberates on the requests of students relating to the educational path.
4.	SECRETARIAT OF THE COURSE OF STUDY	Science and Engineering Degree Courses Secretariat
5.	TEACHERS, PROGRAMS AND OFFICE HOURS	Each professor has his or her own web page where he or she publishes information relating to teaching and research activities, in Italian and English. The teachers' pages can be accessed from the Degree Programme website. The course programs are published on the relevant web pages. Office hours are published on the web page of each teacher.
6.	DURATION	3 years.
7.	HEADQUARTERS	Strada Le Grazie 15, 37134 Verona.
8.	DEPARTMENT/SCHOOL OF AFFILIATION	Engineering for Innovation Medicine.
9.	CURRICULUM	Unique.
10.	LANGUAGE OF DELIVERY	Italian and English (some selected courses of the third year).
11.	TEACHING METHODS	Conventional.
12.	TEACHING MATERIALS	The student has the right to use any teaching materials made available for teaching. If the teacher 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 normal duration of the course. If the teacher has provided video recordings

		of the lessons, the videos remain available to students on the Panopto platform for the current and previous year.
13.	ACCESS	Free.
14.	QUALIFICATION REQUIRED FOR ENROLMENT	Secondary school diploma, or other qualification obtained abroad recognized as suitable.
15.	REQUIRED KNOWLEDGE, ASSESSMENT METHODS AND ADDITIONAL LEARNING OBLIGATIONS (OFA)	The basic knowledge required, listed on the relevant page, is verified as described in the enrolment procedures and in the verification methods. If the score obtained following the verification is below the defined threshold, the student is assigned the relative Additional Educational Obligation (OFA), which is considered fulfilled after having followed the remedial course organized by the Science and Engineering Area and having passed the related final exam. Finally, the B1 certification for the English language is suggested, but not necessary, to facilitate the acquisition of the B2 certification during the degree course and to deal with the teachings in English during the third year.
16.	REGISTRATION	Registration
17.	UNIVERSITY CREDITS	A <i>University Educational Credit</i> (CFU) is a unit of measurement that measures the student's commitment to his or her study activities. Each CFU corresponds to a different number of hours depending on the type of study activity. The different correspondences are as follows: • The study activity completed independently by the student is quantified in 25 hours per CFU. • The different types of teaching activities provided by the university provide for the following hours/CFU ratios: ○ Lectures (in the classroom): 8 hours per CFU; ○ Exercise-laboratory (in the teaching laboratory): 12 hours per CFU; ○ Internship: 25 hours per CFU.

COURSES

18.	TEACHING PLAN	The teaching plan is the list of courses and other training activities that must be taken during one's university career. <i>Teaching plan</i>
19.	COURSES BY PERIOD	This is the list of courses taught in the academic year of reference, divided by period and year of enrolment. <i>Courses by period</i>

RULES ON THE TRAINING PATH

20.	ASSESSMENT METHODS	For each training activity, the learning objectives, any prerequisites, the syllabus, the reference texts and teaching material, the teaching methods, the methods for verifying learning, the evaluation criteria and the criteria for composing the grade are defined. The "course sheets" are published on the website of each Degree Programme under the heading "Courses". The exam takes place after the end of the course in the periods scheduled for the exam sessions. In addition to the final exam, there may also be intermediate tests during the course of the course, aimed at verifying the learning of the subject in itinere and which the teacher can take into account for the final evaluation. The verification of the individual progress achieved by the student and the consequent recognition of the credits accrued in the various training activities end with a grade or a judgment and typically written and/or oral exams are scheduled whose final grade is expressed in thirtieths. In the case of the grade, the result is considered positive for the purposes of awarding credits if a score of at least 18/30 is obtained. The attribution of honors, in the case of a grade of at least 30/30, is at the discretion of the examination commission and requires the unanimity of its members. At least 15 days must elapse between one exam session and another of the same course. It is not allowed to schedule, on the same day, more than one exam session relating to courses belonging to the same year of the course.																				
21.	PREREQUISITES	A course is defined as preparatory to another course if the relevant exam must necessarily be passed before being able to take the exam of the next course. The course of study includes the following prerequisites: <table><tr><th>Teaching</th><th>Necessary prerequisites</th></tr><tr><td>Linear algebra and geometry</td><td>None</td></tr><tr><td>Mathematical analysis</td><td>None</td></tr><tr><td>Logic networks and electronic computers</td><td>None</td></tr><tr><td>Programming for cyber-physical systems</td><td>None</td></tr><tr><td>Mechanics and thermodynamics</td><td>None</td></tr><tr><td>Human-machine interaction</td><td>None</td></tr><tr><td>Mathematical methods</td><td>Mathematical analysis, linear algebra and geometry</td></tr><tr><td>Electromagnetism, optics and the structure of matter</td><td>Mathematical analysis</td></tr><tr><td>Analog and digital electronics with laboratory</td><td>Mathematical analysis</td></tr></table>	Teaching	Necessary prerequisites	Linear algebra and geometry	None	Mathematical analysis	None	Logic networks and electronic computers	None	Programming for cyber-physical systems	None	Mechanics and thermodynamics	None	Human-machine interaction	None	Mathematical methods	Mathematical analysis, linear algebra and geometry	Electromagnetism, optics and the structure of matter	Mathematical analysis	Analog and digital electronics with laboratory	Mathematical analysis
Teaching	Necessary prerequisites																					
Linear algebra and geometry	None																					
Mathematical analysis	None																					
Logic networks and electronic computers	None																					
Programming for cyber-physical systems	None																					
Mechanics and thermodynamics	None																					
Human-machine interaction	None																					
Mathematical methods	Mathematical analysis, linear algebra and geometry																					
Electromagnetism, optics and the structure of matter	Mathematical analysis																					
Analog and digital electronics with laboratory	Mathematical analysis																					

		Fundamentals of mechanics for robotics Computer Vision Introduction to Systems and Signal Analysis with Laboratory Statistical methods for engineering Operating systems Databases Control theory Embedded & IoT intelligent systems programming Applied software engineering Artificial intelligence Principles of nanotechnologies Robot programming and control Sensor networks and wearables	Mathematical analysis, Mechanics and thermodynamics Programming for cyber-physical systems, linear algebra and geometry Mathematical analysis Linear algebra and geometry Logic networks and electronic computers, programming for cyber-physical systems Programming for cyber-physical systems Mathematical analysis Programming for cyber-physical systems, logic networks and electronic computers Programming for cyber-physical systems Programming for cyber-physical systems, statistical methods for engineering Electromagnetism, optics and the structure of matter Mathematical, mechanical and thermodynamic analysis Programming for cyber-physical systems	
22.	BARRIERS	By barrier we mean the requirement to be able to enrol in the next year of the course. To be admitted to the second year, the student must have fulfilled the additional educational obligations (OFA) by 10 December of the following calendar year. Barrages		
23.	ACTIVITIES CHOSEN BY THE STUDENT (D)	12 credits are reserved for the activities chosen by the student in the 2nd and 3rd year of the course (type "D" activities). Students can obtain type D credits by taking any exam included in the University of Verona's educational offer. Before taking type D exams, students are required to submit their choice to the Student Practices Committee, which will verify its consistency with the educational objectives of the Course of Study. Instead, the following are automatically recognized: - the residual exams not chosen from the Degree Course; - type D activities activated by the Department of Computer Science and the Department of Engineering for Innovation Medicine of the University of Verona (maximum 6 CFU); - courses on transversal skills (maximum 6 CFU). Types of training activities D and F		
24.	TRANSVERSAL TRAINING ACTIVITIES	6 credits are reserved for other training activities (type "F" activities) and concern internship activities. Every year, the internship committee, after consulting the interested parties and the professors		

	(F), INTERNSHIPS, INTERNSHIPS, OTHER	of the board, defines a list of internship projects, from which students can choose, in line with their course of study. The list may also be supplemented, subject to the evaluation of the internship committee, by proposals that are formulated by the students themselves who autonomously take action to identify internship opportunities within the Departments of the University of Verona or at institutions/companies. The internship commission also supervises the management of projects, carries out training activities for trainees and ensures the correct conduct of internships. For the recognition of credits acquired with internships, the University Regulations for the recognition of credits earned in internships apply. Internship activities can normally be started from the end of the second year. If the number of credits accrued is higher than the credits provided for the internship in TAF F (i.e. 6 credits), the excess credits will be recognized exclusively as supernumerary. Types of training activities D and F Internship and internship service
25.	SOFT SKILLS	These are training courses aimed at the acquisition of transversal skills useful both from a personal and work point of view and in civic <i>engagement</i>, promoted by the University's Teaching and Learning Center on whose web page all the useful information for registration is published.
26.	RULES FOR SUBMITTING STUDY PLANS	The study plan is completed through an online procedure with which the student selects the courses he wants to take as part of the educational offer of his or her course, based on certain rules of choice.
27.	INDIVIDUAL STUDY PLANS	It is possible, upon request, to obtain the degree according to an individual study plan that also includes training activities other than those provided for in the teaching regulations, provided that they are consistent with the educational regulations of the course of study of the academic year of enrolment. The application for an individual plan is submitted to the examination of the student practice commission which assesses its consistency.
28.	FREQUENCY	Not mandatory.
29.	TUTORING FOR STUDENTS	To guide and assist students throughout the training course, some teachers are entrusted with tutoring tasks. The Academic Board assigns each student a tutor from among the professors of the Degree Course to whom the student can turn for information relating to the administrative, logistical and didactic structure of the Degree Course, for guidance in the choice of training courses and to discuss how to overcome any difficulties encountered in the training process. The Tutoring Service is also established by senior students already enrolled at the University, who make their university experience available to support future freshmen and study colleagues. Tutoring
30.	TRANSFER / TRANSFER FROM ANOTHER DEGREE PROGRAMME	"Transfer" means the change of Degree Programme within the University of Verona (internal transfer). The "transfer", on the other hand, concerns the case of students who, coming from another university, move to the University of Verona. The Student Practices Committee is responsible for validating the credits obtained, with relative scores in other degree courses, in Italy

		or abroad. In the event of a transfer/transfer from another degree course, validation can only take place on the basis of detailed documentation issued by the course/university of origin (acquired ex officio), which certifies the exams taken with the relative grade obtained and credits accrued. The Student Practices Committee, deliberating within 45 days of the transmission of the request, will carry out the validations by applying the following criteria: • for activities for which reference to a specific scientific disciplinary sector is required, the credits acquired will be validated by assessing the content of the training activities and the achievement of the educational objectives of the course of study on a case-by-case basis. In addition to any credit shortfalls, the Student Practices Committee may identify the most appropriate supplementary activities necessary to achieve the credits required for the individual activity in relation to one or more courses active in the degree course. Courses for which less than 40% of the credits required for that course have been accrued may not be integrated with additional activities; • in the case of activities for which reference to a scientific-disciplinary sector is not envisaged, the Student Practices Committee will assess the content of the training activities and their consistency with the objectives of the course of study on a case-by-case basis, considering the number of credits acquired that can be validated as part of the training activities envisaged in the course of study; • In the event that a particular training activity is the contribution of several activities that have given rise to different grades, the final evaluation will be determined by the weighted average of the marks reported rounded to the upper integer. Following the above assessments, the Student Practices Committee determines the year of enrolment and the possible need to remedy the additional training obligations (OFA). The procedure for changes of curriculum and changes of system is the same as for course changes.
31.	RECOGNITION OF PREVIOUS CAREER	It is the assessment of the previous course of study, for the purposes of a transfer, an incoming transfer or a withdrawal from studies, through the partial or total recognition of the credits previously acquired, depending on the correspondence between the two training courses. The rules indicated for transfers/transfers to another degree programme also apply in the case of enrolment of students who apply for recognition for previous career. Following the above assessments, the Student Practices Committee will determine the year of enrolment and any need to remedy the additional educational obligations (OFA). Recognition of previous career
32.	RECOGNITION OF DOUBLE REGISTRATION	Students enrolled in two different courses of study at the same time can request the recognition of the credits acquired in the other

		course of study in which they are simultaneously enrolled up to a maximum of one third of the total credits provided for by the course of study, in which recognition is requested.
33.	NUMBER OF EXAM SESSIONS	The dates of the exams are announced at least 20 days before the start date of the exam session. The number of sessions is 3; there are 5 sessions, of which 2 at the end of the semester of delivery of the course (February or June/July), 2 in the following semester (June/July or September) and 1 of recovery (September or February).
34.	FLEXIBLE PATHS FOR SPECIFIC NEEDS	Career management takes into account the specific needs of certain categories of students. <u>Disability, specific learning disorders (SLD) and special educational needs (SEN):</u> With particular attention to disability and specific learning disorders (SLD), the course of study and the dedicated structure pursues 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 shared accommodations for participation in lectures, exams and other educational activities and in general for participation in the life of the university community, in compliance with applicable legislation and without prejudice to the teaching autonomy of teachers. In particular, the course of study promotes accessibility to teaching facilities and materials and promotes the use of distance teaching methods, synchronous or asynchronous, to meet specific needs expressed by students with disabilities or specific learning disorders. Within the limits of applicable legislation, it promotes university inclusion of students with special educational needs. <u>Part-time (or "part-time") enrolment:</u> The part-time regime regulates only the duration of the university career and the related economic burdens, and allows you to obtain the degree, without incurring the condition of not being on track, for twice the normal duration of the course itself. <u>Enrolment in single courses:</u> it is possible to follow individual courses carried out as part of the Bachelor's and Master's degree courses for one academic year and take the related exams, receiving regular certification, including an indication of the credits obtained. <u>Student – athlete:</u> Those who are in possession of sporting merits of particular competitive importance can access the student-athlete career. Annually, a special notice regulates the access and permanence requirements of student-athletes for the dual career path, to allow them to successfully conclude an academic career in combination with the sports one.
35.	FINAL EXAM	3 university credits are reserved for the final exam. The final exam consists of the creation of a degree thesis, which includes one of the following options: • Thematic in-depth analysis on the topic assigned by the speaker;

		• Development of a laboratory project under the guidance of the speaker. The supervisor of the degree thesis can be any professor of the University of Verona, who is a member of the teaching board or belongs to an SSD present in the degree course system. At the end of the thesis activity, it must be presented to the Thesis Evaluation Committee, composed of two professors, including the supervisor, in one or both of the following options, at the discretion of the supervisor: • written paper, written in Italian or English, describing the thesis work; • oral presentation with the support of slides illustrating the thesis work, in Italian or English. In the evaluation of the final examination, the Thesis Evaluation Committee assigns the graduating student a maximum of 4 points. Upon obtaining the 180 credits provided for in the teaching plan, the proclamation of the achievement of the degree follows, which takes place on the dates provided for in the teaching calendar. The final degree grade is communicated during the proclamation, and is established by a special Graduation Committee composed of at least 3 professors belonging to the teaching board of the CdS. It expresses an overall judgment in one hundred and tenths with possible honors. The minimum score that can be acquired is 66/110. The score is calculated by summing: • The admission grade, determined by relating the weighted average of the CFU of the exams to 110 and then rounding the result to the nearest integer. • an increase of a maximum of 8 points, of which 4 are reserved for the evaluation of the final exam and 4 are reserved for the evaluation of the student's curriculum. The evaluation of the curriculum, carried out by the Degree Committee, takes place through a calculation based on the following scheme (which takes into account in a positive way any honors and Erasmus periods and in a negative way any years out of course): if in progress: $3.5 + 0.2 * \text{number of honors}$; if out of course: $3.5 - 0.5 * \text{number of years out of course} + 0.1 * \text{number of honors}$; 1 point for every 3 months of Erasmus carried out. 2 additional points will also be awarded in the case of obtaining at least 12 credits at foreign universities. In any case, the total increase with respect to the admission grade cannot be more than 8 points. The attribution of honours, in the case of an increase that leads to a mark higher than 110, is at the discretion of the Graduation Committee as well as awarded if the opinion of the commission is unanimous.
36.	LEARN MORE	Academic Board and Committees: The Interuniversity Academic Board (CDI) is composed of the professors of the course of study and a student representative, as provided for in the University General Regulations. In the first application, until the completion of a teaching cycle, the Academic Board is integrated with the reference professors of the course of study.

		The Board of Directors exercises the following functions, coordinated by the President of the CDI: • coordinates and manages the teaching activities of the Degree Course; • regularly consults stakeholders; • annually designs the CdS through the updating of the SUA-CdS frameworks; • proposes changes to the teaching regulations and regulations of the Degree Course; • ensures coordination between the different courses of the Degree Course, including laboratory and internship activities; • deliberates, through the Student Practices Committee, on students' requests relating to the training course; • ensures the implementation of the improvement actions indicated in the Review Reports and in the Annual Monitoring Form. The President of the CDI coordinates activities to ensure the development and consolidation of good quality assurance practices. Subcommittees of the CDI are: • The Student Practices Committee which examines students' requests relating to the training course and reports to the CDI for the necessary deliberations. • The QA Committee, composed of the QA Referent of the Degree Course, a representation of professors, and a student representative. The QA Committee coordinates the quality assurance processes and reports to the CDI for the necessary deliberations. • The internship committee, which coordinates the activities of assignment and management of internships according to the provisions of the relevant vademecum The Stakeholder Committee (IPC) has been set up, which includes representatives of the world of research and the employment areas envisaged for graduates of the Degree Course, The CPI has the task of: • bringing university training courses closer to the needs of the world of work, • monitoring the adaptation of training courses to employment opportunities, also taking into account the match between supply and demand for training, • evaluate the effectiveness of employment outcomes. Foreign qualifications and periods of study abroad: The Student Practices Committee is responsible for the recognition of credits and qualifications obtained abroad by the student. Teaching calendar
--	--	---