

**Bachelor's Degree in Computer Science  
Qualification Guide  
2020-2021**

	Bachelor's Degree in Computer Science	Qualification Guide 2020-2021
<b>1. Legal nature of the qualification</b>	<a href="#">Decree of the Government of the Principality of 10 February 2010</a> , establishing the state university qualification of Bachelor's Degree in Computer Science.	
<b>2. External assessment of the teaching programme</b>	<a href="#">Favourable report on the eUniv Bachelor's Degree in Computer Science of 21 May 2020</a> issued by the Andorran Higher Education Quality Agency (AQUA), in agreement with the Aragon University Quality and Prospective Agency (ACPUA), member of the European Association for Quality Assurance in Higher Education (ENQA) and registered in the European Quality Assurance Register for Higher Education (EQAR).	
<b>3. Legal authorisation</b>	<a href="#">Decree of the Government of the Principality of Andorra of 7 October 2020</a> , approving the eUniv Bachelor's Degree in Computer Science teaching programme.	
<b>4. Report</b>	<a href="#">Report on the eUniv Bachelor's Degree in Computer Science</a>	
<b>5. Centre</b>	F. Layret University College of the European University IMF ( <a href="http://www.euniv.eu">www.euniv.eu</a> ).	
<b>6. EHEA Cycle</b>	First cycle qualification Level 2 of the Andorran Framework of Higher Education Qualifications.	
<b>7. Academic progression</b>	Direct access to The eUniv Master's Degree in Computer Engineering	
<b>8. Academic credits</b>	180 ECTS credits	
<b>9. Length</b>	Six semesters (3 years)	
<b>10. Modality</b>	Online	
<b>11. Languages</b>	Catalan-English / Spanish-English	
<b>12. Places</b>	30	
<b>13. Recommended entry profile</b>	<p>People interested in accessing the Bachelor's Degree in Computer Science should be interested in the latest technology, with critical skills in abstraction, reflection, analysis and summarising and searching for information. They should also have an interest in the international context, which entails an adequate level of standard English in computing. It is especially suitable for those who want to start their working life in an educational world in revolution with specific training in the form of a bachelor's degree of which only two references have been found in the world. It is recommended for those who have a vocation for innovation and entrepreneurship that (also) enables them to consider a future as liberal professionals in the business world.</p> <p>It is recommended that people interested in accessing the bachelor's degree have a good command of Catalan, Spanish or English at B2 level of the Common European Framework of Reference for Languages, good oral and written skills, as well as a good ability to summarise, understand, interpret, reason and relate linguistic, literary and cultural phenomena.</p>	
<b>14. Course objectives</b>	To train professionals with a solid preparation in the field of computing in various fields. The Bachelor's Degree in Computer Science, with its contents, must provide a theoretical and practical, multidisciplinary and general training that is in line with the specificity of the labour market and provides graduates with a versatile profile and adaptable to an increasingly diverse range of employment, which itself justifies the qualification and makes it better understood and valued by potential employers.	
<b>15. Professional fields of the course</b>	<p><b>01.</b> Analysis of requirements, integration and design of applications, programming, tests and support.  <b>02.</b> Administration of systems, management of databases and computer networks.  <b>03.</b> Freelance professional in consultancy, advice and provision of computer services to the public.  <b>04.</b> Project management for handling large volumes of data (analytical data).  <b>05.</b> Data analysis with applications in various fields (marketing, finance, education, strategy, etc.).  <b>06.</b> Management of artificial intelligence projects.  <b>07.</b> Computer science administration of educational centres at all levels: primary, secondary, college, and lifelong learning.  <b>08.</b> Design of computer systems for the development of e-learning.  <b>09.</b> Design of computer applications to support learning.</p>	
<b>16. General skills</b>	<p><b>CT01.</b> Communicative, oral and written skills, at least in their own language and in English. This skill includes both the ability to analyse and synthesise speech.  <b>CT02.</b> Interpersonal skills: includes skills that consist of providing information adapted to the needs of the interlocutor, establish fluent communication and be able to work in interdisciplinary and networked teams.  <b>CT03.</b> Use strategies to anticipate and resolve problems, conflicts and changes within the professional field.  <b>CT04.</b> Information management skill, which means knowing how to acquire skill sin search, discrimination, management and use of information independently in a professional environment.  <b>CT05.</b> Knowing how to apply both analysis and synthesis to organise and plan one's own work.  <b>CT06.</b> Be able to use and apply information technologies in the academic and professional fields with ethical criteria.  <b>CT07.</b> Be aware of the economic and legal repercussions of professional activities  <b>CT08.</b> Know how to learn independently, keep up to date and be able to expand knowledge permanently.  <b>CT09.</b> Interpret and apply knowledge in accordance with ethical values.  <b>CT010.</b> Capacity for analysis and synthesis  <b>CT011.</b> Problem solving ability  <b>CT012.</b> Ability to organise and plan teamwork.</p>	

	<p><b>CT013.</b> Ability to apply knowledge to practice.</p> <p><b>CT014.</b> Ability to combine individual and team work.</p> <p><b>CT015.</b> Ability to generate new ideas (creativity).</p> <p><b>CT016.</b> Ability to work with quality standards.</p>
<b>17. Specific skills</b>	<p><b>CE01.</b> Develop and coordinate computer applications: analysis, specifications, development, integration and implementation.</p> <p><b>CE02.</b> Develop test sets and evaluate the quality of the solution.</p> <p><b>CE03.</b> Provide user support and service.</p> <p><b>CE04.</b> Manage communications networks and systems.</p> <p><b>CE05.</b> Manage databases and systems.</p> <p><b>CE06.</b> Carry out audits and technical consultancies.</p> <p><b>CE07.</b> Define, develop and maintain software systems and applications using various software engineering methods and programming languages appropriate to the type of application to be developed while maintaining the required quality levels.</p> <p><b>CE08.</b> Design, develop, ensure and evaluate the accessibility, ergonomics and usability of the applications.</p> <p><b>CE09.</b> Design and manage the security of computer applications and systems.</p> <p><b>CE010.</b> Understand and contextualise mathematics to apply it to data analysis, computer security, learning support, or any other field.</p> <p><b>CE011.</b> Develop computational learning techniques and design and implement applications and systems that use them, including those dedicated to automatic information and knowledge extraction from large volumes of data.</p> <p><b>CE012.</b> Design and manage intelligent systems and apply them in any field, and in particular in the educational environment.</p> <p><b>CE013.</b> Understand the fundamentals, paradigms and techniques of human learning in order to analyse, design and develop computer systems, services and applications that serve as support for the development of educational activities.</p> <p><b>CE014.</b> Design and manage LMS's.</p> <p><b>CE015.</b> Grasp the social and ecological impact of IT developments and technology in general and integrate it into designs.</p> <p><b>CE016.</b> Integrate sustainability criteria into IT work (specifically the sustainable development objectives).</p>
<b>18. First year subjects</b>	<p><b>01.</b> OB. 12 ECTS: <b>0056-B-INF-ES Programming I</b></p> <p><b>02.</b> OB. 12 ECTS: <b>0057-B-INF-ES Data Analysis I: Mathematics</b></p> <p><b>03.</b> OB. 12 ECTS: <b>0058-B-INF-ES Databases</b></p> <p><b>04.</b> OB. 12 ECTS: <b>0059-B-INF-ES Networks</b></p> <p><b>05.</b> OB. 12 ECTS: <b>0060-B-INF-ES Operating Systems</b></p>
<b>19. Second year subjects</b>	<p><b>06.</b> OB. 12 ECTS: <b>0061-B-INF-ES Programming II and Software Engineering</b></p> <p><b>07.</b> OB. 12 ECTS: <b>0062-B-INF-ES HCI: Web and Mobile Development</b></p> <p><b>08.</b> OB. 12 ECTS: <b>0063-B-INF-ES Software Applied to Education Centres</b></p> <p><b>09.</b> OB. 12 ECTS: <b>0064-B-INF-ES Data Analysis II</b></p> <p><b>10.</b> OB. 12 ECTS: <b>0065-B-INF-ES Computer Security</b></p>
<b>20. Third year subjects</b>	<p><b>11.</b> OB. 12 ECTS: <b>0066-B-INF-ES Human and AI Learning Methodologies</b></p> <p><b>12.</b> OB. 12 ECTS: <b>0067-B-INF-ES Philosophy of Technology</b></p> <p><b>13.</b> OB. 12 ECTS: <b>0068-B-INF-ES Project Management and Business Management</b></p> <p><b>14.</b> OB. 12 ECTS: <b>0069-B-INF-ES Bachelor's Degree Final Project</b></p> <p><b>15.</b> LE.. 12 ECTS: <b>Free choice</b></p>
<b>21. Entry requirements</b>	<p><b>A.</b> Official Andorran bachelor's, professional bachelor's or advanced professional diploma degrees.</p> <p><b>B.</b> Andorran state university diploma, graduate, bachelor's, specialised bachelor's, master's or doctoral qualifications.</p> <p><b>C.</b> Certification from the University of Andorra of having passed the university entrance for people over 25.</p> <p><b>D.</b> Equivalent qualifications issued by non-Andorran educational institutions, which must be previously verified by the Andorran Ministry of Education, and must allow access to education in the country of origin.</p>
<b>22. Admission criteria</b>	<p><b>A.</b> Academic qualifications provided with the entry qualification: 1 point for a Third, 2 points for a Second, 3 points for a First and 4 points for Honours.</p> <p><b>B.</b> Official qualifications other than the one provided for entry: 1 point for each one.</p> <p><b>C.</b> Professional experience: 1 point for each certified year, as long as it is in the field of the course.</p> <p><b>D.</b> Languages: 1 point for each language with a certified B2 level of the Common European Framework.</p>
<b>23. Enrolment</b>	<p><b>A.</b> Full ordinary enrolment for an academic year is 60 ECTS or 5 subjects for all university courses.</p> <p><b>B.</b> In the last academic year, students may request an extraordinary enrolment of 72 ECTS as long as the additional enrolment corresponds to subjects taken and not passed in previous years.</p>
<b>24. Credits system</b>	<p><b>A.</b> Full-time students must enrol with 30 ECTS per semester.</p> <p><b>B.</b> Part-time students must enrol with a minimum of 12 ECTS per semester and a maximum of 24.</p>
<b>25. Course continuity</b>	<p><b>A.</b> Full-time students have a right of continuity and ordinary completion of their bachelor's course of 5 academic years, and the possibility of requesting a single extension.</p> <p><b>B.</b> Part-time students have a right to continuity and ordinary completion of the bachelor's course of 6 academic years, and the possibility of requesting a single extension.</p>
<b>26. Training activities</b>	<p><b>A.</b> Theoretical: Designed to apply the knowledge acquired and solve problems in new environments within multidisciplinary contexts related to courses; prioritises the transmission of knowledge by the teaching staff, requiring prior and subsequent study from students.</p> <p><b>B.</b> Practical: Designed to develop the skills allowing them to continue courses and communicate the findings to target groups in a clear way; prioritises the participation of students in the reasoned interpretation of knowledge, with the coordination of the teaching staff.</p>

	<p>C. Academic: They can be individual or collaborative to reinforce, respectively, individual initiative on research and cooperative habits of students with the coordination of teachers.</p> <p>D. Participative: To promote critical and professional communication in the university environment.</p>
<b>27. Teaching methodologies</b>	<p>A. Theoretical classes</p> <p>B. Lectures</p> <p>C. Practical classes</p> <p>D. Practical workshops</p> <p>E. Debate and discussion forums</p> <p>F. Group academic assignments</p> <p>G. Group simulations</p> <p>H. Group tutorials</p> <p>I. Individual academic assignments</p> <p>J. Individual simulations</p> <p>K. Individual tutorials</p> <p>L. Final bachelor's degree project</p>
<b>28. Assessment of training activities</b>	<p>A. Theoretical: Test of 80 questions with 4 different answer options. The result of the test is declared Pass if the number of correct answers reaches 60. The grade obtained is worth 30% of the total.</p> <p>B. Practical: Practical test consisting of completing 6 questions corresponding to 6 different cases or exercises for each subject. The result of the test is declared Pass if 4 of the 6 questions are answered correctly and completely. The grade obtained is 30% of the total.</p> <p>C. Individual or collaborative academic: Individual or group performance of the compulsory Academic Project in each subject. The Academic Project is declared Pass if the effective performance of all the parts is verified within the term established in the calendar and has received a positive assessment in a minimum of 7 of the 10 parameters of the Assessment Report. The grade obtained is 30% of the total.</p> <p>D. Participative: Participation in the 6 debates in each subject through the Forum. Participation is declared Pass if the student has participated in a minimum of 5 debates and has received a positive assessment in a minimum of 7 of the 10 parameters of the Assessment Report. The grade obtained is 10% of the total.</p>
<b>29. Minimum weighting</b>	<p>Passing the subject evaluation requires a minimum of 50% of the total weighting obtained in the assessment of training activities.</p>
<b>30. Coordination</b>	<p>Dr. Lluís Vicent  <a href="mailto:coordinatio.b.inf@euniv.eu">coordinatio.b.inf@euniv.eu</a></p>
<b>31. Tutor</b>	<p>Mr. Miquel Trilla  <a href="mailto:tutoria.b.inf@euniv.eu">tutoria.b.inf@euniv.eu</a></p>
<b>32. Manager</b>	<p>Mr. Joan Babeli  <a href="mailto:pas.b.inf@euniv.eu">pas.b.inf@euniv.eu</a></p>
<b>33. Teaching staff</b>	<p>01. 0056-B-INF-ES Dr. C. Padrón</p> <p>02. 0057-B-INF-ES Dr. Lluís Vicent</p> <p>03. 0058-B-INF-ES Dr. L. Formiga</p> <p>04. 0059-B-INF-ES Dr. A. Osorio</p> <p>05. 0060-B-INF-ES Mr. J. Cedó</p> <p>06. 0061-B-INF-ES</p> <p>07. 0062-B-INF-ES</p> <p>08. 0063-B-INF-ES</p> <p>09. 0064-B-INF-ES</p> <p>10. 0065-B-INF-ES</p> <p>11. 0066-B-INF-ES</p> <p>12. 0067-B-INF-ES</p> <p>13. 0068-B-INF-ES</p> <p>14. 0069-B-INF-ES</p> <p>15.</p>
<b>34. Monitoring commission</b>	<p>01. Chair: Dr. L. Vicent, Qualification coordination</p> <p>02. Secretary: Sra. Anna M. Llop, University Quality Management Service</p> <p>03. Teaching Staff Representative: Dr. Francesc Fité</p> <p>04. Student Representative: Sr. Joaquim Vallès</p> <p>05. Non-teaching Staff Representative: Sr. Joan Babeli</p> <p>06. Academic Senate Representative: Sr. J. Puigvert</p>
<b>Mailbox</b>	<p><a href="mailto:qualitas.b.inf@euniv.eu">qualitas.b.inf@euniv.eu</a></p>