Bachelor's Degree in Informatics Engineering

School of Informatics
Building 1G
Campus of Vera (València)

4 courses
240 credits

Spanish, valencian and english

Credit 20,27 € (2018/2019)
It will make you eligible for scholarships

375 places
Out-off marks
2018 8,07
2016 8,528
2015 9,326
etsinf@upvnet.upv.es
+34 963 877 210
www.upv.es/titulaciones/GII/

Introduction to the degree

Computer systems enable to enjoy an improvement in the quality of life. In this sense, computer engineering is currently essential in the design and production of large projects such as electronic administration, savings management and internet purchases, the most sophisticated and clean means of transport, and automation solutions. Computer engineering trains qualified professionals to face challenges such as managing and coordinating teams that study the needs of companies and individuals, designing and developing solutions at all levels (material, processing, interconnection, etc.) and adapting the proposals to current standards.

The curriculum includes 48 ECTS of specialisation courses that are grouped into two different itineraries. One is held at the Escola Politècnica Superior in Alcoi and the second itinerary takes place at the School of Computer Engineering.

International mobility

Computer engineering students have great flexibility when choosing international destinations in which to study for a semester, carry out their final degree project or take on internships in companies. There are agreements in place with some of the best European universities and also with universities in the United States, China, Japan and Australia.

Internships

The internship completes the student’s training so that they can join the professional world with some technical and human experience. Some of the companies or institutions which accept UPV students for work placement opportunities are: Indra, Bull, British Telecom, Iberdrola or the Generalitat Valenciana (València’s Government). In 98% of the cases the students receive financial compensation.

Continuation of studies

This degree provides access to:

- MD in Information Management
- MD in Parallel and Distributed Computing
- MD in Computer and Network Engineering
- MD in Software Engineering, Formal Methods and Information Systems
- MD in Artificial Intelligence, Pattern Recognition and Digital Imaging
- MD in Automation and Industrial Computing
- MD in Computer Engineering

Professional opportunities

According to the latest reports, there is a high deficit of graduates in the sector. The Degree in Computer Engineering qualifies to become a computer engineer that, although it is not a regulated profession, for these purposes it is considered as an equivalent.

Graduates in computer engineering are trained to manage companies in the information technology and communications sector (ICT) and informatics departments of companies and public institutions, take on various responsibility roles in development of computer systems, management and direction tasks.

They will be able to carry out their work in disciplines such as artificial intelligence, multimedia design, computer animation, videogame programming, mobile device programming, network and computer systems security, medical informatics, home automation, etc.

Study at the UPV

and be part of Spain’s best technological university according to the Shanghai ranking

Enjoy our huge campuses with spaces designed for you such as the Student Recreation House.

You can do up to 70 sports in our facilities.

You will find many services at your disposal: language classes, discounts in public transport, counselling, employability support…
## Bachelor's Degree in Informatics Engineering

**Curriculum**

### Credits for obtaining the degree

<table>
<thead>
<tr>
<th>Basic courses</th>
<th>Compulsory</th>
<th>Elective</th>
<th>Internship</th>
<th>T.F.G.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.00</td>
<td>93.00</td>
<td>75.00</td>
<td>0.00</td>
<td>12.00</td>
<td>240.00</td>
</tr>
</tbody>
</table>

### The subjects that you will be able to take

#### Basic courses

- Algebra
- Computer Fundamentals
- Computer Technology
- Discrete Mathematics
- Fundamentals of Business Management
- Introduction to Computer Science and Programming
- Mathematical Analysis
- Physics Foundations on Computer Science
- Programming
- Statistics

#### Compulsory courses

- Automata Theory and Formal Languages
- Computer Architecture and Engineering
- Computer Networks
- Computer Organization
- Concurrency and Distributed Systems
- Data Structures and Algorithms
- Databases and Information Systems
- Ethics and Professionalism
- Human-Computer Interfaces
- Intelligent Systems
- Network Information System Technology
- Operating System Fundamentals
- Parallel Computing
- Programming Languages, Technologies and Paradigms
- Project Management
- Software Engineering

#### Elective courses

- Design, Configuration, and Evaluation of Computer Systems
- Advanced Architectures
- Advanced Data Analysis in Computer Engineering
- Algorithm for Problem Solving
- Algorithmics
- Analysis and Specification of Requirements
- Analysis of Business Requirements
- Animation and Design of Videogames
- Application Integration
- Bioinformatics
- Business Models and Company Functional Areas
- Ciberseguridad En Dispositivos Móviles
- Computability and Complexity
- Computer-Assisted Control
- Corporate Networks
- Cryptography
- Database Technology
- Design and Configuration of Local Area Networks
- Design and Management of Databases
- Design and Management of Genome Information Systems
- Design of Digital Systems
- Design of Operating Systems
- Development of Applications for Mobile Devices
- Distributed System Design and Application
- Edition and Postproduction of Digital Video
- German - A1 - A2 - B1 - B2
- Hacking Ético
- Industrial Formal Methods
- Information Storage and Retrieval Systems
- Information System’s Architecture Management and Configuration
- Innovation and Technology Management in Health
- Integrated Information Systems in Organizations
- Integration and Interoperability
- Intelligent Agents
- Interactive and Immersive Multimedia Systems
- Introduction to Computer Security
- Introduction to Interactive Computer Graphics Systems
- Introduction to Videogame Programming
- Italian - A1
- Lower Intermediate English for Computer Science
- Machine Learning
- Management and Configuration of Networks
- Management of Information Technologies
- Mechatronics
- Medical Informatics
- Model Driven Software Development
- Multimedia Networks
- Network Services and Systems
- Network Technology
- Optimization Techniques
- Organisational Behaviour and Change Management
- Parallel Programming Languages and Environments
- Perception
- Programming Languages and Compilers
- Project of Software Engineering
- Quality and Optimization
- Quantum Computing
- Real-Time and Embedded Systems
- Robotic Systems
- Scientific Computing
- Security in Networks and Computer Systems
- Seguridad Web
- SI TI Service Management
- Social Web Behaviour & Network Analysis
- Software Analysis, Validation and Debugging
- Software Design
- Software Maintenance and Evolution
- Software Process
- Software Quality
- Strategic Information Systems
- System Administration
- Techniques, Tools and Applications of Artificial Intelligence
- Upper Intermediate English for Computer Science
- User-Centered Development
- Valencià Tècnic - C1 - C2
- Video Game Console Architecture and Development Environments
- Videogame Development Environments
- Web Development
- Website Design
- 3D Design and Manufacturing
- 3D Printing

*Internationally accredited bachelor's degree (EURO-INF)*