



# COMPUTER SCIENCE

**Degree:** Engineer's degree  
**Faculty:** Faculty of Technical Sciences  
**Specialisations:** computer games and multimedia, Internet systems, IT system and network security  
**Duration:** 3.5 years

Students have access to professional software. We use Microsoft Azure Dev Tools for Teaching and Autodesk packages. At our University, there is a fibre-optic network connecting all of the university buildings, creating an extensive campus network called the Nysa Academic Network. In addition, we cooperate with IT companies; students participate in workshops conducted by experienced staff.

In the field of computer science, technology is changing quickly. It means not only faster and faster computers but also different software and even programming languages. IT specialists must update their knowledge if they want to stay up to date with the standards. The same problem applies to staff teaching computer science courses. Our teachers have extensive professional experience gained in various IT sector companies. Students acquire the knowledge of modern methods and algorithms of computer science. This knowledge enables solving IT problems, including their analysis, implementation and verification. In addition, the courses taught guarantee education in multimedia, game development, 2D and 3D graphics, modern databases, networks, mobile systems and extensive knowledge in IT security.

## Educational goals

- making students professionals in the area of the computer science
- demonstrating the comprehension of modern software engineering principles
- making students more adjustable in the field of continuously changing technology
- teaching students the skills of analysing complex problems and synthesising solutions to those problems



## Selected general courses

- algorithms and programming
- databases in web applications
- fundamentals of artificial intelligence
- algorithms and data structures programming in Java
- NET programming and computer networks
- information data and IT project management
- information and e-business systems
- computer architecture and operating systems

## Selected specialisation courses

### **Computer games and multimedia**

- computer graphics
- games creation
- virtualisation technology
- multimedia systems

### **Internet systems**

- (NET, PHP, JS) programming
- mobile device programming
- modern web technologies

### **Networks and information system security**

- system virtualisation and protection
- information system security



### **Tiago, Portugal**

I have learned a lot here, dealing with outstanding professionals – they have taught me many valuable things. People who work at the University speak English very well. The International Cooperation Office staff is helpful, and I am grateful for their assistance. They provided us with many great moments, they organised trips and taught me a lot about Polish culture. I liked the study environment, localisation and good communication with our coordinators.



### **Amani, Algeria**

I came from Algeria to Poland, not knowing what I would face. I thought it would be boring and blank. However, it was the most colourful chapter in my life. I had the chance to experience a new system of education and learned a lot of new stuff. As a computer science student, I can say that the university had every facility and was very updated. I met new people from all countries and they are now my family and my heart is melting to meet them again. From this experience, you learn how to get out of the box, think differently and be more dynamic. You learn new cultures and new mindsets. You will love diversity and enjoy it. Moreover, finally, you will learn how to enjoy life and that you can be independent on your own. Thank you for giving us this opportunity and giving us the best.