# After your degree?

You'll be ready to work in a **growth market**. There is a **very high demand** for the skills you will have acquired. And in **Belgium** you are perfectly located in a European **heartland** of the technical and IT sector.

Typical careers include working as a **front or back end developer**, **project coordinator** or **manager**, or an IT **consultant**. And you can specialise in the dynamic world of **artificial intelligence**.

By studying in English, you'll give yourself global opportunity.

# Where are classes held?

### **Campus Groenplaats**

Nationalestraat 5, 2000 Antwerp, Belgium +32 3 613 16 00 study@kdg.be

Campus Groenplaats is the main campus, but from time to time classes are held at:

#### **Campus Pothoek**

Pothoekstraat 125, 2060 Antwerp, Belgium

#### **Campus Stadswaag**

Predikerinnenstraat 18, 2000 Antwerp, Belgium

- kareldegrotehogeschool
- #kdghogeschool
- @kdguniversity.asa

# Open days 2024

Lecturers are on hand to answer your questions about our programme. For times, locations and extra information moments, check **www.kdg.be/info-days**.

SAT SAT TUE

OP 20 22 03

MAR APR JUN SEP

# Time to apply

Follow the application procedure on www.kdg.be/en/apply.



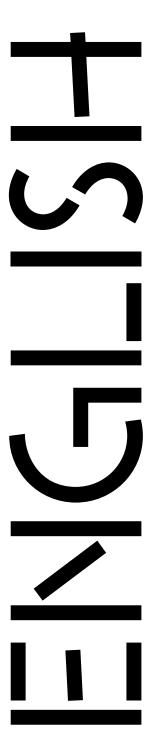
Belgium, where great minds grow



Up-to-date info and video: www.kdg.be/acs

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KdG is part of AUHA, the Association of the University and Universities of Applied Sciences and Arts in Antwerp.





**Professional bachelor** 

# Applied Computer Science

Specialise in artificial intelligence and data. Train to be a developer. Learn, practice and sharpen a range of in-demand IT skills by applying what you learn on group projects. Give yourself international opportunity. And benefit from KdG's 50+ years of expertise in this field. Get ready to help shape the future!



# Your study programme

In this transformative programme you will:

- √ Focus on AI and future technologies
- ✓ Learn coding, programming, data management and security
- ✓ Build your own portfolio of projects with classmates from around the world
- ✓ Enjoy an 8 week internship to practice your skills for real and begin your networking
- ✓ Experience what it's like to work for a company. Develop your business know-how

Benefit from practical coaching with a personal touch.

# Who is the programme for?

- You have a passion for computer science and new tech innovations
- ✓ You have a **logical mind** and enjoy solving puzzles
- ✓ You are **curious**. You have to find out how things work!
- ✓ You learn best by doing. By applying your knowledge
- ✓ You're dedicated and ready to put in the hard work for a rewarding career

This programme is taught in English.



Questions regarding eligibility, prerequisites, enrolment, tuition fee, credits, learning account, guidance, ...? Check www.kdg.be/en.

# Classes

This is the planned class schedule. Check **www.kdg.be/acs** for updates and course content.

### **ECTS = European Credit Transfer System**

## Academic year = 2 semesters

Our approach:

- Well-defined amount of study material for the exams and a manageable workload
- Modules with a project-based focus
- Immediate and frequent feedback
- You learn how to plan

### YEAR 1

COURSES EC	TS
Infrastructure	12
Includes: computer architecture, operating systems, networking, scripting, Arduino	
Programming	12
Includes: basic concepts, object- oriented programming in Java, HTML, CSS, JavaScript	
Data and artificial intelligence	12
Includes: SQL databases, data management, data science with Python, data modelling, machine learning	
The company	12
Develops: business management and intercultural communication skills as part of a company simulation	
Integration project	12
Includes: analysis and design with UML, version control with Git	

### YEAR 2

COURSES EC	TS
Infrastructure	6
Includes: operating systems and scripting, security and encryption, virtualisation, containers, cloud computing	
Programming & architecture	18
Includes: design patterns, web technology, Spring, layered architecture, testing, application security, REST	
Data and artificial intelligence	12
Includes: data storage, No-SQL databases, computational complexity, business intelligence, data visualisation, reinforcement learning, deep learning	
The company	12
Develops: coaching, sales and project management skills as part of a company simulation	
Integration project	12
Includes: agile development, testing and continuous integration	

### YEAR 3

COURSES EC	TS
Programming Includes: enterprise architecture with spring microservices, front-end development with react	(
security, testing  Data and Artificial intelligence	1
Includes: data engineering, information retrieval, computational linguistics, natural language processing, reinforcement learning, deep learning, auto ML, ensemble methods, AI in gaming, AI in the cloud	•
The company	
Develops: strategic insight, performance management and leadership skills in intercultural teams and technical professions.	
A Big picture	
Includes: a deeper understanding of today's societal challenges and the use of technology to deal with them	
Integration project Includes: integrating Data & Al services in end-user applications, Quality Assurance	
The lab Includes: trends and future technologies	
Internship	1



Deliberation



