

# BBA BIG DATA & MANAGEMENT

21/22

BACHELOR OF BUSINESS ADMINISTRATION

Cti  
Commission  
des Titres d'Ingénieur

CCFDG



A DUAL COMPETENCE,  
A UNIQUE DEGREE,  
A PROMISING FUTURE



## KEY FIGURES

### AUDENCIA AND CENTRALE NANTES

+ 8 100  STUDENTS

390  INTERNATIONAL PARTNERS

20  RESEARCH CHAIRS

+ 240  PERMANENT FACULTY

+ 50 000  GRADUATES

16  CAMPUSES IN FRANCE AND ABROAD

### TWO HIGHLY-REPUTABLE INSTITUTIONS



Times Higher Education World University Rankings by Subject 2022 - Centrale Nantes in top 250 for Engineering



Ranked 31st business school in Europe by Financial Times 2021 Ranking







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TheChinaStudio®

**Gaetan de KERROS**  
CEO of TheChinaStudio

*"Our company, TheChinaStudio, is a digital marketing agency based in both Nantes and Shanghai. We launch brands on e-commerce platforms in China as well as providing strategic value to other brands that are already present by*

*means of access to Big Data, the back-office of such platforms. The creation of the BBA Big Data & Management by Centrale Nantes and Audencia has been very well received by us, because it fully meets our need for young executives with hybrid skills to drive development in a fast-growing sector"*

**accenture**

**Xavier BAIS**

Manager of School  
Relations & Marketing  
Recruitment

*"For several years, Accenture has been a partner of Centrale Nantes and Audencia. We are mindful of cooperation with our partner schools regarding the teaching curriculum, to help the students gain a good grasp of the market and our customers. Data is an important*

*activity within Accenture, in our Applied Intelligence teams, and the profiles of graduates from this course will be perfectly suited to our business".*



**Luisa SILVA**

Centrale Nantes Director  
of BBA Big Data &  
Management / Director  
of the Supercomputing  
Institute



**Marc GIBIAT**

Audencia Director  
of BBA Big Data & Bachelor  
and Specialised Masters®  
Director of programmes

The exponential growth of Big Data output reinforces the strategic nature of their collection and analysis for **operational and strategic decision-making**, particularly in real-time. Data creates value and impacts all sectors of the economy and all corporate functions: analysis of customer consumption, targeted advertising, personalisation of services, risk management, medical research, climate change monitoring, etc. It is a mine of information that must be collected, processed and analysed to **anticipate developments** and **inform decision making**. Within this context, the BBA Big Data & Management prepares its students to take on **cross-functional management** positions in international environments. They will acquire a unique blend of managerial expertise (finance, management, marketing, strategy) and **advanced technical skills** in the collection, analysis and use of data for business performance. Audencia and Centrale Nantes - two French higher education institutions with excellent reputations in their respective fields of expertise - have joined forces to offer this joint four-year programme with a strong international and professional focus. Choosing the BBA Big Data & Management means **assured employability** in a global economy in search of multi-skilled young graduates.

# A RECOGNISED DEGREE



It is the first time in France that a hybrid qualification has been accredited by the French Ministry of Higher Education, Research and Innovation, the CEFDG (Commission for the Evaluation of Management Training and Degrees) and the CTI (the French engineering accreditation institution). It is also the very first 4-year hybrid Bachelor course to have obtained degree accreditation according to the joint reference framework created for business and engineering schools.

Recognition of the degree means that students can choose between pursuing their studies with a Master's programme or directly joining the workforce with the benefit of a highly-sought after, hands-on qualification.

Accreditation to award a bachelor level degree is based on thorough analysis of the following criteria:

- Good governance and organisation of the institution.
- Human, material and financial resources.
- Academic resources in permanent teaching staff numbers.
- Research activities and participation in the advancement of knowledge.
- Job market and employability.
- International outreach.
- Innovative teaching.



**Maëva**

1<sup>st</sup> year student  
2025 graduation class

*"As I have a very scientific background, I made enquiries in my final year of high school into digital engineering schools, but the only option up until now to obtain dual expertise was to first study engineering and then pursue with a management course, i.e. 6 years of study in all. When I heard about this joint programme at its launch in January, I jumped at the opportunity! The sector is evolving so fast that we need to be able to acquire this dual skill set in order to negotiate all the new tools that exist today in the field of data."*



Audencia has EQUIS, AACSB and AMBA accreditation. As a result, Audencia is part of the very closed circle of the world's Business Schools that can boast such triple accreditation.

# A JOINT APPROACH ON SOCIAL RESPONSIBILITY



Sustainable development and social responsibility are an integral part of Centrale Nantes' strategy. In 2021, the school adopted a Sustainable Development Action Plan drawn up in conjunction with its staff, students and graduates, which placed ecological, social and societal transition at the heart of teaching courses and research activities.

This commitment took a further step in July 2021 when the school signed up to the Grenoble Agreement. 2021 also witnessed the implementation of a gender equality action plan produced by the Equality & Diversity Commission created in 2020.



From the start of the 2021 - 2022 academic year, Audencia will open the very first school for ecological and social transition launched by a Business School: Gaïa. Dedicated to training in positive impact management and strategies, this school will be an opportunity to combine many disciplines revisited through the lens of sustainable development. To make them tangible, they will be applied in particular through projects proposed by Audencia's partners. The Gaïa School will make it possible to develop the open-mindedness required for development of responsible projects that are fully aware of the societal stakes.





# WHY CHOOSE THE BBA BIG DATA & MANAGEMENT PROGRAMME?



## 1 A DUAL SKILL SET

This programme is built on the combined expertise of two establishments in their specific environment: engineering for Centrale Nantes and management for Audencia. Students will therefore follow both engineering as well as management classes during their studies. This is different from traditional hybrid courses that generally teach students one area of expertise after the other. As a result, future graduates will receive a degree jointly awarded by both institutions.



## 2 STRONG INTERNATIONAL FOCUS

The programme welcomes both French and international students and thus allows total immersion in a global and multicultural environment. This 100% English-language course includes a minimum of 15 months abroad for both internships and courses, particularly on the international campuses of each of the schools, based in Casablanca for Centrale Nantes and in Shenzhen for Audencia.



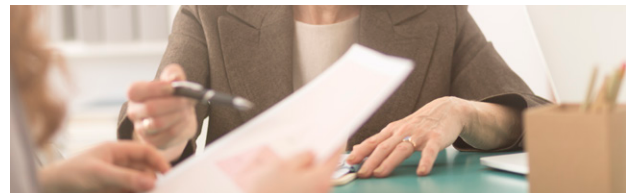
## 3 THE EXPERTISE OF TWO HIGHLY-REPUTABLE INSTITUTIONS

To ensure academic excellence of this 4-year programme, Audencia and Centrale Nantes have pooled their material and learning resources. The faculty from both institutions have teamed up to deliver a career-oriented programme that draws on shared tools (access to both campuses, e-learning, media libraries, laboratories, etc.) to facilitate professional development.



## 4 CLOSE LINKS WITH PARTNER BUSINESSES

On this course, teaching combines theoretical and practical classes. Partner businesses contribute actively to practical workshops to apply the knowledge acquired. They open their doors for company visits and provide lectures and master classes.



## 5 INDIVIDUAL CAREERS GUIDANCE

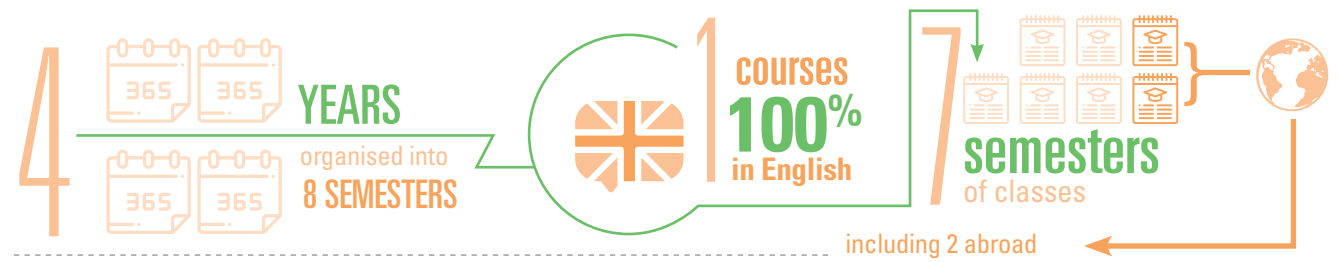
Our career teams at Centrale Nantes and Audencia provide students with day-to-day support in their professional development. Whether via face-to-face or remote career meetings, mentoring sessions with graduates, virtual forums, webinars, etc., many means are deployed to help each future graduate find their pathway.



## 6 A FAST-GROWING SECTOR

The Big Data & Management offers students the assurance of a hybrid qualification in tune with the real expectations of the labour market. Companies in all sectors are accumulating a large volume of data and must therefore reinvent their organisations to master the key stages of information processing. This requires the development and creation of cross-disciplinary professions, ranging from technical mastery of digital tools to strategic decision-making.

# THE BBA BIG DATA & MANAGEMENT CURRICULUM



	Year1	Year 2	Year 3	Year 4
Autumn (1 <sup>st</sup> semester)	<b>Core Courses</b>	<b>Core Courses</b>	<b>Advanced Business</b> China or partner university	<b>Hybrid Courses</b> taught jointly by both schools: project-based learning.
Spring (2 <sup>nd</sup> semester)	<b>Core Courses</b>	<b>Advanced Engineering</b> Casablanca or partner university	<b>Hybrid Courses</b> taught jointly by both schools: project-based learning.	<b>Internship</b> 6 months
Summer	<b>International Internship</b> 3 months		<b>Internship</b> 3 months	

■ Courses taught by Audencia ■ Courses taught by Centrale Nantes ■ Abroad

The courses are taught in a balanced half-day each format, with the mornings at Audencia and the afternoons at Centrale Nantes or vice versa (approximately 25 hours per week + group and personal work).

## EXAMPLES OF COURSES

### Core courses

- Probability and statistics
- English
- Marketing mix

### Advanced Engineering

- AI and Data Mining
- Cloud Computing
- Scientific visualization

### Advanced Business

- Budget analysis
- Geopolitics
- Financial diagnosis

### Practical Courses

- Blockchain and purchasing
- Fintech
- Big Data and energy

## KEY SKILLS

### Management skills

- Sales communication
- HR & Management
- Corporate social responsibility

### Technical skills

- Big Data Analytics
- Artificial Intelligence
- Coding

### Marketing skills

- Marketing Mix
- Sales techniques
- Market study

### General skills

- Intercultural competence
- Creativity
- Ethics

## FOCUS ON THE SUPERCOMPUTER AT CENTRALE NANTES

The supercomputer, which was installed at Centrale Nantes at the end of 2015 as part of the Connect Talent project in the Pays de la Loire region, is one of the most powerful in its category in France (Tier-2). Giving access to unprecedented levels of precision, this state-of-the-art equipment is a real game changer which will release new potential for innovation. High performance computing is an indispensable tool for both research and industry: it reduces the cost of testing, facilitates optimization and promotes creativity and the search for new solutions. Centrale Nantes is the only higher education establishment in France to have such a powerful supercomputer which is open to different users

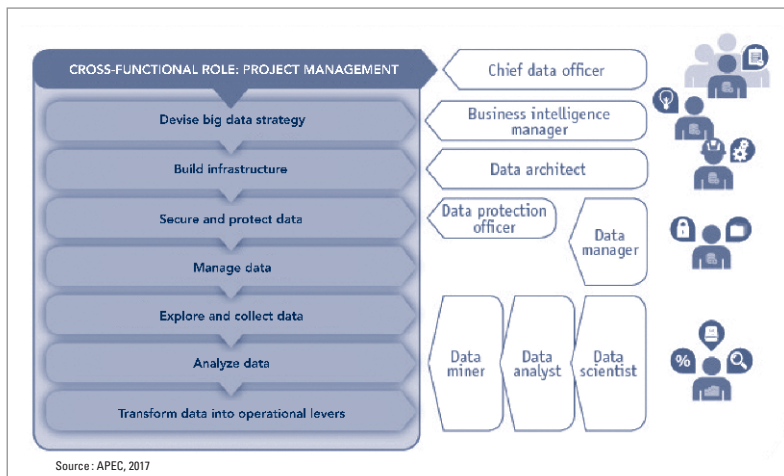


# TRAINING DIRECTLY IN TUNE WITH INDUSTRY

The demanding BBA Big Data & Management programme draws on the excellence of the two institutions to offer a qualification and professional development ensuring a high rate of employability in line with market needs and the strong jobs growth in data. This sector is already having a strong impact on the structuring of companies and the transformation of "traditional" professions. Organisations are looking for new cross-functional skills ranging from management to technical analysis of data, as a lever for strategic managerial decision making.

## WHERE WILL THE BBA TAKE ME?

- Chief data officer
- Business intelligence manager
- Data architect
- Data protection officer
- Data manager
- Data miner
- Data analyst
- Data scientist



## PARTNER BUSINESSES



## CAREER FOCUS



### CHIEF DATA OFFICER

The role of a Chief Data Officer is to steer his or her company's digital strategy using the data collected. He or she must develop an environment that enables all the company's various managers to access the information they need with ease and in total security. In order to do this, he or she must find the most suitable Business Intelligence platforms and systems that allow each user to conduct data analysis independently. The Chief Data Officer thus occupies a position of crucial importance in his or her organisation.

### DATA ANALYST

The role of a Data Analyst is to **use and interpret data to derive** useful business observations. As a result, the reports provided can be used to guide management decisions and improve performance as well as marketing strategies. He or she plays a key role because he or she often has to collaborate with several teams such as the sales and financial departments or general management. The results provided will have a direct impact on the growth of the company.

Discover other careers on [bba.audencia.com](http://bba.audencia.com) and [ec-nantes.fr](http://ec-nantes.fr)

*"Chief Data Officer is a new role and an emerging function, but has now cemented its place in the organisation charts of companies. Indeed, with the increasingly massive diffusion of new technologies, new organisations and work transformations, the CDO who is in charge of facilitating access to data and thus allowing optimal decisions to be made, is at the heart of the main operational and strategic challenges facing organisations. The CDO is a mediator, a conductor, a strategist, a builder, an alchemist, and a disrupter all in one".*

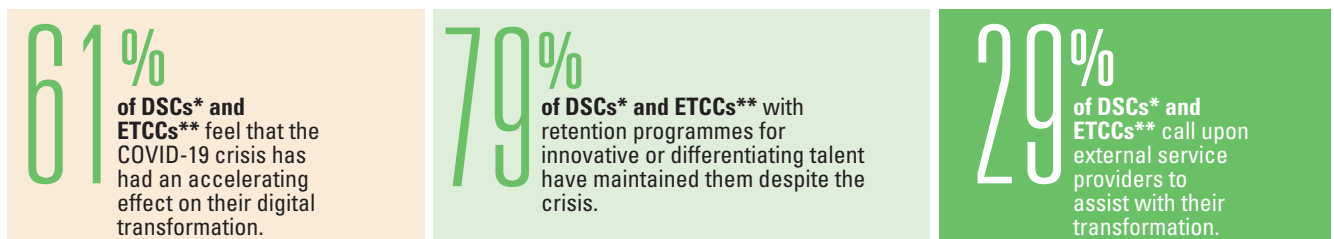
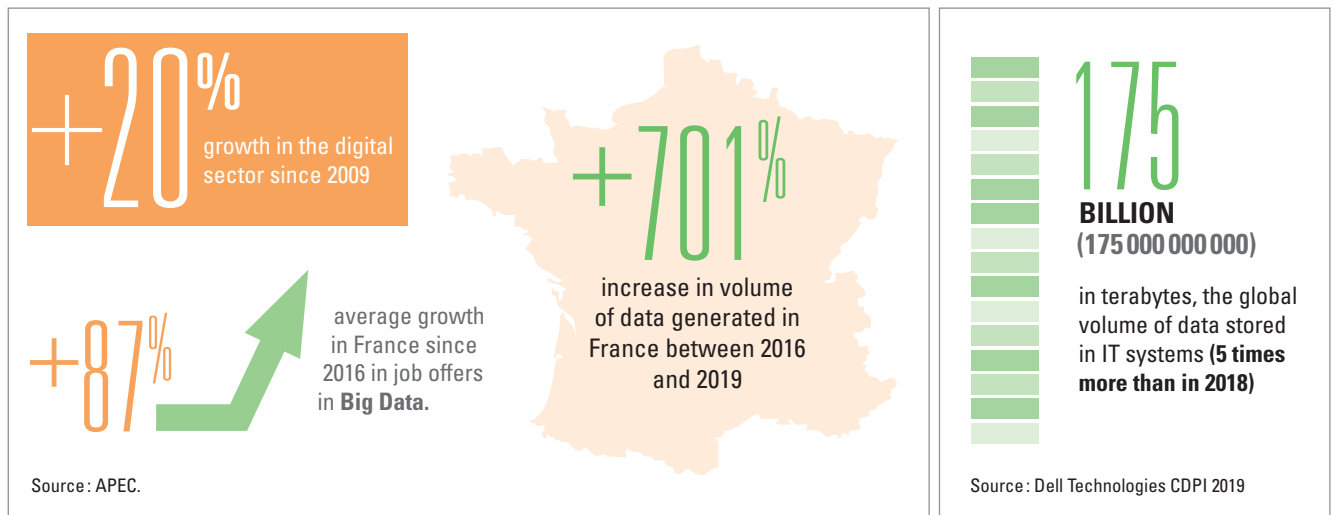
**Alain YEN-PON**

Expert and published author in Data, Innovation Management and Transformation

# GROWING DEMAND IN THE DATA JOB MARKET

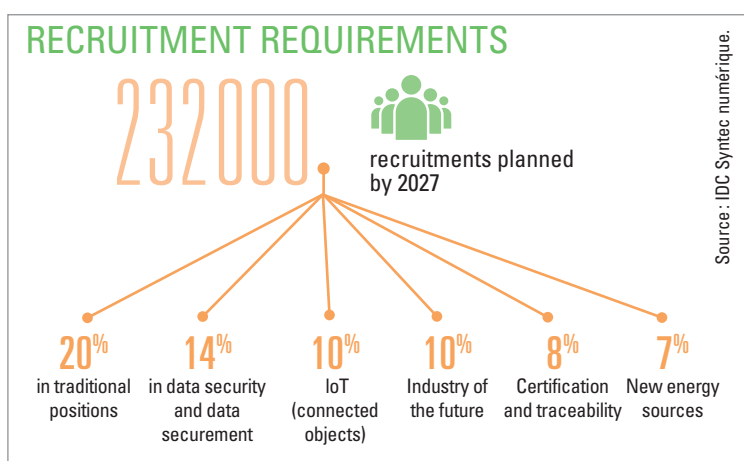
With the development of new technologies, the internet and social networks over the last twenty years, output of digital data has exploded: texts, photos, videos, on-line transactions, GPS signals, etc. The sheer volume of digital data being produced, combined with ever-increasing storage capacity and increasingly sophisticated real-time analysis tools, offers unparalleled opportunities to exploit information.

## A VALUE CREATING SECTOR



Source : IDC Syntec numérique. \*DSC: Digital Services Company

\*\*ETCC: Engineering and Technology Consulting Company



**altran**

**Nathalie PENHOAT**

IT and Industry  
Western Recruitment  
Manager – Altran

*"We are looking to recruit consultants to work in our Big Data service centre and are regularly confronted with the difficulty of finding these rare profiles. The BBA Big Data & Management meets our needs and those of our business sectors".*

**PHILIPS**

**Pascal Dussert**

Business Marketing & Sales Leader,  
Connected Care - PHILIPS

*"Royal Philips is a leader in the field of health technology. In this area, IT plays a key role in the value propositions Philips proposes to its customers, with a strong focus on artificial intelligence for diagnostics, or the Internet of Things for device connectivity. The BBA Big Data & Management proposed by École Centrale de Nantes and Audencia will enable development of talent whose capabilities are fully aligned with Philips' strategic development".*



# OPPORTUNITIES TO PURSUE YOUR STUDIES AFTER THE BBA

At the end of the course, a student may choose to enter working life or continue his or her studies. Each student benefits from individual careers support to help them choose the best career path. There are many opportunities for further study within the Audencia and Centrale Nantes programmes.

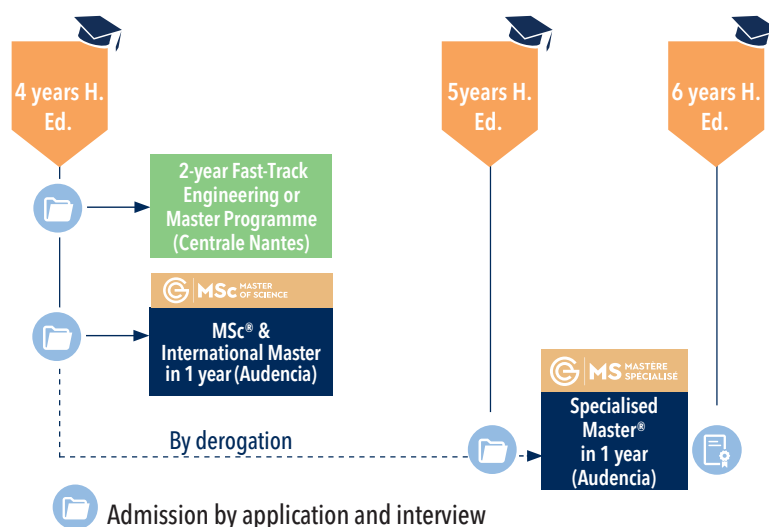
## EXAMPLES OF POSSIBLE COURSES:

### AUDENCIA

- MSc in Data Management for Finance
- Specialised Master® in Digital Strategies and Data Marketing

### CENTRALE NANTES

- Fast Track Engineering programme (a highly selective course) or a Master's of Science Technology & Health.



## APPLY FOR THE BBA

### ELIGIBILITY

Open to students preparing a high school diploma or equivalent, or having obtained this qualification within the last 12 months. Applicants must be under 26 years of age on 1 January of the year of entry to the programme.

### SELECTION CRITERIA

Students will be selected for the BBA programme based on the following criteria:

- Academic results (60)%
- Mathematics grades (20%)
- Proficiency in English (20%):
  - Minimum score for English tests:
    - TOEFL: 78
    - TOEIC: 605
    - IELTS: 6.0

Additional bonuses may be awarded based on international experience and proficiency in other languages.

### APPLICATION

Applicants are selected based on their application form, and take account of the applicant's academic performance, attitude and progress in class, motivation, the relevance of career plans, extra-curricular activities, and level of proficiency in English.

### APPLICATION FEES

€ 100 for all applicants.

### APPLICATION REQUIREMENTS

To complete the online application form, you will need to submit the following documents:

- Curriculum Vitae and cover letter in English
- A certified copy in English or French of your secondary school diploma; or failing that, the current year's enrolment certificate for the final year of high school studies and academic transcripts
- Copy of an identity document (e.g. passport)
- Photo
- English test score (TOEFL, TOEIC, IELTS)\*

\* English test scores are not required for native speakers or applicants who have completed their high school diploma in English.

### TUITION FEES

For all information on tuition fees (guaranteed for the four years of the course), consult our web sites: [www.bba.audencia.com](http://www.bba.audencia.com) et [www.ec-nantes.fr](http://www.ec-nantes.fr). Alternatively, you can contact us by e-mail at [international@audencia.com](mailto:international@audencia.com).

### FUNDING OPPORTUNITIES

Two scholarships opportunities for new BBA students:

Early Application Scholarship - € 1,500, apply before Jan 31st 2022.

Academic or Sport Excellence Scholarship - Up to 50% of 1st year tuition, Apply before May 1st 2022.

2022 ACADEMIC YEAR START: SEPTEMBER





## STUDENT CLUBS AND ASSOCIATIONS

In the heart of Nantes, the 'loopiestic' city in France according to the Sunday Times, joining the BBA Big Data & Management is also a guarantee that you can take advantage of a rich network of associations, both at Audencia and Centrale Nantes. Whether you are interested in sport, culture, the world, stage, solidarity, etc., you will have the choice of more than one hundred associations to enjoy your student experience to the full and to blossom within a year group rich in diversity.

### THE STUDENTS' COMMITTEE - AUDENCIA

Run by a chairperson and committee elected by their peers, each year the Students' Committee develops new projects, takes part in welcoming new year groups, organises weekends, evenings, etc., especially for the students.



### THE SPORTS COMMITTEE - CENTRALE NANTES

The Sports Committee runs the sporting activities at Centrale Nantes: tournaments within the school, inter-schools, university championships, leisure activities and competitions. More than 20 sports are played all year round on a well-equipped campus but also all over France, for example during the ski week in February!



**Samuel**

2<sup>nd</sup> year student 2023  
year group President  
of the Centrale Nantes  
sports association

*"The Sports Association is made up of 30 students elected after intense campaigning to look after all the sports in the school. We have a lot of facilities including an artificial pitch and squash courts so everyone can find a sport that suits them! As president of the Sports Association, I can only encourage you to play the sport of your dreams. You'll make friends with whom you'll share memorable moments and who will form your first network. Don't hesitate to join us! See you soon".*



# CAMPUS LIFE



Audencia Atlantic Campus

 **3 200**  
students

 **1** cafeteria &  
**1** sports facility

 **1 2200m<sup>2</sup>**  
**esplanade**

## TWO CAMPUSES IN NANTES

Located near the university and easily accessible by tram, Centrale Nantes and Audencia benefit from technical and teaching facilities essential to the development of their students: Audencia thanks to its modern, bright and welcoming facilities which are ideal for new teaching methods; Centrale Nantes, with its 16-hectare green campus and 13 major research platforms, including the supercomputer, one of the most



Centrale Nantes

 **2050**  
students

 **4** sports facilities and  
**1** cafeteria

 **One 16-hectare**  
**green campus**

powerful of its kind in France. This campus also plays home to the Centrale-Audencia-ENSA Nantes business incubator, which hosts and supports business start-up projects.



**ADDED BONUS: THE CLOSE  
PROXIMITY OF THE 2 CAMPUSES**



Shenzhen (Chine)

 **150**  
students

 **16**  
teachers

 **1** campus incorporated  
in the heart of Shenzhen  
University

## TWO CAMPUSES ABROAD

With the Audencia campus in Shenzhen (in China) and the Ecole Centrale campus in Casablanca (Morocco), the two schools offer courses with a truly international dimension to their students, as well as the opportunity to take advantage of a heightened multi-cultural experience.



Casablanca (Maroc)

 **+ de 100**  
students

 **1** hall of residence and  
**1** cafeteria

 **1** sports facility



**BONUS: ENJOY THE WEALTH OF DIVERSITY  
OF OUR INTERNATIONAL CAMPUSES**





Emily Ducoin-Chai



Michelle Cristy



Léa Pennober



Benjamin Rethmel



Sandra Manrique



Claire Bourgeton



Adrien Bernard

contact: [international@audencia.com](mailto:international@audencia.com)

[bachelor.admission@ec-nantes.fr](mailto:bachelor.admission@ec-nantes.fr)