

DATA BACHELOR OF SCIENCE & AI

STUDY THE FUTURE



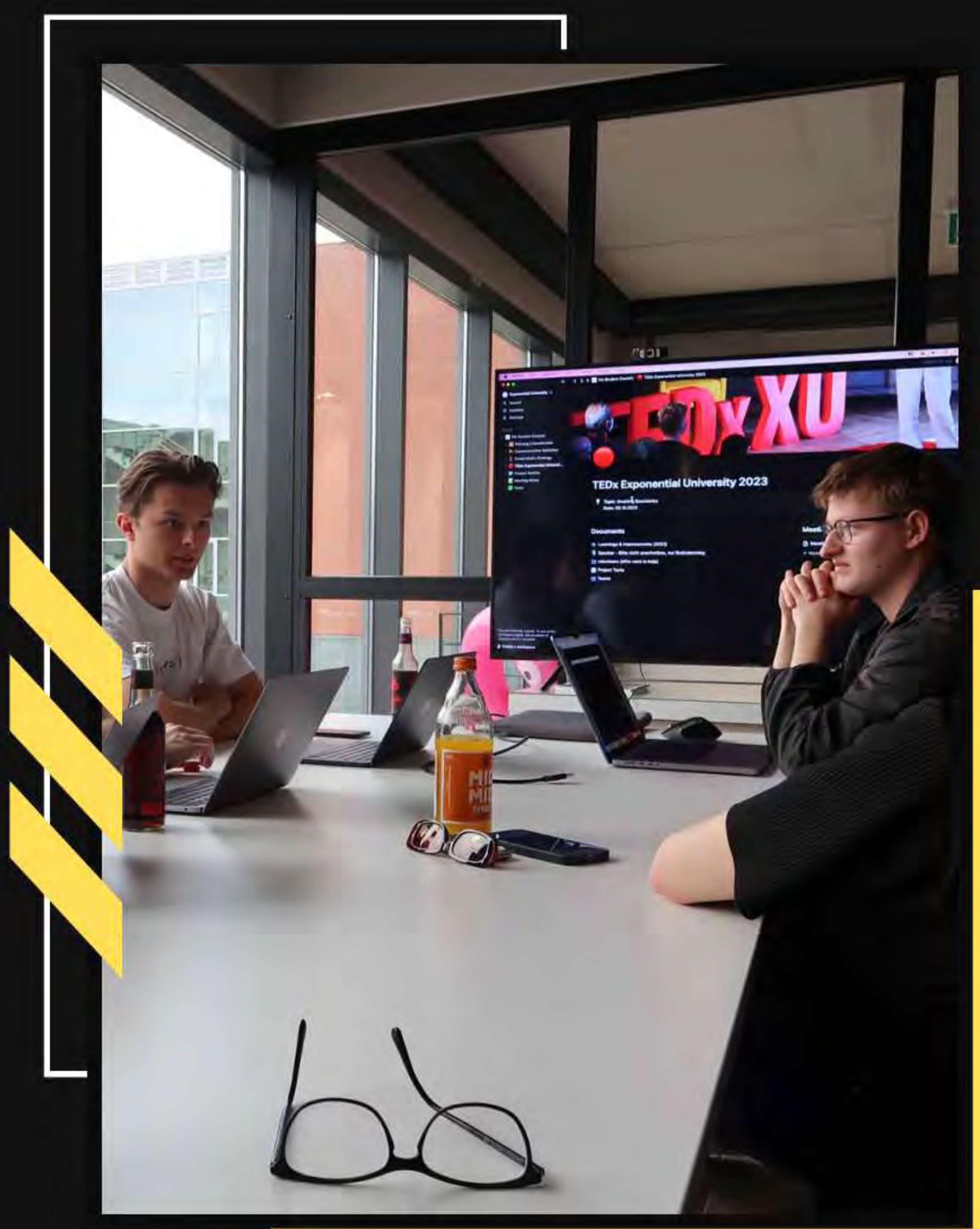
**DATA ANALYST
AI ENGINEER
CYBER SECURITY CONSULTANT
BUSINESS INTELLIGENCE
ENVIRONMENTAL DATA ANALYST**



Uncover hidden patterns in data to drive **strategic business decisions**, utilizing analytics and insights to shape the future of strategies.

Gain hands-on experience:

Our **project-based learning** concept with well known inter-national companies will boost your career after graduation.



BACHELOR EXPLAINED

WHAT SKILLS YOU WILL GAIN

HARD & SOFT SKILLS

Machine Learning

Graduates master machine learning techniques, enhancing predictive marketing capabilities.

Data Interpretation

Graduates are skilled data interpreters, turning complex data into actionable marketing insights.

Critical Thinking

Critical thinking is nurtured, enabling graduates to solve data-driven marketing challenges.

Market Analysis

Graduates excel in marketing analytics, evaluating campaign effectiveness and ROI.



Prof. Dr. Raad Bin Tareaf
Professor for Data Science

"In Germany, it is already estimated that between 50% and 80% of companies make their strategic decisions based on data analytics. As a Data Scientist/Business Data Analyst, you will learn to understand customer behavior and analyze growth potential using massive data. This places you in a key role in the future world of work."

DURING YOUR BACHELOR

COMBINING THEORY WITH PRACTICE

Alex – Data Science

WHY DID YOU DECIDE TO STUDY DATA SCIENCE?

"Learning cutting-edge knowledge and hands-on experience in our respective fields of study while still in college gives us an advantage over many who attend a traditional university."



REAL JOB EXPERIENCE



Working Student Jobs

We have established a vast **network of companies** that offer invaluable opportunities for **real work experience** and working student jobs. Our Data Science students, for instance, benefit from hands-on roles like:

- ✓ Data Analyst
- ✓ Project Management
- ✓ Manager Big Data



AFTER GRADUATION

FUTURE JOB OPPORTUNITIES

These are two of many data science jobs you can expect after graduating in our bachelor of science in data science.

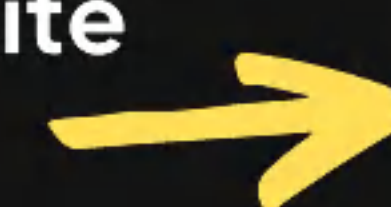


Data Engineer

As a Data Engineer, you cultivate a strong foundation in database design and management during your Data Science program. Your expertise in SQL and NoSQL databases allows you to develop robust data architectures to support analytical processes.

Marketing Data Coordinator

In this role, you'll leverage your knowledge of data analytics and marketing strategies gained during your degree. You'll focus on collecting, organizing, and analyzing marketing data to evaluate campaign performance.



CHOOSE YOUR SPECIALIZATION



WEB TECHNOLOGIES

- Develop dynamic and scalable web applications.
- Understand front-end and back-end web development.
- Apply frameworks and technologies for web-based solutions.
- Ensure security and performance optimization in web applications.

SECURITY FOR DATA SCIENTISTS

- Understand cybersecurity principles and data protection.
- Apply encryption and access control mechanisms.
- Identify vulnerabilities in data security frameworks.
- Develop secure data management strategies.



COMPUTATIONAL INTELLIGENCE

- Understand principles of artificial intelligence and neural networks.
- Apply intelligent algorithms to solve computational problems.
- Analyze and optimize machine learning models.
- Explore applications of computational intelligence in real-world scenarios.

**** 2 Electives in the above specialisation**

OVERVIEW

	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6
Data Science & AI	Intro to Data Science 5 ECTS	Databases 5 ECTS	Data Analysis 5 ECTS	Study Abroad Semester 20 ECTS	Machine Learning 2 5 ECTS	Smart Data & Big Data 5 ECTS
	Python Programming 5 ECTS	Data Visualization 5 ECTS	Algorithms and Data Structure 5 ECTS		Mandatory Electives 1* 5 ECTS	Mandatory Electives 2* 5 ECTS
	Web Engineering 5 ECTS	Data Mining 5 ECTS	Machine Learning 1 5 ECTS	Internship 10 ECTS	Mandatory Electives 1* 5 ECTS	Mandatory Electives 2* 5 ECTS
Quantitative Methods	Quantitative Methods I 5 ECTS	Quantitative Methods II 5 ECTS	Quantitative Methods III 5 ECTS		Data Ethics 5 ECTS	Bachelor Thesis (Set Up) 10 ECTS
Innovation Methods	Digital Transformation for Sustainability 5 ECTS	Green Interaction Design: UI/UX for Sustainability 5 ECTS	Innovation 5 ECTS	Or Entrepreneurship Semester / (Semester 7 Optional) 20 ECTS	Organization 5 ECTS	Bachelor Thesis 5 ECTS
Skills	Academic Skills 5 ECTS	Professional Skills 5 ECTS	Data Warehouse 5 ECTS		Cloud Computing 5 ECTS	

*Mandatory Electives (2 out of 3):

Web Technologies
Security for Data Scientists
Computational Intelligence

Period of time

6 semesters, 3 years

**Entrepreneurship Semester (Optional Semester 7):

International and Intercultural Management (5 ECTS)

Business Model Innovation & Research (5 ECTS)

Start-Up Campus (5 ECTS)

Start-up Management & Scaling (5 ECTS)

Pitch Night

Further Training



THIS IS XU



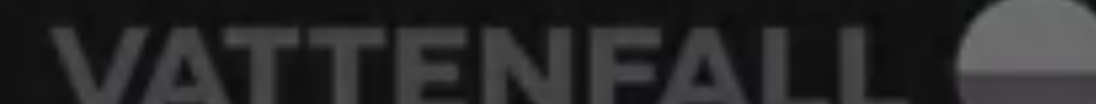
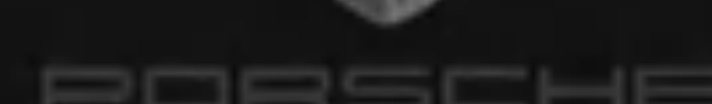
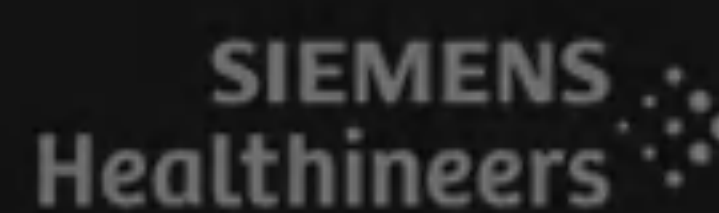
REAL PROJECTS



Watch
video



Work on **Live Company Projects** with CEOs, Senior Executives & XU Professors to have **hands on approach** to solving **real company problems** and **easier access to careers possibilities**



SPECIAL ELECTIVES TAILORED TO BOOST YOUR EXPERTISE

These electives provide a **tailored learning experience** that equips you with the **knowledge and skills** needed to excel in **your chosen fields**. It's about **unlocking your full potential** and shaping a brighter future.

Our **XU Career Service** will guide you to find **internships, student jobs** and to enhance **your career opportunities** after graduation.



FUNDING OPTIONS



More
information



We offer a **bunch of possibilities** to **fund your study program** in collaboration with our partners. Enjoy the **full learning experience without** any **financial burden**.

STUDY IN POTSDAM BY BERLIN

Enjoy the **metropolitan region of Berlin** and discover our campus at the area of Studio Babelsberg.

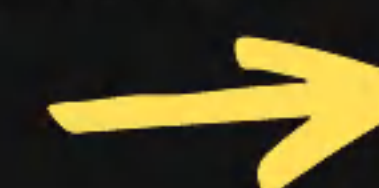
Discover our campus with the **latest tech equipment** for the best learning experience in the world of digitalization.

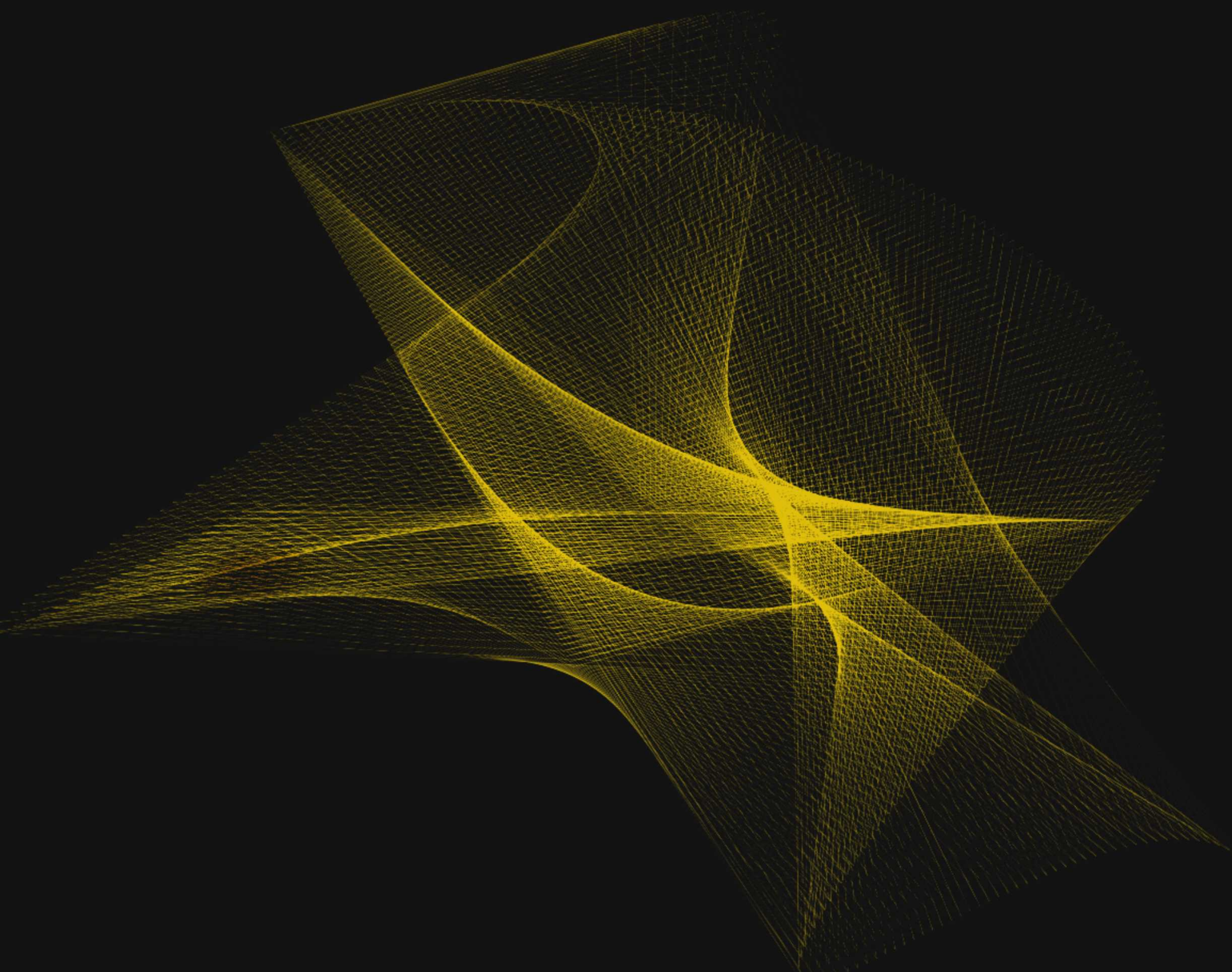
At XU University **you're not just a number, you'll be part of the XU family!**

SMALL CLASSES



More
information





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XU Exponential University

www.xu-university.com

