

# INSPIRING THE INNOVATOR IN YOU

COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

**BACHELOR OF TECHNOLOGY -**

# BJECH in CS, Al and ML

FOUR-YEAR UNDERGRADUATE PROGRAM



atlasuniversity.edu.in

# Welcome to ATLAS

A campus beyond the ordinary!
Located in the heart of Mumbai, one of the world's top ten centers of commerce,
ATLAS SkillTech University is an urban campus, a crucible of ideas, a melting pot of diverse perspectives and a launchpad for tomorrow's leaders reimagining education in the financial, commercial and entertainment capital of India.

Think of our university as an atlas, a navigator for India's youth, and a beacon of knowledge and inspiration that guides you towards your destination. We believe education is not just about absorbing information, but about forging your path, exploring new frontiers, and shaping your future. So, come join us at our university, where you can be part of a vibrant community that inspires you to reach new heights and achieve your dreams!





#### FROM THE PRESIDENT

#### **DR INDU SHAHANI**

Sheriff of Mumbai (2008-09)

Member, University Grants Commission (2011-14)

Principal, H.R. College of Commerce & Economics, Mumbai (2000-16)

It is an exciting new world. A world full of excitement and innovation. A world full of new ideas. Where possibilities are limitless and success is at hand for the brave. As students reach forward into this future with both hands outstretched to grab success, it is our duty to nurture their minds and spirits. ATLAS SkillTech University will be one of the cornerstones of this philosophy.

We shall foster a spirit of innovation and impart skill sets that help our students in the new world. Our modern pedagogy and information dissemination methodologies allow us to create entrepreneurial leaders who have the sensibilities of the West while being driven by the enthusiasm of the East. This confluence of cultures will help our students push-start the entrepreneurial revolution in India which will create jobs and provide the backbone to India's race to super-powerdom. Powered by the vision of our youth."

## **ATLAS ADVISORY BOARD**



**DEEPAK PAREKH**Former Chairman HDFC

**JHDFC** 



**KESHAV MURUGESH**Group CEO



KARAN SINGH

Managing

Director



ANANT GOENKA

Managing

Director



RAM RAGHAVAN
President,
Enterprise Oral Care



JAMIL KHATRI Co-Founder & CEO



**AVANI DAVDA**Strategic Advisor

**WNS** 













ARYAMAN BIRLA Founder



**RUSS WINER**Professor of Marketing



TIM MARSHALL
Deputy
Vice-Chancellor



SANJAY GURBUXANI
VP, IBS AMEA &
Global Digital
Innovation



CAROL KIM
Vice President,
Global Recruitment,
Admissions &
Financial Aid



VIVEK PANDIT Senior Partner,

New Age.









McKinsey & Company



ANITA DONGRE
Chief Creative
Officer





RONNIE SCREWVALA
Chairperson &
Co-Founder





**DR. INDU SHAHANI**Founding President
& Chancellor





MAYANK KUMAR
Co-Founder &
Managing Director





SIDDHARTH SHAHANI Co-Founder & Executive President



## Study B.Tech at ATLAS | uGDX

The place where global tech leaders of the future are born

The ATLAS | uGDX School of Technology is the youngest member of the ATLAS family, collaborating with the School of Design and the School of Management and Entrepreneurship. Based on a new-age tech-enabled environment, the program nurtures and prepares professionals in digital technology along with laying the foundation of a global leadership.

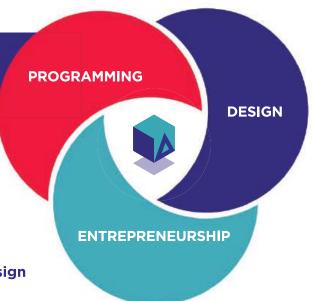
The B.Tech program curriculum is designed keeping in mind the ever-evolving scientific and technological breakthroughs. The program focuses on Computer Science, Artifical Intelligence and Machine Learning, making students ready for the work and workforce of the future.

# EXPERIENCE THE TECHNOLOGY TRINITY

**Learn to program advanced AI Algorithms** 

**Develop competencies to build tech startups** 

Create compelling tech experiences through design



#### **MAKING YOU FUTURE READY**

**INDUSTRY EXPERIENCE** 

HIGHER EDUCATION

**ENTREPRENEURSHIP** 





# MULTIDISCIPLINARY TECH EDUCATION

Learn not only Al/ML, but also a host of electives across the Design and Management schools and specialisations. Put the skills you learn to practical use through a unique semester-long internship.

# MASTER CLASSES BY INDUSTRY LEADERS

Learn from the best professors renowned globally for their technology expertise.

Masterclasses and industry sessions conducted by CTOs and CIOs of large companies.

# CURRICULUM CO-CREATED WITH INDUSTRY

The B.Tech curriculum is co-created with industry stalwarts and leading CTOs, to ensure the skills you learn inside the classroom never become rusty.

# URBAN CAMPUS EXPERIENCE

State-of-the-art infrastructure with modern classroom, high technology machines and creative labs to create an environment for you to thrive.

# 1150+ HOURS OF PROGRAMMING AND TRAINING PROJECTS

It takes 1000+ hours of practice & training to write clean and scalable code. Our professors and mentors empower you to develop the ability to write high quality code.

# **EXPERIENTIAL &**HANDS-ON LEARNING

We believe in learning by doing. Work on live projects and cases to put your learnings in the classroom to practice in the real world.

# ENTREPRENEURSHIP HUB

The ATLAS Venture Labs supports you through mentorship, training and capital to launch your technology startup from your classroom.

#### **CAREER** SERVICES

150+ partners for recruitment and internship. Get mentored by our Career Services team to crack your dream tech job.

#### **ACADEMIC CURRICULUM**

#### **SEMESTER 1: BECOME A GAME DEVELOPER**

- Introduction to Computer Science & Programming 1 (Pinnacle I)
- Calculus 1
- Foundations of Statistics and Probability for AI and ML
- Databases and SQL
- Chemistry
- Communication Skills for Digital World
- ATLAS Electives
- Simulation/Computer Game Design (Pinnacle I)

#### **SEMESTER 3: BECOME A DATA SCIENTIST**

- Machine Learning Foundations (Pinnacle II)
- Computer Organization and Architecture
- Linear Algebra
- Data Structures
- Unstructured Data, NoSQL and Storage Techniques
- Model Thinking
- ATLAS Electives
- Foundational Literature of Indian Civilization
- Machine Learning: Astrophysics, Particles, Drug Design (Pinnacle III)

### SEMESTER 5: BECOME A DIGITAL TECHNOLOGY ENGINEER

- Reinforcement Learning and NLP
- Computer Vision and Deep Learning
- Advanced Algorithms
- Emerging Technologies (Pinnacle)
- Cloud Application Development
- Entrepreneurship Development
- Academic Research Writing (AEC)
- Enterprise Grade Connected Device Application:
   Self-Driving Cars (Pinnacle V)

#### **SEMESTER 7: BECOME A AI ENTREPRENEUR**

- AI in Engineering
- Network Security
- Knowledge Graphs and Minor Project (Pinnacle VII)
- Prompt Engineering
- Agentic Al
- Ethical Hacking (VAC)
- Intellectual Property and Innovation in AI(AEC)
- Constitution of India (Audit Course)

### The curriculum may be subject to change based on the dynamic technology trends and learning needs of students.

#### **SEMESTER 2: BECOME A DATA ANALYST**

- Introduction to Computer Science & Programming 2 (Pinnacle II)
- Mathematics for Computer Science
- Calculus 2
- Physics
- Statistical Modeling
- Indian Health Sciences
- Expository Writing
- ATLAS Electives
- Data Analyst Project (Pinnacle II)

#### **SEMESTER 4: BECOME AN ML ENGINEER**

- Advanced Machine Learning (Pinnacle 4)
- Introduction to Algorithms
- Operating Systems and Networks
- Large-Scale Data Storage
- Software Development Lifecycle, DevOps and MLOps
- Data Engineering Operations
- ATLAS Electives
- Business Plan Writing
- An Enterprise Grade Al Application: Recommendation Engines for OTT Platforms (Pinnacle IV)

### SEMESTER 6: BECOME A CYBER SECURITY ENGINEER

- Secure Coding (Pinnacle VI)
- Project Life Cycle Management
- Numeric Optimization Techniques
- Recent Advances and Challenges in AI
- UI/UX Development
- Cybersecurity and Blockchain
- Digital Culture and Language (AEC)
- Build Your Own Encryption Software (Pinnacle VI)

#### **SEMESTER 8: INTERNSHIP AND PROJECT**

- Internship and Project and Dissertation (Product Based)
- subject 1 (Applied Accelerated Artificial Intelligence)
   IIT Pallakad NPTEL Course
- Core: Subject 2 (Design and Implementation of HCI)
   IIT Guwahati NPTEL

### We follow a

**'GET' Philosophy:** 

**Goal for Each Term** 

### **MULTIDISCIPLINARY LEARNING**

### **Choose Your Electives, Shape Your Future**

Art of Photography	The Finance Lab	Business of E-Sports	German Language
Spanish – Hola Espa	Art of 3D Modelling & Animation	Craft – The Future of Fashion	The Art of Calligraphy
The Writer's Odyssey	Managing Change Using Dance & Movements	Fashion and Films	Behavioural Science in Action
Visual Mastery	Future Forward with AI	Kaat Chap	Experimental Cinematics
Blogging Unleashed	Unleash Your Creativity: Designing is Fun	Interactive Typography	Design through Trends: Clue to Concept
Japanese – Get Set Nihongo	Generative Al Applications Toolbox	Innovative Thinking	Empathetic Leadership
Prototyping	Cosmic Insights: The Art of Astrology, Numerology & Vastu	Blockchain Fundamentals	Cinema of the World
Ace Your Communication	Power & Politics	Nautanki Shaala	Colour Psychology
Trading on Stock Markets	Integrated Storytelling for Digital Marketing	Al Narratives: Storytelling through 2D Art	Tai Chi - Meditation in Motion
Deep Tech - Frontiers of Innovation	Design Futures – 3D Modelling & Digital Making	The Al Genesis: Fundamentals of Smart Systems	Canvas Painting: Flourish Your Imagination
Mandarin: How to Ni Hao	Culture in Motion – Exploring Society through Media	Panchatantra Reimagined: Modern Impact	All the World's Your Stage: Using Theatre in Life
Sanskrit Essentials – Key to Ancient Indian Wisdom	Film Foundry: Crafting Stories, Building Audiences		

TRANSFORMING YOU FROM A

TECH ENTHUSIAST

INTO A

TECHNOLOGY TRAILBLAZER



While the program will lay the foundation for your transformation into a global tech leader and innovator, there are many pathways to success that you can explore.

**AI Scientist** 

Choose

a future

of your choice

**Data Scientist** 

**ML Engineer** 

**Business Intelligence Researcher** 

**Al Engineer** 

**Big Data Analyst** 

Al Consultant

Learn the skills and the tech stack that powers Artificial Intelligence

- Get mentored by world-renowned faculty on how to start your career in technology
- Build a technology startup from the Venture Labs Incubator
- Crack your dream job with leading global technology companies

The program will give you the opportunity and flexibility to work across a broad range of industries and business functions

Healthcare Social Impact Retail

Manufacturing

**Supply Chain Management** 

**Banking and Finance** 

**E-Commerce** 

Social Media Management

Information Technology

Consulting

Research and Development

Academia

**Agritech** 



Build
Real World
Apps for
Industries

# ATLAS FACULTY & STUDENT RESEARCH ACHIEVEMENTS

**220** 

Faculty Publications in UGC Care/Scopus Indexed/WoS Journals

**50** 

Books Published 30

**Patents Filed** 

404

Book Chapters
Published

7.892

Highest Impact Factor for UGC Care (Care 1 Listed Publication)

1000

Publication
Drafts Submitted by
ATLAS Faculty

1100

Publication Drafts
Submitted by ATLAS
Students

Student Publications (Book Chapters)

Copyrights

Conference
Proceedings as
ISBN

Highest Impact Factor for Scopus Indexed Publications

### **STUDENT LIFE & BEYOND**

Life at ATLAS SkillTech University is best captured in the word mosaic. With a swirl of multiple cultures, more than a dozen clubs and societies, state-of-the-art infrastructure including sports and fitness centres, cafes, fairs, events, and festivals, p ick up the skills essential for future success and carry experiences that will inspire you to make a difference in the world. Come build lifelong connections, find your calling, take a step to live your dreams and be a changemaker.















From The Machine Learning Company

Along with a vibrant student life, students experience various entrepreneurial events throughout the year. Through collaborations with startups, government and large MNCs, our school supports student projects, fosters inclusivity, and promotes home-grown entrepreneurship aligned with the Make in India campaign. Our on-campus initiatives, such as the Centre for Innovation, Incubation, and Entrepreneurship (CIIE), ATLAS Shark Tank, and Uncode Series provide aspiring tech enthusiasts experience of how they can contribute to future developments and embark on their transformational journey.

One of the key benefits of industry-integrated, global learning is its impact on employability. Graduates with this type of education are highly sought after by employers due to their practical experience, global perspective, and readiness to adapt to the demands of a dynamic job market. These students are better equipped to tackle complex challenges, drive innovation, and make socially responsible decisions, making them valuable assets to organizations operating in a globalized world.

The program aims to nurture lifelong learners who are open to continuous growth and self-improvement. It instills a curiosity to explore diverse perspectives, develop innovative solutions, and contribute positively to society at both local and global levels.





#### **GLOBAL LEARNING AT HOME**

A week-long global learning and knowledge exchange across 26 transdisciplinary tracks across Design, Management, Technology and Entrepreneurship

Bringing global transdisciplinary learning home to our students, in the vivid city of Mumbai, the week prepares individuals to gain pragmatic knowledge from academic and industry leaders from around the world. The exchange aims to bridge the gap between academics and real-life learning and prepare the students to be leaders of tomorrow in a globally inclusive world.

**350+** HOURS OF

25+ SPEAKERS

O4 TRACKS 175+ SESSIONS

#### **GLOBAL IMMERSIONS**

**Explore Multicultural Work Cultures** 

**Learn Global Business Practices** 

**Experience Cross Cultural Communications** 

With global associations across continents, our students are have the opportunity to access global learning through immersions and student exchange. They develop a global mindset enabling them to be empathetic and informed leaders and holistic thinkers. Students have travelled to booming urban cities such as London, Paris and New York to understand and experience what their future may look like.



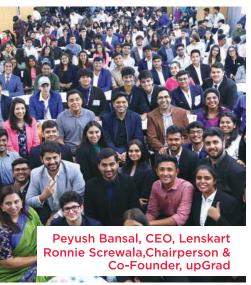




#### **VENTURE LABS**

# Your first step towards becoming an entrepreneur

Equipping aspring entrepreneurs with resources, mentorship, and funding to fuel startup growth, empowering future disruptors and leaders. The aim is to encourage students to develop entrepreneurial skills and consider entrepreneurship as a career choice, providing essential tools for success to drive positive change for a prosperous, sustainable world.



# IMMERSE YOURSELF IN VALUABLE INDUSTRY KNOWLEDGE WITHIN YOUR CLASSROOM, GUIDED BY EXPERT PROFESSIONALS.









#### **MASTERCLASSES**

Your educational journey at ATLAS is filled with opportunities to excel and prepare for your future careers. One of the most effective ways to enhance your learning experience is by actively seeking knowledge from industry experts. These seasoned professionals and industry leaders bring a wealth of practical knowledge and firsthand experience right into your classroom, providing invaluable resource for your academic and professional development. Through various channels, masterclasses, event and University initiatives, you have the chance to engage with industry experts and grow your network even before you graduate!



# GROW YOUR NETWORK PREPARE FOR A GLOBAL FUTURE

With global associations across continents, our students gain exposure to global immersions, student exchanges, masterclasses by renowned professors while they study at ATLAS in Mumbai. Developing a global mindset helps them to prepare and make informed decisions to pursue Masters' at top ranked universities and institutions globally. At ATLAS | uGDX, students will have opportunities to be able to transform ideas into thriving opportunities for themselves that contribute significantly to the national and global economy.









































































# EXPERIENCE INDUSTRY EXPERTS IN YOUR CLASSROOM

**OBSERVERSHIP** 

**INTERNSHIP** 

**PLACEMENT** 

We collaborate with a range of organizations, including startups and industry leaders like Google, Deloitte, TATA Group, and HSBC. These partnerships offer our students unique learning and working experiences. CXOs, CEOs, CMOs and thought leaders often use our classrooms to share their stories and learnings through masterclasses, curriculum advice, mentoring, and more. Our students are prepared to be industry-ready from day one equipped with interdisciplinary skills for impactful careers that shape the global landscape.

























Morgan Stanley



































#### **ADMISSION PROCESS**

At ATLAS, we believe in spending time with each applicant before we make a selection. Therefore, we accommodate a limited number of students on a particular day at each venue.

Therefore our entrance exam is conducted on multiple dates and various locations.

#### **Eligibility Criteria**

- ➤ 50% marks in 10+2 or equivalent with a major in Physics, Mathematics and Chemistry/Electronics/Computers etc.
- > A National/State Common Entrance (CET/JEE) Test score.

#### And/Or

> ATLAS uGDX entrance exam.

STEP 1



#### **Fill The Online Application Form**

on www.atlasuniversity.edu.in & submit a Statement of Purpose

STEP 2



#### uGDX Challenge

Students will need to take an online aptitude test

STEP 3



#### **Personal Interview**

Shortlisted students will undergo a Personal Interview

STEP 4



#### **Result Announcement**

Based on the SOP, entrance test score and the personal interview outcome, the final list of shortlisted students will be announced

STEP 5



#### **Enrolment**

Shortlisted students will need to complete the enrolment process by submitting the required documents and paying the enrolment fees





To know more about the program

#### Contact Us:

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- btech@atlasuniversity.edu.in
- ATLAS SKILLTECH UNIVERSITY Tower 1, Equinox Business Park, Off Bandra-Kurla Complex (BKC), LBS Marg, Kurla West, Mumbai - 400070



Scan to know more about the course

