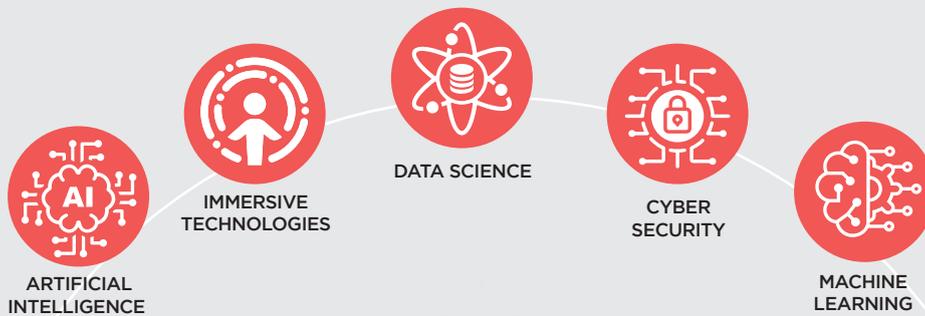


**B.Sc.**  
**COMPUTER SCIENCE**  
(AI Based Immersive Technologies)



In Collaboration with



**PERIYAR MANIAMMAI**  
INSTITUTE OF SCIENCE & TECHNOLOGY  
(Deemed to be University)  
Established Under Sec. 3 of UGC Act, 1956 - NAAC Accredited

think • innovate • transform



## MESSAGE FROM CEO'S DESK

**Mr. Shankaran Chettur**  
CEO

In today's rapidly evolving digital landscape, staying ahead requires continuous learning and upskilling. At Veloces Center for Research & Technology, we are committed to empowering students and professionals with cutting-edge Technology courses designed for the new age. Our programs focus on emerging technologies such as Artificial Intelligence, Immersive Technologies, Cyber Security, Data Science and Machine Learning - equipping learners with the skills needed to thrive in the dynamic tech industry. Join us in embracing the future of IT education and unlocking new career opportunities.

Today, Veloces Center for Research & Technology is here at Periyar Maniammai University (PMU), offering B.Sc Computer Science in AI enabled Immersive Technologies in collaboration with Microsoft.

# VELOCES CENTER FOR RESEARCH & TECHNOLOGY.

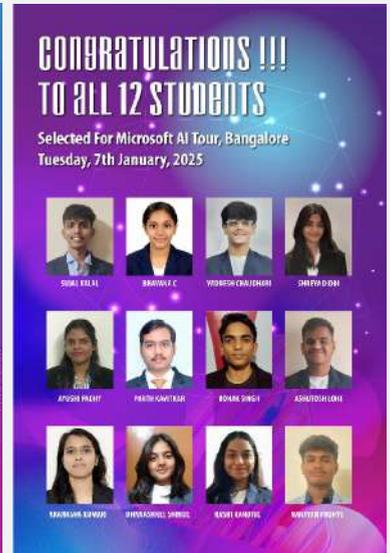
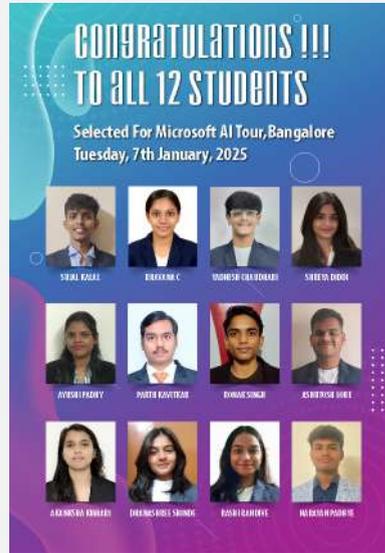
## We help create educational institutions of tomorrow, today.

At Veloces, we help create educational institutions of tomorrow, today. We are committed to revolutionizing the education landscape by providing innovative solutions to universities, colleges, schools, training organizations, corporates, and students alike. As a forward-thinking education solutions provider, Veloces team is composed of seasoned professionals with a deep understanding of both academia and industry dynamics. Our consultants bring in a wealth of experience in education, technology and business, enabling us to offer holistic solutions that cater to the evolving needs of educational institutions and students.

Veloces offers Industry programs with renowned universities which include Curriculum Design and Enhancement, Industry Academia Collaboration, Technology and Innovation Centers of Excellence, Industry relevant Credentials and Certifications, Student Development Programs, Course and Content Development, etc.



# ENGAGEMENTS WITH MICROSOFT



# YOUR SUCCESS JOURNEY BEGINS AT

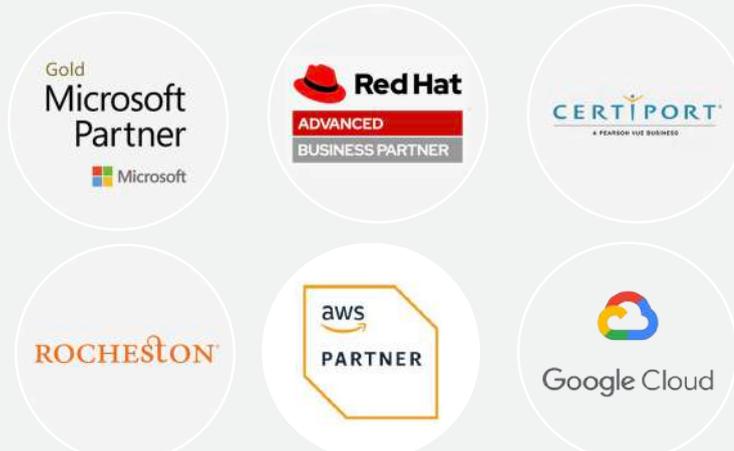


## B.Sc Computer Science programs

### Program Highlight

- B.Sc in Computer Science - AI Based Immersive Technologies program at PMU in collaboration with MICROSOFT
- Global Certifications from Microsoft, Intuit, Meta, Unity, Cisco and Certiport.
- Access to Microsoft Cloud Labs for AI students
- Industry-level Training modules in Artificial Intelligence and Immersive Technologies (XR).
- Entrepreneurship Start-up support from Microsoft.
- Participation in Global Challenges and Competitions from Microsoft - Code without Challenges, AI Odyssey, Imagine Cup and Hackathons.

## Our Alliances



# BE THE TECHNOCRAFT OF TOMORROW!

## Advantage of learning at **PMU**



PRACTICAL  
BASED  
LEARNING PATH



T-SHAPED  
PROFESSIONALS



TOP INDUSTRY  
PLACEMENTS



INDUSTRY  
ALIGNED  
CURRICULUM



STUDENT  
EXPERIENCE



GLOBAL  
IMMERSION

## CORE FEATURES OF PMU SCHOOL OF ENGINEERING

- Innovative Engineering
- Distinguished Faculty
- Hi-Tech Labs
- Industry Collaboration
- Start-Up Culture
- Global Immersion



# PMU CAMPUS LIFE



# B.Sc

## COMPUTER SCIENCE

### AI Based Immersive Technologies

#### PROGRAM OVERVIEW

B.Sc. Computer Science - AI in Immersive Technologies (XR) is a comprehensive 3-year undergraduate program that immerses students in the dynamic and rapidly evolving field of Computer Science with specialisation in Immersive Technologies -

**Augmented reality (AR),  
Virtual reality (VR) and  
Extended reality (XR).**

The program provides a deep dive into the theoretical foundations, technical skills, and practical applications of AR and VR technologies across various industries such as Gaming, Education, Manufacturing, Real Estate, Healthcare, Tourism and Entertainment. Through hands-on projects, research opportunities, and industry collaborations, students will gain expertise in developing AR-VR-XR immersive experiences, interactive simulations, and virtual environments.



# WHY CHOOSE AI IN IMMERSIVE TECHNOLOGIES (XR) AS A CAREER?

According to Forbes, XR technologies, including VR and AR, will be "one of the most transformative tech trends of the next five years." Organizations of all types will be looking for technology professionals with the knowledge base, vision, and skills to implement VR and AR applications that provide a competitive edge.

You may also progress to attain skills and develop your independent research work, which could lead to doing a PhD in this area.

**23 Million**

Projected number of jobs that will be enhanced by VR and AR technologies by 2030.

**1400% Upsurge**

In demand for AR-VR professionals by Top Technology & AR-VR companies by 2028.

SOURCE: STATISTICA & GARTNER RESEARCH 2023

## JOB PROFILES

- AR/VR/XR Designer
- AR/VR Game Developer
- AR/VR Developer
- AR/VR Technical Architect
- AR/VR System Analyst
- AR/VR Content Creator
- XR Developer
- XR Technology Specialist

## INDUSTRY SECTORS

- Retail & Online Shopping
- Gaming & Entertainment
- Events & Expositions
- Advertising & Marketing
- Manufacturing & Industrial
- Real Estate & Architecture Design
- Healthcare & Tourism
- Education & Training



## B.Sc. COMPUTER SCIENCE (AI Based Immersive Technologies)

### ELIGIBILITY CRITERIA

The student should have an aggregate score of 50% or more in Class 12th / HSC with Physics, Chemistry and Mathematics as the compulsory subject or Pass in 3-years of Technical Diploma examination from an accredited and recognised Institute / Board.

### APPLICATION PROCESS

To apply for B.Sc. Computer Science in AR & VR program, the student has to submit an Application Form which is followed by counselling, where relevant documents / certificates are submitted, which eventually leads to their admission in the B.Sc. Computer Science (AI Based Immersive Technologies) program.

## PROGRAMME STRUCTURE (MODULES)

### SEMESTER 1

- பொதுத்தமிழ் (General Tamil)
- அடிப்படத்தமிழ் (Foundational Tamil)
- English for Communication - I
- Matrices and Differential Calculus
- Information Technology Essentials
- Physical Science
- Coding Techniques

### SEMESTER 2

- அறிவியல்தமிழ் (Scientific Tamil)
- வளர்தமிழ் (Beginners Tamil)
- English for Communication - II
- Vector Calculus
- Scripting Paradigms
- Programming in Practice
- Universal Human Values

### SEMESTER 3

- கணினித்தமிழ் (Computer Tamil)
- English for Communication - III
- Foundation Art
- Introduction to Immersive Technologies
- Fundamentals of Graphics Algorithms
- Digital Photography

### SEMESTER 4

- தொழில்நுட்பத்தமிழ் (Technology Tamil)
- English for Communication - IV
- Introduction to AR-VR Software Development Tools
- 3D Modeling
- Virtual Reality
- Thirukkural in Computing
- Internship

### SEMESTER 5

- Immersive Interaction and Audio Design
- Extended Reality
- Programme Elective - I
- 3D Animation
- Cyber Security
- Environmental Studies
- Community Engagement and Social Responsibility

### SEMESTER 6

- Script writing and Narrative storytelling techniques
- Computer Vision using Open CV
- UI/UX Design
- Programme Elective - II
- Open Elective - II
- Online Course
- Capstone Project

## POTENTIAL RECRUITERS



Join Veloces Center for Research & Technology's prestigious programs to gain cutting-edge knowledge, hands-on experience, and industry-relevant skills. Build a strong foundation for a successful career and become a future leader in technology and innovation.

*Shape the future -  
start your journey with us today!*



FOR FURTHER QUERIES  
PERIYAR MANIAMMAI INSTITUTE OF  
SCIENCE & TECHNOLOGY (Deemed to be University)  
Periyar Nagar, Vallam,  
Thanjavur. - 613 403. Tamil Nadu, India.

[admissions@veloces.in](mailto:admissions@veloces.in)  
[www.velocescampus.com](http://www.velocescampus.com)

**+91 844-844-8611**  
**+91 7845511904**