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Indian Institute of Information Technology Sri City, Chittoor भारतीय सूचना प्रौद्योगिकी संस्थान श्री सिटी, चित्तूर

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# Online MTech in VLSI

**Design High-Performance Circuits with IIIT Sri City** 

2 years | Online | ₹2,60,000 | Graduate from an IIIT

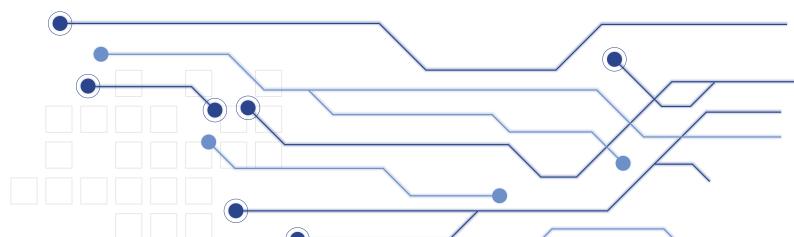


### IIIT Sri City: Shaping Tomorrow's VLSI Experts

Nestled in the vibrant hub of Sri City, Andhra Pradesh, IIIT Sri City (IIITS) is a premier institute of national importance, established in 2013 under the Ministry of Education, Government of India. Known for its cutting-edge IT education, research, and innovation, IIITS offers B.Tech., M.Tech., M.S., and Ph.D. programs in Al, Machine Learning, Data Science, Cyber Security, and more.

What sets IIITS apart? A UG-led research approach, a globally acclaimed faculty, and an industry-driven curriculum designed to solve real-world challenges. With a dynamic learning environment, students engage in experiential learning, research projects, and vibrant cultural & technical clubs to foster innovation and entrepreneurship.

At IIIT Sri City, we are on a mission to compete with the world's top 100 tech universities, shaping future leaders who will transform technology and society.



# **Director's Message**

# **Prof MV Kartikeyan** Director, IIIT Sricity



IIIT Sricity, is an institute of national importance, established under the act of parliament in 2013. IIIT Sricity is strategically located adjacent to Sricity, a major industrial hub, and is well-connected to key cities - just 70 km from Chennai and 70 km from Tirupati. This unique positioning allows us to foster strong industry collaborations, providing students with real-world exposure and research-driven insights.

IIIT Sri City, established under a public-private partnership model, is dedicated to nurturing the next generation of leaders in technology and research. Our students, drawn from across India, bring a diverse array of talents & perspectives. The institute prides itself on its cutting-edge curriculum, emphasis on real-world applications, and a vibrant ecosystem of creativity and intellectual pursuit. Our talented students have consistently demonstrated excellence in academics, innovation, and extracurricular activities, contributing to societal & technological advancements.

Inline with our existing campus education, present M.Tech Online program is designed to empower working professionals and aspiring technologists with advanced skills in emerging domains. With a rigorous curriculum, expert faculty, and industry-relevant projects, this program ensures a perfect blend of theoretical foundations and practical applications. In line with NEP, the flexible learning model allows a person at any stage of their career to upskill while continuing his professional journey. Importantly, the online model would allow students who are working in different geographies to attend and learn in this program. Whether you are looking to enhance your technical proficiency or explore new career opportunities, this program will be a significant milestone in your professional growth.

I encourage you to make the most of this opportunity, engage actively with your mentors, and contribute to the vibrant learning community. We look forward to seeing you excel and innovate in your chosen field.

Jai Hind

Prof MV Kartikeyan Director



The Online M.Tech in VLSI at IIIT Sri City is designed to equip professionals with advanced expertise in semiconductor technology, digital and analog VLSI design, and system-on-chip (SoC) architectures. This program blends theoretical foundations with hands-on learning, ensuring graduates are well-prepared for high-impact roles in the VLSI, semiconductor, and chip design industries. Through real-world simulations and lab-based projects, learners will gain proficiency in low-power VLSI design, nanoscale device modeling, and advanced testing methodologies. With a curriculum aligned to the latest industry trends, this program empowers professionals to develop cuttingedge semiconductor solutions, optimize high-performance circuits, and contribute to the next generation of VLSI innovations.

- Program Date: 5th July (Saturday)
- Campus Immersion Opportunity: One week per year
- Alumni Status: Earn IIIT Sri City alumni status upon completion



# **COURSE ELIGIBILITY**

(a) Applicants should have a B.Tech / BE /BS/ M.Tech / MSc (4 semesterprogram) / MCA (4-semester program) / MS Degree (min. 4 semester) /equivalent degree in the relevant discipline with at least 55% marks or 5.5/10 CPI. In the case of the candidate belonging to SC, ST, or Persons with Disability (PwD) category, this is relaxed to 50% or equivalent 5.0 CGPA/CPI

(b) For MCA/MSC passed graduates, the percentage score of MCA/MSC would be considered. For BE/BTech Engineering graduates without PG specialization, the percentage score of the undergraduate degree would be considered. For a post-graduation in the Engineering field of study,

(c) PG score qualification can be considered.

(d) GATE is not mandatory.

Selection process will be scheduled post-counseling & application process, depending on the number of eligible applications as per seat availability for the program. This entire process will be online.

Candidates who do not meet the minimum CGPA or percentage requirement, can still be considered if they provide relevant work experience in the technical field.

# Who Should Apply?

#### This program is ideal for:



Working professionals looking to specialize in VLSI, chip design, and semiconductor technology.



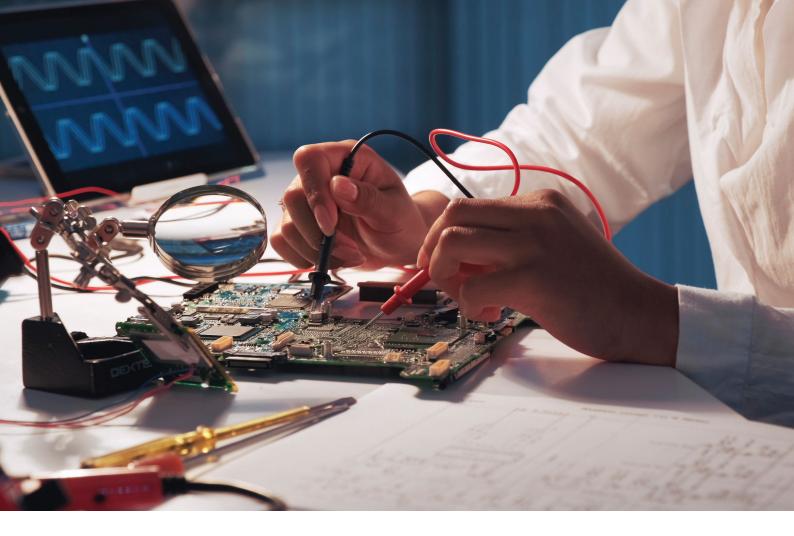
Individuals with a background in Electronics, Electrical Engineering, or Computer Science.



Professionals aiming for roles in VLSI design, semiconductor research, and SoC development.



Research enthusiasts seeking hands-on experience in VLSI system testing, nano-scale devices, & simulation-based circuit design.



### Why Choose IIIT Sri City for Your M.Tech in VLSI?

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#### **Prestigious IIIT Certification**

Earn a highly regarded M.Tech from IIIT Sri City, recognized globally for its excellence in technology and research.



#### Distinguished Faculty

Learn from renowned experts in VLSI, semiconductors, and chip design.



#### Industry-Aligned Curriculum

Stay ahead with a program tailored to cutting-edge VLSI and semiconductor trends.



#### Flexible Online Learning for Professionals

A program tailored for working professionals, enabling them to upskill efficiently while balancing work and study.

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#### **Experiential Learning**

Work on live projects, simulationbased design, and hands-on VLSI system implementation.



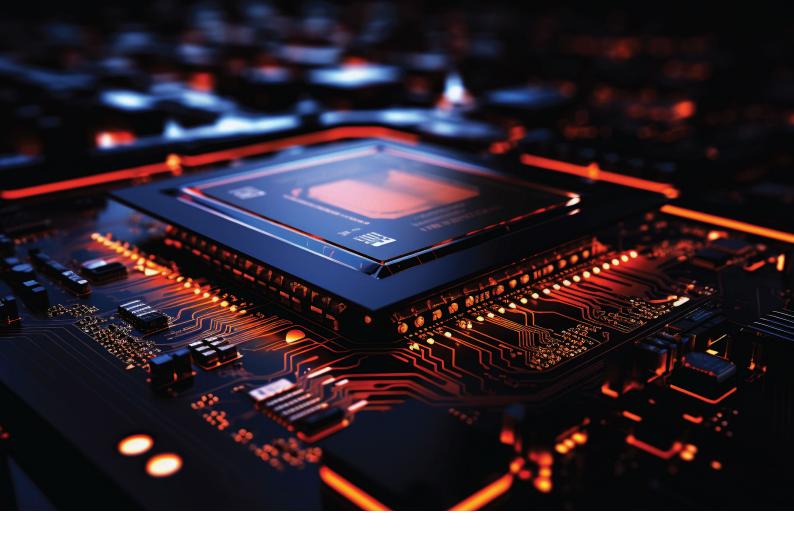
#### IIIT Sri City Alumni Status

Become part of a prestigious network of industry leaders, VLSI experts, and researchers, opening doors to global career opportunities.



#### **Research & Innovation Focus**

Gain exposure to high-impact research, publications, patents, and funded projects.



# **Program Objectives**

#### Master Semiconductor & VLSI Design -

Build expertise in device physics, fabrication, and digital/analog design.

#### Develop Low-Power & High-Speed Circuits - //

Learn optimization techniques for power-efficient chip designs.

#### System on Chip (SoC) & Nano-Scale Devices -

Understand advanced miniaturization and high-performance VLSI circuits.

#### Hands-on Expertise in Verilog HDL & Simulation -

Work on industry-grade VLSI design tools and hardware simulations.

#### **Enhance Testing & Reliability -**

Learn VLSI test methodologies, fault modeling, and system verification.

#### **Practical Project Implementation -**

Apply knowledge through simulation labs, minor & major projects, and a final dissertation.



### Semester - I

Course Name	L	Т	Ρ	Credits
Semiconductor Device Physics	3	4	0	4
VLSI Technology	3	1	0	4
Digital VLSI Circuit Design	3	1	0	4
Verilog HDL	3	0	1	4
Simulation Lab-1	0	0	2	2

Total - 18 Credits

# Semester - II

Course Name	L	т	Р	Credits
Analog VLSI Design	3	1	0	4
Low Power VLSI Design	3	1	0	4
System on Chip	3	1	0	4
VLSI System Design	3	0	1	4
Simulation Lab-2	0	0	2	2

Total - 18 Credits

## Semester - III

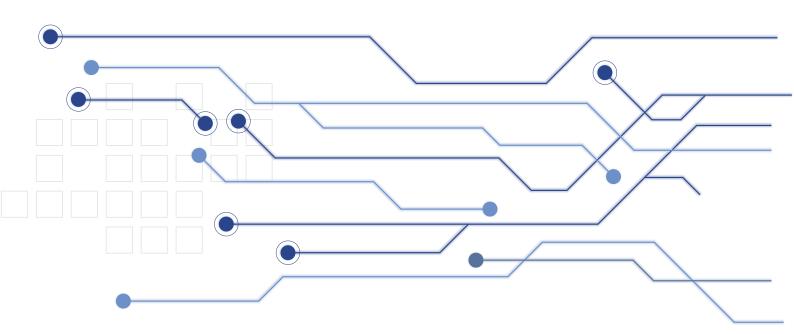
L	т	Р	Credits
3	1	0	4
3	1	0	4
3	1	0	4
0	4	0	4
	3 3 3	-     -       3     1       3     1       3     1       3     1	3       1       0         3       1       0         3       1       0         3       1       0

Total - 16 Credits

### Semester - IV

Course Na	me L	т	Р	Credits
Dissertati	on -	-	-	12

#### Total - 12 Credits





# **Program Outcome**

**Deep Understanding of VLSI Architectures** – Gain expertise in semiconductor devices, circuits, and SoC design.

#### Design & Optimize VLSI Circuits –

Develop high-speed, power-efficient chips for various applications.

#### **Expertise in VLSI Testing & Simulation –**

Master debugging, validation, and verification techniques for complex circuits.

**Industry-Ready Skills in Chip Design & Fabrication** – Get hands-on with nano-scale technologies and digital twin simulations.

**Implement Real-World VLSI Solutions** Work on capstone projects, from concept to prototype deployment.

#### Innovate in Semiconductor R&D -

Contribute to next-gen research, patents, and semiconductor advancements.

# **Admission Process**

# Check Eligibility

Ensure you meet the criteria.

### Upload Documents

Submit degrees, mark sheets, and work experience proof (if required).





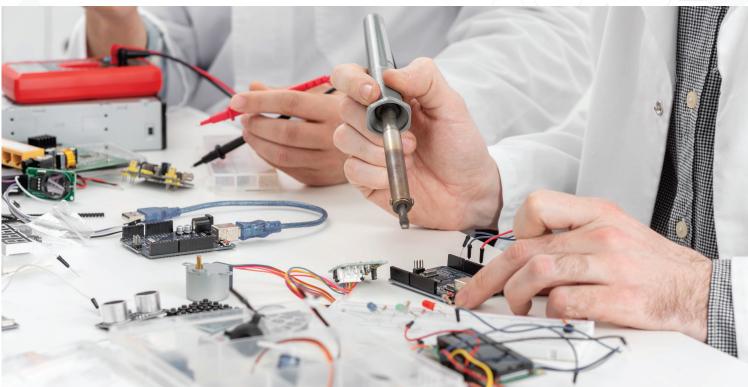
# Verification & Reverification

Documents are verified by TeamLease EdTech and IIIT Sri City.

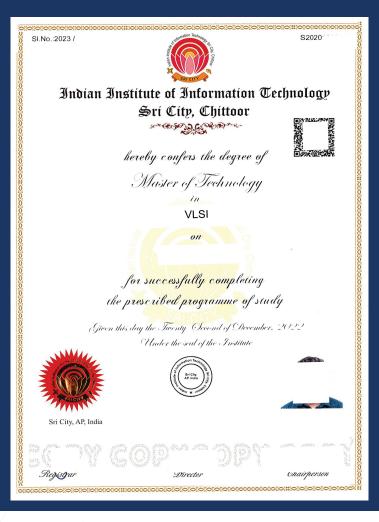
### Admission Number Generated

Marks the completion of the admission process.





# Program Certificate



# **Fee Structure**

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Online MTech in VLSI									
Fees	Seml	Sem2	Sem 3	Sem 4	Total				
Instalment 1	40000	40000	40000	40000					
Instalment 2	25000	25000	25000	25000					
Optional Campus Immersion Fee	7000								
Optional Alumni Fee			6000						
Total	65000	65000	65000	65000	260000				

### **Cancellation & Fee Refund Policy:**

Application Fee: Non-refundable.

Course Fee Refund:

1)A refund of 80% of the paid course fee will be issued if a request is raised before the Batch commencement date.

2)No refund will be provided on or after the batch commencement date.



## Get In Touch With Us

For registration and any other information please get in touch with us at

🗞 04049170726 | 🕅 admission@iiitsricityonline.com | https://cep.digivarsity.com/iiit-sricity/