



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Kakinada 533003, Andhra Pradesh, India

Information to the Students of
Constituent, Affiliated and Autonomous Institutions of JNTUK Kakinada

Jawaharlal Technological University Kakinada, Kakinada is having an MoU with VEDA IIT and Consortium of Industries in the area of VLSI Design, Embedded System Design and Applied AI Engineering, to train the Students at VEDA IIT.

Thereby, the students of III B.Tech studying in Constituent Colleges, viz., University College of Engineering Kakinada, University College of Engineering Narasaraopet, Affiliated Institutions and Autonomous Institutions are hereby informed of the following points for their perusal and to develop the knowledge and expertise in the area of VLSI Design, Embedded System Design and Applied AI Engineering.

1. Students of 3/4 B.Tech from the branches of ECE, ECE allied branches, CSE, AI & ML, and EEE are eligible to apply for the training program at VEDA IIT, Hyderabad.
2. For students who complete the training process successfully for the subjects and projects at VEDA IIT, their credits at VEDA IIT will be transferred to JNTUK for the final year and accordingly degree will be awarded as per university norms.
3. **Student Eligibility to Apply for this Program as follows**
 - I. The student should not have any backlog subjects as on the date of application.
 - II. Students who have secured a CGPA equivalent to **7.5** or have obtained **First Class** with distinction up to the **Third Year – First Semester** are eligible to apply for this training program.
 - III. Students must attend the written test conducted at the centres, namely **VEDA IIT, Financial District Area, Puppalaguda, Hyderabad**, or **V.R. Siddhartha Engineering College, Vijayawada / PVP Sidhartha Institute of Technology, Vijayawada** as per the norms of VEDA IIT. Candidates who successfully qualify in the test and subsequent interview will be eligible to join the training program at VEDA IIT.
 - IV. Students who are interested in pursuing careers in the chosen field and successfully complete the training program (IV year I semester) and internship (IV year II semester) totalling to a minimum duration of 1 year will be provided with job opportunities in the consortium/sponsoring companies in the areas of **VLSI Design, Embedded System Design and Applied AI Engineering** subject to fulfilling their employment terms and conditions.

4. **Examination Schedule**

The examination conducted by VEDA IIT is scheduled to be held on **20th June 2026**, and the timings will be informed through Hall ticket at the chosen examination centre.

5. The Examination pattern is as given in the **Annexure I**

<https://VEDAiit.org/industry-ready-professional-training-test-pattern/>

6. The application to be filled and to be submitted is provided in the

https://vedaiit.org/application/veda_examination/registration_irpt_jntuk.php

(as given in the **Annexure II**)

7. The last date for submission of the application is 17th June 2026.

8. The syllabi for the examination is provided in **Annexure–III**, <https://vedaiit.org/industry-ready-professional-training-test-pattern/>

9. Students who are interested in pursuing specialization in the areas of **VLSI Design, Embedded System Design** and **Applied AI Engineering** are advised to appear for the examination.

All Principals, Managements are informed to provide this information to all the students and also informed that the credits obtained from this training process will be transferred to the final year B.Tech.

10. Students may please note that there is no financial commitment if they accept the terms and conditions of the sponsoring company for subsequent employment and successfully pass all the exams as per the industry criteria. However they are required to pay their regular tuition fees to the respective University/Colleges. Students will be provided full list of terms and conditions of sponsorship leading to employment at the time of Interview and accordingly they can decide. It is an option to the students to get trained at VEDA IIT and exposed to industry oriented learning. Otherwise, students can continue final B. Tech. in concerned branch of engineering at their respective institutions.

11. The students have to plan their accommodation and food at Hyderabad by themselves and they have to take care of local transport.

12. The institutions are not having any financial commitment

13. The duration of the course will be decided by the VEDA IIT to a maximum of 2 semesters or 1 Year.

14. The Hall Tickets will be communicated to student's Email Address.

15. Calculators / Electronic gadgets are not permitted to the examination centre.

Annexure I

Selection and Admission process

The selection and admission process for VEDA IIT programs involves three or four rounds, depending on the number of applications received.

- **Round 1: Preliminary Test** – A one-hour screening test will be conducted at VEDA IIT campus in Hyderabad (or VR Sidhartha Engineering College, Vijayawada or PVP Sidhartha Institute of Technology, Vijayawada) to shortlist the applicants.
- **Round 2: Main Test** – Candidates who qualify in Round 1 will take a written test of two-hours duration at the VEDA IIT campus in Hyderabad (or VR Sidhartha Engineering College, Vijayawada or PVP Sidhartha Institute of Technology, Vijayawada).
- **Round 3: Technical & Personal Interview** – Shortlisted candidates from the main test will undergo technical and personal interviews at the VEDA IIT campus in Hyderabad.
- **Round 4:** Optional based on sponsoring company requirements.

<https://VEDAiit.org/industry-ready-professional-training-test-pattern/>

Annexure II
Online Application Format

https://vedaiit.org/application/veda_examination/registration_irpt_jntuk.php

Annexure III

<https://VEDAiit.org/industry-ready-professional-training-test-pattern/>

Syllabus/Topics for Preliminary Test (Analog Domain)	Marks#	Duration
Basic Electronics (Basic RC Circuits, Diodes and BJTs) – 10M Digital Design (Number Systems, Combinational Logic Circuits) – 10M	20	1 hour
Aptitude	10	
Syllabus/Topics for Preliminary Test (Digital & ESD Domains)	Marks#	Duration
Digital Design (Number Systems, Combinational Logic Circuits, Sequential Logic Circuits) – 15M Basic Electronics (Basic RC Circuits, Diodes and BJTs) – 5M	20	1 hour
Aptitude	10	
Syllabus/Topics for Preliminary Test (Applied AI Domain)	Marks#	Duration
Mathematics covering Statistics, Probability Theory, Linear algebra and Calculus	11	1 hour
Python programming	9	
Database concepts	4	
Problem solving	6	

Round 2 Main Test: Candidates short-listed in Preliminary Test will take the Main Test which comprises of 1 mark, 2 marks, 3 marks/ 4 marks questions in the following pattern

- Fill in the blanks
- Short Answers Questions
- Problems

Topics for Main Test – Analog Design Domain	Marks#	Duration
Analog Design & Circuit Design Analysis of Active and Passive circuits (BJT and MOSFET amplifiers: biasing, ac coupling, small signal analysis, frequency response, Current mirrors and differential amplifiers, Time and frequency domain analysis of linear circuits: RL, RC and RLC circuits), Opamp circuits: Amplifiers, summers, differentiators, integrators, active filters, Schmitt triggers and oscillators.	30	2 hours
Basic Electronics (Basic RC Circuits, Diodes and BJTs) Kirchhoff's Laws, Node and mesh analysis, superposition, Thevenin's theorem, Norton's theorem and maximum power transfer theorem, PN junction diode (clipping, clamping and rectifiers), Zener diode, BJT	10	

<p>Number Systems: Different radices/bases and its conversions, arithmetic operations on different radices, signed numbers: signed magnitude numbers, 1's complement numbers, 2's complement numbers</p> <p>DigitalDesign</p> <p>Combinational Logic Circuits: Minimization of Boolean functions, Logic gates, Multiplexers and De multiplexers , Decoders ,Encoders, Priority Encoders, Comparators, Adders, Subtractors.</p> <p>Sequential Logic Circuits: Latches, Flip flops, Counters, Timing waveforms, Mealy & Moore State Diagrams, State tables.</p>	10	
<p>Aptitude: Area, Average, Boats and Streams, Calendar, Clock, Height and Distance, Logarithm, Logical Reasoning, Numericals and Numbers, Partnership, Percentage, Permutation and Combination, Pipes and Cistern, Probability, Problems on Ages, Problems on H.C.F and L.C.M, Problems on Trains, Profit and Loss, Races and Games, Ratio and Proportion, Square Root and Cube Root, Stocks and Shares, Time and Distance, Time and Work, True Discount, Volume and Surface Area.</p>	20	
Topics for Mains Test – Digital Design Domain	Marks#	Duration
<p>Number Systems: Different radices/bases and its conversions, arithmetic operations on different radices, signed numbers: signed magnitude numbers, 1's complement numbers, 2's complement numbers.</p> <p>DigitalDesign</p> <p>Combinational Logic Circuits: Minimization of Boolean functions, Logic gates, Multiplexers and De multiplexers , Decoders ,Encoders, Priority Encoders, Comparators, Adders, Subtractors.</p> <p>Sequential Logic Circuits: Latches, Flip flops, Counters, Timing waveforms, Mealy & Moore State Diagrams, State tables.</p>	20	2 hours
<p>Basic Electronics (Basic RC Circuits, Diodes and BJTs)</p> <p>Kirchhoff's Laws, Node and mesh analysis, superposition, Thevenin's theorem, Norton's theorem and maximum power transfer theorem, PN junction diode (clipping, clamping and rectifiers), Zener diode, BJT</p>	10	
<p>C Programming: Introduction, Character set, ascii and unicode , Tokens: Keywords, Identifiers, Literals, Operators; Builtin Data Types, Variables, Modifiers,Scope. Flow Control Statements, Variables, Pointers, Input/Output, Arrays: Single Dimensional for Numbers and characters, Multidimensional arrays, Structures, Bit Fields, Union, Enum , Bit Dynamic Allocation of Memory. User defined Functions: Definition, Invocation, Declaration; Libraries.</p> <p>Text Files: Open modes, Opening, Processing, Closing. Binary Files; Low levelProgramming.</p> <p>Command line Arguments, Function Pointers, Preprocessor Directives.</p>	20	

Aptitude: Area, Average, Boats and Streams, Calendar, Clock, Height and Distance, Logarithm, Logical Reasoning, Numericals and Numbers, Partnership, Percentage, Permutation and Combination, Pipes and Cistern, Probability, Problems on Ages, Problems on H.C.F and L.C.M, Problems on Trains, Profit and Loss, Races and Games, Ratio and Proportion, Square Root and Cube Root, Stocks and Shares, Time and Distance, Time and Work, True Discount, Volume and Surface Area	20	
Topics for Mains Test – ESD Domain	Marks#	Duration
Number Systems: Different radices/bases and its conversions, arithmetic operations on different radices, signed numbers: signed magnitude numbers, 1's complement numbers, 2's complement numbers Digital Design Combinational Logic Circuits: Minimization of Boolean functions, Logic gates, Multiplexers and De multiplexers , Decoders , Encoders, Priority Encoders, Comparators, Adders, Subtractors Sequential Logic Circuits: Latches, Flip flops, Counters, Timing waveforms, Mealy & Moore State Diagrams, State tables	20	2 hours
8086 Microprocessor & 8051 Microcontroller: Architecture, Instruction Sets and Assembly Language Programming, Addressing modes, Interrupts	10	
C Programming: Introduction, Character set, ascii and unicode , Tokens: Keywords, Identifiers, Literals, Operators; Builtin Data Types, Variables, Modifiers, Scope. Flow Control Statements, Variables, Pointers, Input/Output, Arrays: Single Dimensional for Numbers and characters, Multidimensional arrays, Structures, Bit Fields, Union, Enum , Bit Dynamic Allocation of Memory. User defined Functions: Definition, Invocation, Declaration; Libraries. Text Files: Open modes, Opening, Processing, Closing. Binary Files; Low level Programming. Command line Arguments, Function Pointers, Preprocessor Directives.	20	
Aptitude: Area, Average, Boats and Streams, Calendar, Clock, Height and Distance, Logarithm, Logical Reasoning, Numericals and Numbers, Partnership, Percentage, Permutation and Combination, Pipes and Cistern, Probability, Problems on Ages, Problems on H.C.F and L.C.M, Problems on Trains, Profit and Loss, Races and Games, Ratio and Proportion, Square Root and Cube Root, Stocks and Shares, Time and Distance, Time and Work, True Discount, Volume and Surface Area	20	
Topics for Main Test – Applied AI Domain	Marks#	Duration
Mathematics covering Statistics, Probability Theory, Linear algebra and Calculus	20	2 hours
Python Programming	20	

Database concepts (ex: SQL and NoSQL)	10	
Problem solving including Logical reasoning, aptitude and Out of box thinking	10	
HTML/CSS, JavaScript	10	

*Applicants need to bring their own pencils, pens, erasers etc. Question paper cum answer booklet will be provided at the center.

#Marks may vary slightly based on domain.