



M.I.E.T. ENGINEERING COLLEGE

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai)
 UG - CSE, EEE & MECH Programs Accredited by NBA, New Delhi.
 (An ISO 9001:2015 Certified Institution)
 TRICHY - PUDUKKOTTAI ROAD, TIRUCHIRAPPALLI - 620 007.
 Email: principalengg@miet.edu, contact@miet.edu
 Website: - www.miet.edu



Ph: 0431 - 2660 303

1.2.2 Number of Add on /Certificate programs offered during the last five years (10)

| 2015-2016 | | |
|-----------|---|-------|
| Sl. No | Name of Add on /Certificate programs offered | Pg.No |
| 1. | EC15161- Microwind Tools for VLSI Design | |
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| | Circular | 3 |
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| | Resource Person Details | 19-20 |
| | Attendance | 21-32 |
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| 2. | EC15162- Digital System Design with PLD and FPGA | |
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Website: - www.miet.edu

Ph: 0431 - 2660 303

Date: 03.06.2015

To

The Principal
M.I.E.T Engineering College,
Trichy - 620007

Respected Madam,

Sub: Permission to conduct the certificate program - Reg...

We have planned to conduct the certificate program for our Third and Final year students from 8.6.2015 to 13.6.2015)

| Name of the Certificate Program | Course Coordinator |
|---------------------------------|--|
| Micro wind Tool for VLSI Design | Mrs.B.Rajalakshmi AP/ECE & G.Karthika AP/ECE |

So kindly give us permission to conduct the course and to utilize the class room.

Thanking you

B. Rajalakshmi
Karthika
Course Coordinator

[Signature]
HoD/ECE

[Signature]
Principal

[Signature]
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05.06.2015

CIRCULAR

Sub: Certificate Program

It is planned to conduct the Certificate Program for the Third year and Final year Electronics and Communication Engineering students.

The Certificate Program is short term certificate courses which are designed and offered by our department for the benefit of our students.

Certificate Program will be conducted at free of cost and based on the performance of the participated students, the merit certificate will be issued after the successful completion of the course.

Students those who are willing to attend the below mentioned course can enroll their name to the course coordinator.

| Name of the Certificate Program | Course Coordinator |
|--|--|
| Micro wind Tool for VLSI Design | Mrs.B.Rajalakshmi AP/ECE & G.Karthika AP/ECE |
| Commencement of course from 08.06.2015 to 13.06.2015 Time: 09.00 AM - 5.30 PM | |

B. Rangh
Karthika
Course Coordinator

[Signature]
HOD/ECE

[Signature]
Principal

[Signature]
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Website: - www.miet.edu

Ph: 0431 - 2660 303

Certificate Program (III Year/V Semester and IV Year/VII Semester)

Course Syllabus

Name of the Course: Micro wind Tool for VLSI Design

Course Code: EC15161

Course Coordinator: Mrs.B.Rajalakshmi AP/ECE & G.Karthika AP/ECE

Total hours:32

Academic Year:2015-2016

Objectives:

- The presentation of the single MOS device, with details on the device modeling, simulation at logic and layout levels.
- Presents the CMOS Inverter, the 2D and 3D views, the comparative design in micron and deep-submicron technologies.
- Technology influence on design rules resistance effect, capacitance effect, propagation.
- Concerns analog-to-digital and digital to analog converter principles.

UNIT 1: Technology Scale down & the MOS device

6

Evolution of Microprocessors and Memories, Frequency Improvements, Increased Layers, The MOS as a switch, Logic Simulation of the MOS, MOS layout, Vertical aspect of the MOS, Static Mos Characteristics, Dynamic MOS behavior, Analog Simulation, Layout considerations, The MOS Model, The BSIM4 MOS Model, Low leakage MOS, High voltage MOS, Temperature effects on the MOS, The PMOS Transistor, The Transmission Gate.

UNIT 2: The Inverter

6

The LOGIC Inverter, THE CMOS INVERTER, Fanout effect, MANUAL LAYOUT OF THE INVERTER, Analog simulation of the INVERTER ,2D View of the Process,3D View of the Process,3-STATE INVERTER ,Basic Gates -The Nand Gate, The AND gate , The 3-Input OR Gate,The XOR Gate, Complex Gates, Multiplexor, Multiplexer, Keyboard multiplexor Arithmetics-Half-Adder Gate, Full-Adder Gate, Full-Adder Symbol in DSCH , Full-Adder Layout , Four-Bit Adder,Comparator , Arithmetic and logic Units , Critical Path.

UNIT 3: Latches, Memories&Analog Cells

6

RS Latch, D Latch, Edge Triggered Latch, Counter, RAM Memory , RAM Array, RAM Line decoder, RAM Column Selection, Dynamic RAM Memory, EEPROM, Analog Cells -Diode-connected MOS Voltage Reference, Current Mirror, Single Stage Amplifier, Simple Differential Amplifier, Voltage Controlled Oscillator.

UNIT 4: Converters &Input/output Interfacing

6

Analog-Digital Converter, Digital-Analog Converter, Sample and Hold circuit, **Input/Output Interfacing-** Create a Pad Ring, VDD/VSS Floor-planning, High Voltage MOS, I/O Pad, ESD, Protections, I/O Pad description using Ibis.

UNIT 5: Design Rules & Electrical Rules

8

Select a Design Rule File, Start Microwind with a specific design Rule, Nwell Design Rules, Diffusion Design Rules, Polysilicon Design Rules, 2nd Polysilicon Design Rules, Option Design Rules, Contact Design Rules, Metal & Via Design Rules, Metal2 & Via2 Design Rules, Metal3 & Via3 Design Rules, Metal4 & Via4 Design Rules, Metal5 & Via5 Design Rules, Metal6 Design Rules, Pad Design Rules, **Electrical Rules-** Electrical Circuit Extraction, Capacitance,

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Surface Capacitance, Interlayer Capacitance, Crosstalk Capacitance, Resistance, Vertical Aspect of the Technology, Dielectrics, Simulation Parameters, Models Level1 and Level3 for analog simulation,BSIM4 Model for analog simulation, TEC file for DSCH2.

Total Hours:32

Course Outcomes:

Upon the completion of this course, students will demonstrate the ability to:

- Design and simulation of CMOS integrated circuits
- Design and simulate an integrated circuit at physical description level.


Text book &References:

- National Institute of Applied Sciences Toulouse, FRANCE Microwind User's Manual
- John P. Uyemura, Chip Design for Submicron VLSI: CMOS Layout and Simulation, Nelson Engineering; 2nd Revised edition
- Etienne SICARD, CHEN Xi, Microwind : Introducing Microelectronics Design on PC, Microelectronics Education
- E. Sicard, Chen Xi "Microwind, Dsch, an Introduction to micro-electronics", INSA Edition, Toulouse, France, 1998, ISBN


Course Coordinator


HoD/ECE


Principal


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Willing Student list

CP1 Coordinator: Micro wind Tool for VLSI Design


CP2 Coordinator: Digital Systems Design with FPGAs and PLDs

Academic Year: 2015-16

| SL. NO | STUDENT NAME | <u>CP1</u> Micro wind Tool for VLSI Design | <u>CP2</u> Digital Systems Design with FPGAs and PLDs |
|--------|--------------------------|--|--|
| 1. | Ayesha Siddiqah. S | | ✓ |
| 2. | Deepthi. D | | ✓ |
| 3. | Karkuzhali. S | | ✓ |
| 4. | Mahabupparveen. S | | ✓ |
| 5. | Maria Sweety. P | | |
| 6. | Mohamed Rifai. M | | ✓ |
| 7. | Mohamed Yasar Arafath. M | | ✓ |
| 8. | Mohamed Rabeek. S | | ✓ |
| 9. | Monisha. A | | ✓ |
| 10. | Monisha Juliet. M | | ✓ |
| 11. | Muthu Lakshmi. C | | |
| 12. | Ramba. S | | ✓ |
| 13. | Rojini Preetha. M | | ✓ |
| 14. | Sabccna Begam. A | | ✓ |
| 15. | Sriram. S | | ✓ |
| 16. | Suresh Babu. S | | |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|---------------------------|---|---|
| 17. | Sushmithabanu. A | | |
| 18. | Vijayabaskar. M | | |
| 19. | Vinodhini. S | | ✓ |
| 20. | Ajith. N | | ✓ |
| 21. | Arun Prasanth. K | | |
| 22. | Fathima Begum. M | | ✓ |
| 23. | Imran. F | | ✓ |
| 24. | Infant Durai Raj. C | | ✓ |
| 25. | Jayalakshmi. S | | ✓ |
| 26. | Kalaiyaran. A | | |
| 27. | Mohamed Farooq. K | | ✓ |
| 28. | Mohamed Irshad Hussain. A | | ✓ |
| 29. | Mohamed Noordeen. B | | ✓ |
| 30. | Pahalavan. R | | ✓ |
| 31. | Palaniyappan-. S | | ✓ |
| 32. | Pavithra. P | | ✓ |
| 33. | Punitha. A | | ✓ |
| 34. | Sahana. M | | ✓ |
| 35. | Shabeek Ahamed. S | | |
| 36. | Terrence. E | | |
| 37. | Thiyagaraj. S | | |
| 38. | Abdul Bessam. S | | |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|----------------------|---|---|
| 39. | Abinaya. K | | ✓ |
| 40. | Abinaya. T | | ✓ |
| 41. | Abirami. M | | ✓ |
| 42. | Alexander. W | | ✓ |
| 43. | Anil Kumar. S | | ✓ |
| 44. | Anitha. R | | ✓ |
| 45. | Anna Srinivasan. T.A | | |
| 46. | Arun. J | | ✓ |
| 47. | Asif Hussain. J.M | | ✓ |
| 48. | Chindhamani. K | | ✓ |
| 49. | Deepika. R | | ✓ |
| 50. | Dhivyapriya. S | | ✓ |
| 51. | Divya. S | | ✓ |
| 52. | Gunasekar. A | | ✓ |
| 53. | Hajira. M | | ✓ |
| 54. | Ibrahim Fazil. Y | | ✓ |
| 55. | Ilakiya. A | ✓ | |
| 56. | Iyswarya. S | | ✓ |
| 57. | Jaya Priya. J | | ✓ |
| 58. | Jayasri. J | | ✓ |
| 59. | Jayasudha. M | | ✓ |
| 60. | John Meshak. S | | ✓ |

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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|-----------------------------|---|---|
| 61. | Kalavathi. M | | ✓ |
| 62. | Kanagaraj. M | | ✓ |
| 63. | Kaviya Priya. K | ✓ | |
| 64. | Keerthana. M | ✓ | |
| 65. | Kousalya. R | ✓ | |
| 66. | Kowsalya (29-10-1995). K | | ✓ |
| 67. | Kowsalya (02-04-1996). K | | ✓ |
| 68. | Lakshmi Priyadharshini. B | | ✓ |
| 69. | Mageshwari. A | | ✓ |
| 70. | Mahadir Mohamed Vaseem. J.S | | ✓ |
| 71. | Manikandan. S | | ✓ |
| 72. | Meena. J | | ✓ |
| 73. | Mehala. C | | ✓ |
| 74. | Mohamed Firnas. B | | ✓ |
| 75. | Mohamed Haameem. M | | ✓ |
| 76. | Mohamed Natharsha. A | ✓ | |
| 77. | Vivek. G | ✓ | |
| 78. | Naga Venkata Ramana. S | ✓ | |
| 79. | Nagalingam. K | ✓ | |
| 80. | Nandhini. G | | ✓ |
| 81. | Padmapriya. A | | ✓ |
| 82. | Paranika. S | | ✓ |


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| SL. NO | STUDENT NAME | <u>CP1</u> Micro wind Tool for VLSI Design | <u>CP2</u> Digital Systems Design with FPGAs and PLDs |
|--------|------------------------|--|--|
| 83. | Pavithra (16.05.96). R | | ✓ |
| 84. | Pavithra (31.05.96). R | | ✓ |
| 85. | Prema. C | | ✓ |
| 86. | Ragavi. R | | ✓ |
| 87. | Rajachidambaram. R | | ✓ |
| 88. | Ramya. C | | ✓ |
| 89. | Rojaammal. M | | ✓ |
| 90. | Sabitha. C | | ✓ |
| 91. | Sana Bakthiyar. S | | ✓ |
| 92. | Sankari. K | | ✓ |
| 93. | Sasmitha. N | | ✓ |
| 94. | Sathiya Sheela. M | | ✓ |
| 95. | Shanmugaraj. P | | ✓ |
| 96. | Sheik Aslam Khan. A | | ✓ |
| 97. | Shofiya Stella. J | | ✓ |
| 98. | Siva. R.K | | ✓ |
| 99. | Siva Lakshmi. S | | ✓ |
| 100. | Sivaranjani. P | | ✓ |
| 101. | Stephy Beula. J | | ✓ |
| 102. | Suguna. K | | ✓ |
| 103. | Sukumar. S | | ✓ |
| 104. | Tamilselvan. T | | ✓ |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|-----------------------|---|---|
| 105. | Thulasi Brindha. S | | ✓ |
| 106. | Udhayavani. U | | ✓ |
| 107. | Umamaheshwari. P | | ✓ |
| 108. | Vengadesan. M | | ✓ |
| 109. | Victoria. R | | ✓ |
| 110. | Vidhyaleela. C | | ✓ |
| 111. | Vishnu Varthan. M | | ✓ |
| 112. | Vithiya Sri. Y | | ✓ |
| 113. | Yogesh. M | | ✓ |
| 114. | Shahad Saleem. A.S | | ✓ |
| 115. | Mohamed Ibrahim. S | | ✓ |
| 116. | Mohan Raj. Y | | ✓ |
| 117. | Syed Mohamed Ashiq. M | | ✓ |
| 118. | Virat Chouhan. S | | ✓ |
| 119. | Arthi. M | ✓ | |
| 120. | Abdul Latheef. R | ✓ | |
| 121. | Akifa Nishat. A | ✓ | |
| 122. | Akshaya. S | ✓ | |
| 123. | Ameer Sheik. M | ✓ | |
| 124. | Amudha. G | ✓ | |
| 125. | Ananda Kumar. A | ✓ | |
| 126. | Anitha. K | ✓ | |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|-------------------------|---|---|
| 127. | Anushiya. P | ✓ | |
| 128. | Anusuya]. S | ✓ | |
| 129. | Aravind. R | ✓ | |
| 130. | Arul Vendhan. M | | |
| 131. | Arun Kumar. K | ✓ | |
| 132. | Aruna. J | ✓ | |
| 133. | Aruna. M | ✓ | |
| 134. | Aruna. R | ✓ | |
| 135. | Asif. G | | |
| 136. | Bala Bharathi. B | ✓ | |
| 137. | Benadict Navin Raj. A | ✓ | |
| 138. | Bhuvana. G.V | ✓ | |
| 139. | Bhuvaneshwari. B | ✓ | |
| 140. | Bhuvaneshwari. J | ✓ | |
| 141. | Dhanalakshmi. T | | |
| 142. | Dharshni Priya. S | ✓ | |
| 143. | Divya. P | ✓ | |
| 144. | Fancy Felciya. J | ✓ | |
| 145. | Gayathri. P | ✓ | |
| 146. | Gnana Micheline Ancy. J | ✓ | |
| 147. | Halithrahman. M | ✓ | |
| 148. | Hema. M | ✓ | |

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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|---------------------------|---|---|
| 149. | Jaya. C | ✓ | |
| 150. | Juhi Jahana. R | ✓ | |
| 151. | Kamalavani. G | ✓ | |
| 152. | Karthiga. M | ✓ | |
| 153. | Karthik. K | ✓ | |
| 154. | Karthika. T | | |
| 155. | Lavanya. N | ✓ | |
| 156. | Mahesh. J | ✓ | |
| 157. | Majitha. K | ✓ | |
| 158. | Meena. K | ✓ | |
| 159. | Merlin Priseela. E | ✓ | |
| 160. | Michael. A | ✓ | |
| 161. | Mohamed Noorul Yasar. M.Z | | |
| 162. | Narmatha. B | ✓ | |
| 163. | Nasima Begam. S | ✓ | |
| 164. | Nazeerahamed. H | ✓ | |
| 165. | Neelakandan. T | ✓ | |
| 166. | Nivetha Princy. P | ✓ | |
| 167. | Priya. K | | |
| 168. | Priyanga. P | ✓ | |
| 169. | Priyanka. G | ✓ | |
| 170. | Raajsree. S.R | ✓ | |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|-------------------|---|---|
| 171. | Raagavendar. B | ✓ | |
| 172. | Rajarajeshwari. N | ✓ | |
| 173. | Rajeshwari. S | ✓ | |
| 174. | Ramadevi. S | ✓ | |
| 175. | Renuga Devi. S | ✓ | |
| 176. | Salman Khan. R | ✓ | |
| 177. | Santhiya. B | | |
| 178. | Saranraju. K | ✓ | |
| 179. | Shanmuga Priya. S | ✓ | |
| 180. | Solai. R | ✓ | |
| 181. | Steffi. X | ✓ | |
| 182. | Subasri. P | | |
| 183. | Sudhakar. P | ✓ | |
| 184. | Sumithra. SP | ✓ | |
| 185. | Sunafir Banu. S | ✓ | |
| 186. | Syed Basith. S | ✓ | |
| 187. | Syed Sulaiman. N | ✓ | |
| 188. | Thansira. S | ✓ | |
| 189. | Udhayaraj. K | ✓ | |
| 190. | Venkatesan. K | ✓ | |
| 191. | Vignesh. B | ✓ | |
| 192. | Vignesh. B | ✓ | |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|----------------------|---|---|
| 193. | Vigneshwaran. M | | |
| 194. | Vigneshwari. M | ✓ | |
| 195. | Vimalan. D | ✓ | |
| 196. | Vinoth. M | ✓ | |
| 197. | Vinothini. T | ✓ | |
| 198. | Yasmeen Banu. S | ✓ | |
| 199. | Yogaraj. S | ✓ | |
| 200. | Akasten Raj. L | ✓ | |
| 201. | Arockia Ilakkia. A | | |
| 202. | Chitrrasu. K | ✓ | |
| 203. | Divakar. A | ✓ | |
| 204. | Eswari. N | ✓ | |
| 205. | George Joel. M | | |
| 206. | Harun Raseed. M | | |
| 207. | Janani. S | | |
| 208. | Karthi. V | | |
| 209. | Kavitha. C | | |
| 210. | Manivannan. M | | |
| 211. | Mohamed Ashick. P | ✓ | |
| 212. | Mohamed Farees. N | | |
| 213. | Mohamed Thaslim. M.R | | |
| 214. | Nanthini. M | | |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|---------------|---|---|
| 215. | Surya. S | | |
| 216. | Vigneswari. M | | |

D. Raju
Santhos
Course Coordinator

[Signature]
HoD/ECE

[Signature]
Principal

[Signature]
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Certificate Program (III Year/V Semester and IV Year/VII Semester)

Program Schedule

Name of the Course: Micro wind Tool for VLSI Design
Course Code: EC15161
Course Coordinator: Mrs.B.Rajalakshmi AP/ECE & G.Karthika AP/ECE
Total Hours: 32
Academic Year: 2015-6

| Sl.No | Topics to be Covered | Hours | Date of Delivery |
|-------|--|-------|------------------|
| 1. | Evolution of Microprocessors and Memories | 7 | 8.6.2015 |
| 2. | Logic Simulation of the MOS, MOS layout | | |
| 3. | Vertical aspect of the MOS, Static Mos Characteristics, | | |
| 4. | Dynamic MOS behavior, Analog Simulation | | |
| 5. | Layout considerations, The MOS Model, The BSIM4 MO Model, Low leakage MOS | | |
| 6. | High voltage MOS, Temperature effects on the MOS, TH PMOS Transistor, The Transmission Gate. | | |
| 7. | The LOGIC Inverter, THE CMOS INVERTER | | |
| 8. | Fanout effect, MANUAL LAYOUT OF THE INVERTER Analog simulation of the INVERTER | 7 | 9.6.2015 |
| 9. | 2D View of the Process,3D View of the Process,3-STAT INVERTER ,Basic Gates | | |
| 10. | The Nand Gate, The AND gate , The 3-Input OR Gate,TH XOR Gate, Complex Gates | | |
| 11. | Multiplexor, Multiplexer, Keyboard multiplexe Arithmetics-Half-Adder Gate, Full-Adder Gate | | |
| 12. | Full-Adder Layout , Four-Bit Adder,Comparator Arithmetic and logic Units , Critical Path. | | |
| 13. | RS Latch, D Latch, Edge Triggred Latch, Counter | | |
| 14. | RAM Memory , RAM Array, RAM Line decoder, RAM Column Selection | | |
| 15. | Dynamic RAM Memory, EEPROM | 7 | 10.6.2015 |
| 16. | Analog Cells -Diode-connected MOS Voltage Reference | | |
| 17. | Simple Differential Amplifier | | |
| 18. | Voltage Controlled Oscillator. | | |

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| Sl.No | Topics to be Covered | Hours | Date of Delivery |
|-------|---|-------|------------------|
| 19. | Analog-Digital Converter, Digital-Analog Converter | | |
| 20. | Sample and Hold circuit | | |
| 21. | Input/Output Interfacing- Create a Pad Ring | | |
| 22. | VDD/VSS Floor-planning | | |
| 23. | I/O Pad, ESD, Protections | | |
| 24. | I/O Pad description using Ibis | | |
| 25. | Select a Design Rule File, Start Microwind with a specific design Rule | 7 | 11.6.2015 |
| 26. | Nwell Design Rules, Diffusion Design Rules, Polysilicon Design Rules | | |
| 27. | 2nd Polysilicon Design Rules, Option Design Rule Contact Design Rules, Metal & Via Design Rules | | |
| 28. | Metal2 & Via2 Design Rules, Metal3 & Via3 Design Rule Metal4 & Via4 Design Rules, | | |
| 29. | Metal5 & Via5 Design Rules, Metal6 Design Rules, Pad Design Rules, Electrical Rules- Electrical Circuit Extraction, Capacitance, Surface Capacitance | 4 | 12.6.2015 |
| 30. | Interlayer Capacitance, Crosstalk Capacitance, Resistance Vertical Aspect of the Technology | | |
| 31. | Dielectrics, Simulation Parameters, Models Level1 and Level3 for analog simulation,BSIM4 Model for analog simulation, | | |
| 32. | TEC file for DSCH2 | | |

B. Rajan
Gnanthar

Course Coordinator

[Signature]
HOD/ECE

[Signature]
Principal

[Signature]
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Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

Ph: 0431 - 2660 303

Resource Person Details

| | |
|---|---|
| Title of the program | Micro wind Tool for VLSI Design |
| Course Code | EC15161 |
| Duration and timing of the program | 32 Hrs, 09.00AM - 05.30 PM |
| Name of the resource person | Mrs.B.Rajalakshmi AP/ECE |
| Photo of the resource person |  |
| Email address | rajivijanani@gmail.com |
| Contact number | 8056600528 |
| Designation | Assistant Professor |
| Educational qualification | <ul style="list-style-type: none">➤ B.E -Electronics and Communication Engineering 2002 in R.V.S.College of engineering and technology, Madurai Kamaraj University with 66%➤ M.E - Applied Electronics 2010 in Government College of Technology , Anna University Coimbatore with CGPA 70% |
| Experience | ➤ Teaching Experience - 10 Years. |


A. Raj
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Website: - www.miet.edu

Ph: 0431 - 2660 303

| | |
|------------------------------------|---|
| Title of the program | Micro wind Tool for VLSI Design |
| Course Code | EC15161 |
| Duration and timing of the program | 32 Hrs, 09.00AM - 05.30 PM |
| Name of the resource person | Mrs.G.Karthika AP/ECE |
| Photo of the resource person |  |
| Email address | Karthika.g@miet.edu |
| Contact number | 9865197766 |
| Designation | Assistant Professor |
| Educational qualification | <ul style="list-style-type: none">➤ B.E -Electronics and Communication Engineering 2006 in Sudharsan Engineering College affiliated to Anna University Chennai with CGPA 70%.➤ M.E -VLSI DESIGN (2011-2013) in M.I.E.T Engineering College, affiliated to Anna University Chennai with CGPA 8.5. |
| Experience | <ul style="list-style-type: none">➤ Teaching Experience - 10 Years. |


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Certificate Program (III/V Semester and IV Year/VII Semester) Attendance Sheet

Name of the course: Micro wind Tool for VLSI Design
Course code: EC15161
Course coordinator: Mrs.B.Rajalakshmi AP/ECE & G.Karthika AP/ECE
Academic Year: 2015-16

| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 1. | E1134019 | Ilakiya. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 2. | E1134027 | Kaviya Priya. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 3. | E1134028 | Keerthana. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 4. | E1134029 | Kousalya. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 5. | E1134040 | Mohamed Natharsha. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 6. | E2144084 | Vivek. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 7. | E1134041 | Naga Venkata Ramana. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 8. | E1134042 | Nagalingam. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 9. | E1124001 | Arthi. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 10. | E1124002 | Abdul Lathceef. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 11. | E1124003 | Akifa Nishat. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 12. | E1124004 | Akshaya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 | |
|-------|----------|-----------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|---|
| 13. | E1124005 | Ameer Sheik. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 14. | E1124006 | Amudha. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 15. | E1124007 | Ananda Kumar. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 16. | E1124008 | Anitha. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 17. | E1124009 | Anushiya. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 18. | E1124010 | Anusuya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 19. | E1124011 | Aravind. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 20. | E1124013 | Arun Kumar. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 21. | E1124014 | Aruna. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 22. | E1124015 | Aruna. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 23. | E1124016 | Aruna. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 24. | E1124018 | Bala Bharathi. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 25. | E1124019 | Benadict Navin Raj. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 26. | E1124020 | Bhuvana. G.V | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 27. | E1124021 | Bhuvaneshwari. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 28. | E1124022 | Bhuvaneshwari. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 29. | E1124024 | Dharshni Priya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 30. | E1124025 | Divya. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|-------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 31. | E1124026 | Fancy Felciya. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 32. | E1124027 | Gayathri. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 33. | E1124028 | Gnana Micheline Ancy. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 34. | E1124029 | Halithrahman. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 35. | E1124030 | Hema. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 36. | E1124031 | Jaya. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 37. | E1124032 | Juhi Jahana. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 38. | E1124033 | Kamalavani. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 39. | E1124034 | Karthiga. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 40. | E1124035 | Karthik. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 41. | E1124037 | Lavanya. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 42. | E1124038 | Maresh. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 43. | E1124039 | Majitha. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 44. | E1124040 | Meena. K | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a |
| 45. | E1124041 | Merlin Priseela. E | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 46. | E1124042 | Michael. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 47. | E1124045 | Narmatha. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 48. | E1124046 | Nasima Begam. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 49. | E1124047 | Nazeerahamed. H | / | / | | | | | | | | | | | | | | | | | | |
| 50. | E1124048 | Neelakandan. T | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 51. | E1124049 | Nivetha Princy. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 52. | E1124051 | Priyanga. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 53. | E1124052 | Priyanka. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 54. | E1124053 | Raajsree. S.R | a | a | a | a | a | a | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 55. | E1124054 | Raagavendar. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 56. | E1124055 | Rajarajeshwari. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 57. | E1124056 | Rajeshwari. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 58. | E1124057 | Ramadevi. S | a | a | a | a | a | a | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 59. | E1124058 | Renuga Devi. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 60. | E1124059 | Salman Khan. R | / | / | / | / | / | / | / | a | a | a | a | a | / | / | / | / | / | / | / | / |
| 61. | E1124061 | Saranraju. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 62. | E1124062 | Shanmuga Priya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 63. | E1124064 | Solai. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 64. | E1124065 | Steffi. X | a | a | a | a | a | a | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 65. | E1124067 | Sudhakar. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 66. | E1124068 | Sumithra. SP | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 67. | E1124069 | Sunafir Banu. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 68. | E1124070 | Syed Basith. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 69. | E1124071 | Syed Sulaiman. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 70. | E1124072 | Thansira. S | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a |
| 71. | E1124073 | Udhayaraj. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 72. | E1124074 | Venkatesan. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 73. | E1124075 | Vignesh. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 74. | E1124076 | Vignesh. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 75. | E1124078 | Vigneshwari. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 76. | E1124079 | Vimalan. D | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 77. | E1124080 | Vinoth. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 78. | E1124081 | Vinothini. T | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 79. | E1124082 | Yasmeen Banu. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 80. | E1124083 | Yograj. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 81. | E2134084 | Akasten Raj. L | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 82. | E2134086 | Chitrarasu. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 83. | E2134087 | Divakar. A | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a | a |
| 84. | E2134088 | Eswari. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|------------------------------|----------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 85. | E2134095 | Mohamed Ashick. P | | | | | | | | | | | | | | | | | | | | |
| Total No Students Presents | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Total No Students Absent | | | 72 | 75 | 78 | 71 | 80 | 81 | 70 | 72 | 74 | 78 | 80 | 72 | 71 | 68 | 81 | 69 | 71 | 73 | 74 | 77 |
| Signature Course Coordinator | | | 13 | 10 | 07 | 14 | 05 | 04 | 15 | 13 | 11 | 07 | 05 | 13 | 14 | 12 | 04 | 18 | 14 | 12 | 11 | 08 |
| | | | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> |


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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 1. | E1134019 | Ilakiya. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 2. | E1134027 | Kaviya Priya. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 3. | E1134028 | Keerthana. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 4. | E1134029 | Kousalya. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 5. | E1134040 | Mohamed Natharsha. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 6. | E2144084 | Vivek. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 7. | E1134041 | Naga Venkata Ramana. S | a | a | a | a | a | a | / | / | / | / | / | / | / | / | / | / | / |
| 8. | E1134042 | Nagalingam. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 9. | E1124001 | Arthi. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 10. | E1124002 | Abdul Latheef. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 11. | E1124003 | Akifa Nishat. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 12. | E1124004 | Akshaya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 13. | E1124005 | Ameer Sheik. M | / | / | / | / | / | / | u | a | a | a | a | a | a | a | a | a | a |
| 14. | E1124006 | Amudha. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|-----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 15. | E1124007 | Ananda Kumar. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 16. | E1124008 | Anitha. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 17. | E1124009 | Anushiya. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 18. | E1124010 | Anusuya]. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 19. | E1124011 | Aravind. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 20. | E1124013 | Arun Kumar. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 21. | E1124014 | Aruna. J | a | a | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 22. | E1124015 | Aruna. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 23. | E1124016 | Aruna. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 24. | E1124018 | Bala Bharathi. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 25. | E1124019 | Benadict Navin Raj. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 26. | E1124020 | Bhuvana. G.V | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 27. | E1124021 | Bhuvaneshwari. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 28. | E1124022 | Bhuvaneshwari. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 29. | E1124024 | Dharshni Priya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 30. | E1124025 | Divya. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 31. | E1124026 | Fancy Felciya. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 32. | E1124027 | Gayathri. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

A. S. S.
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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|-------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 33. | E1124028 | Gnana Micheline Ancy. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 34. | E1124029 | Halithrahman. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 35. | E1124030 | Hema. M | / | / | / | / | / | / | / | / | / | / | / | a | a | a | a | a | a |
| 36. | E1124031 | Jaya. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 37. | E1124032 | Juthi Jahana. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 38. | E1124033 | Kamalavani. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 39. | E1124034 | Karthiga. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 40. | E1124035 | Karthik. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 41. | E1124037 | Lavanya. N | / | / | / | / | / | / | / | a | a | a | a | / | / | / | / | / | / |
| 42. | E1124038 | Mahesh. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 43. | E1124039 | Majitha. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 44. | E1124040 | Meena. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 45. | E1124041 | Merlin Priseela. E | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 46. | E1124042 | Michael. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | a | a | a |
| 47. | E1124045 | Narmatha. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 48. | E1124046 | Nasima Begam. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 49. | E1124047 | Nazeerahamed. H | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|-------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 50. | E1124048 | Neelakandan. T | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 51. | E1124049 | Nivetha Princy. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 52. | E1124051 | Priyanga. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 53. | E1124052 | Priyanka. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 54. | E1124053 | Raajsree. S.R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 55. | E1124054 | Raagavendar. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 56. | E1124055 | Rajarajeshwari. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 57. | E1124056 | Rajeshwari. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 58. | E1124057 | Ramadevi. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 59. | E1124058 | Renuga Devi. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 60. | E1124059 | Salman Khan. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 61. | E1124061 | Saranraju. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 62. | E1124062 | Shanmuga Priya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 63. | E1124064 | Solai. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 64. | E1124065 | Steffi. X | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 65. | E1124067 | Sudhakar. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 66. | E1124068 | Sumithra. SP | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 67. | E1124069 | Sunafir Banu. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

A. S. J.

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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|-------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 68. | E1124070 | Syed Basith. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 69. | E1124071 | Syed Sulaiman. N | / | / | / | / | / | / | / | / | / | / | a | / | / | / | / | / | / |
| 70. | E1124072 | Thansira. S | / | / | / | / | / | / | / | / | / | / | / | a | a | a | a | a | a |
| 71. | E1124073 | Udhayaraj. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 72. | E1124074 | Venkatesan. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 73. | E1124075 | Vignesh. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 74. | E1124076 | Vignesh. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 75. | E1124078 | Vigneshwari. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 76. | E1124079 | Vimalan. D | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 77. | E1124080 | Vinoth. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 78. | E1124081 | Vinothini. T | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 79. | E1124082 | Yasmeen Banu. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 80. | E1124083 | Yograj. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 81. | E2134084 | Aksten Raj. L | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 82. | E2134086 | Chitrasu. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 83. | E2134087 | Divakar. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 84. | E2134088 | Eswari. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 85. | E2134095 | Mohamed Ashick. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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Principals
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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|---------|------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | | Total No Students Presents | 81 | 80 | 80 | 80 | 80 | 75 | 75 | 75 | 75 | 75 | 81 | 81 | 81 | 81 | 81 | 80 | 80 |
| | | Total No Students Absent | 84 | 5 | 5 | 5 | 5 | 10 | 10 | 10 | 10 | 10 | 84 | 4 | 4 | 4 | 4 | 5 | 5 |
| | | Signature Course Coordinator | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> |

B. Prabakaran
[Signature]

Course Coordinator

HOD/ECE

Principal

A. Arul
PRINCIPAL.
M.I.E.T. ENGINEERING COLLEGE
GUNDUR, TIRUCHIRAPPALLI-620 007.

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M.I.E.T. ENGINEERING COLLEGE

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TRICHY - PUDUKKOTTAI ROAD, TIRUCHIRAPPALLI - 620 007.
Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

Ph: 0431 - 2660 303

Certificate Program Assessment Test

Name of the course: Micro wind Tool for VLSI Design
Course Code: EC15161
Academic Year: 2015-2016

Date: 16.12.2017
Time: 01:30 hrs

1. The utilization of CAD tools for drawing timing waveform diagram and transforming it into a network of logic gates is known as _____.
 - a. Waveform Editor
 - b. Waveform Estimator
 - c. Waveform Simulator
 - d. Waveform Evaluator
2. Which among the following is a process of transforming design entry information of the circuit into a set of logic equations?
 - a. Simulation
 - b. Optimization
 - c. Synthesis
 - d. Verification
3. _____ is the fundamental architecture block or element of a target PLD.
 - a. System Partitioning
 - b. Pre-layout Simulation
 - c. Logic cell
 - d. Post-layout Simulation
4. In VLSI design, which process deals with the determination of resistance & capacitance of interconnections?
 - a. Floorplanning
 - b. Placement & Routing
 - c. Testing
 - d. Extraction
5. Among the VHDL features, which language statements are executed at the same time in parallel flow?
 - a. Concurrent
 - b. Sequential
 - c. Net-list
 - d. Test-bench
6. In Net-list language, the net-list is generated _____ synthesizing VHDL code.
 - a. Before
 - b. At the time of (during)
 - c. After
 - d. None of the above


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7. In VHDL, which object/s is/are used to connect entities together for the model formation?
- Constant
 - Variable
 - Signal
 - All of the above
8. Which data type in VHDL is non synthesizable & allows the designer to model the objects of dynamic nature?
- Scalar
 - Access
 - Composite
 - File
9. Which type of simulation mode is used to check the timing performance of a design?
- Behavioural
 - Switch-level
 - Transistor-level
 - Gate-level
10. In the simulation process, which step specifies the conversion of VHDL intermediate code so that it can be used by the simulator?
- Compilation
 - Elaboration
 - Initialization
 - Execution
11. Which type of simulator/s neglect/s the intra-cycle state transitions by checking the status of target signals periodically irrespective of any events?
- Event-driven Simulator
 - Cycle-based Simulator
 - Both a and b
 - None of the above
12. Which among the following is not a characteristic of 'Event-driven Simulator'?
- Identification of timing violations
 - Storage of state values & time information
 - Time delay calculation
 - No event scheduling
13. Which among the following is an output generated by synthesis process?
- Attributes & Library
 - RTL VHDL description
 - Circuit constraints
 - Gate-level net list
14. Register transfer level description specifies all of the registers in a design & _____ logic between them.
- Sequential
 - Combinational
 - Both a and b
 - None of the above


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15. In synthesis process, the load attribute specify/ies the existing amount of _____ load on a particular output signal.

- a. Inductive
- b. Resistive
- c. Capacitive
- d. All of the above

16. Which attribute in synthesis process specify/ies the resistance by controlling the quantity of current it can source?

- a. Load attribute
- b. Drive attribute
- c. Arrival time attribute
- d. All of the above

17. Which type of digital systems exhibit the necessity for the existence of at least one feedback path from output to input?

- a. Combinational System
- b. Sequential system
- c. Both a and b
- d. None of the above

18. The output of sequential circuit is regarded as a function of time sequence of _____.

- A. Inputs
- B. Outputs
- C. Internal States
- D. External States

- a. A & D
- b. A & C
- c. B & D
- d. B & C

19. The time required for an input data to settle _____ the triggering edge of clock is known as 'Setup Time'.

- a. Before
- b. During
- c. After
- d. All of the above

20. Hold time is defined as the time required for the data to _____ after the triggering edge of clock.

- a. Increase
- b. Decrease
- c. Remain stable
- d. All of the above

B. Resmi
Chandhi
Course Coordinator

[Signature]
HoD/ECE

[Signature]
Principal

A. S. J.
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M.I.E.T. ENGINEERING COLLEGE

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Email: principalengg@miet.edu, contact@miet.edu
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Ph: 0431 - 2660 303

Report

Name of the course: Micro wind Tool for VLSI Design

Course Code: EC15161

Course Coordinator: Mrs.B.Rajalakshmi AP/ECE & G.Karthika AP/ECE

Total Hours: 32

Academic Year:2015-2016

I hereby affirm that the entire course contents listed in the course syllabus of the certificate program "Micro wind Tool for VLSI Design" have educated to the students as the part of the prescribed co - curricular activities through Certificate Program.

The Students can able to design and simulate at layout level and know the best practice of Micro wind tool. I confirmed that the certificate program titled as "Micro wind Tool for VLSI Design" has been conducted in the beginning of the semester and course delivery along with attendance of the students was recorded. I confirmed that all the students were actively attended this certificate Program and performed well throughout the program and eligible students received the certificate.

B. Rajalakshmi
G. Karthika

Course Coordinator

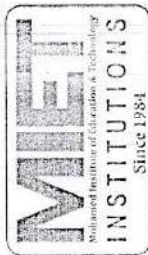
[Signature]
HOD/ECE

[Signature]
Principal

A. S. J.
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M.I.E.T. ENGINEERING COLLEGE

Trichy, Pudukkottai Road, Trichy - 620 007.



Course Completion Certificate

This is to Certify that Mr/Ms. G. Vivek

of AI ETE has Completed the Course on

Micro and spa for VLSI Design from 8.6.2015 to 13.6.2015

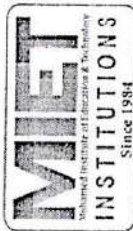
Course Coordinator


Hod


PRINCIPAL
M.I.E.T. ENGINEERING COLLEGE Principal
GUNDUR, TIRUCHIRAPPALLI-620 007.

M.I.E.T. ENGINEERING COLLEGE

Trichy, Pudukkottai Road, Trichy - 620 007.



Course Completion Certificate

This is to Certify that Mr/Ms. A Muneja
of M ETE has Completed the Course on

Micro wind Tool for VLSI Design from 8.6.2015 to 13.6.2015

Course Coordinator


Hod


Principal


M.I.E.T. ENGINEERING COLLEGE
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10.12.2015

CIRCULAR

Sub: Certificate Program

It is planned to conduct the Certificate Program for the Second year and Third year Electronics and Communication Engineering students.

The Certificate Program is short term certificate courses which are designed and offered by our department for the benefit of our students.


Certificate Program will be conducted at free of cost and based on the performance of the participated students, the merit certificate will be issued after the successful completion of the course.

Students those who are willing to attend the below mentioned course can enroll their name to the course coordinator.

| Name of the Certificate Program | Course Coordinator |
|--|---|
| Digital Systems Design with FPGAs and PLDs | Ms.T.Nithya AP/ECE & Mr. K.Javid AP/ECE |
| Commencement of course from 21.12.2015 to 30.12.2015 Time: 09.30 AM - 5.00 PM | |


Course Coordinator


HoD/ECE


Principal


- PRINCIPAL
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Email: principalengg@miet.edu, contact@miet.edu
Website: - www.miet.edu

Ph: 0431 - 2660 303

Date: 08.12.2015

To
The Principal
M.I.E.T Engineering College,
Trichy - 620007

Respected Madam,

Sub: Permission to conduct the certificate program - Reg...

We have planned to conduct the certificate program for our Second Year and Third Year students from 21.12.2015 to 30.12.2015.

| Name of the Certificate Program | Course Coordinator |
|--|---|
| Digital Systems Design with FPGAs and PLDs | Ms.T.Nithya AP/ECE & Mr. K.Javid AP/ECE |

So kindly give us permission to conduct the course and to utilize the class room.

Thanking you

Course Coordinator

HoD/ECE

Principal

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Certificate Program (II Year/IV Semester and III Year/VI Semester) Course Syllabus

Name of the course: Digital Systems Design with FPGAs and PLDs

Course Code: EC15162

Course Coordinator: Ms.T.Nithya AP/ECE & Mr. K.Javid AP/ECE

Total hours: 34

Academic Year: 2015-16

Objectives:

- Introduction to digital system design flow and approaches.
- Concept of Hardware description language.
- Understanding of Combinational, Sequential, Arithmetic Circuits and their Hierarchical Implementation.
- Knowledge of architecture of Programmable Logic Devices like FPGA.

Unit 1: Introduction to Programmable Logic

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Introduction, Electronic Circuits: Analogue and Digital, Continuous Time versus Discrete Time, Analogue versus Digital, History of Digital Logic, Programmable Logic versus Discrete Logic, Programmable Logic versus Processors, Types of Programmable, Simple Programmable Logic Device (SPLD), Complex Programmable Logic Device (CPLD), Field Programmable Gate Array (FPGA), PLD Configuration Technologies, Programmable Logic Vendors, Programmable Logic Design Methods and Tools, Typical PLD Design Flow, Technology Trends.

Unit 2: Electronic Systems Design

7

Introduction, Sequential Product Development Process versus Concurrent Engineering Process, Introduction - Sequential Product Development Process, Concurrent Engineering Process, Flowcharts, Block Diagrams, Gajski-Kuhn Chart, Hardware-Software Co-Design, Formal Verification, Embedded Systems and Real-Time Operating Systems.

Unit 3: Design Languages

7

Introduction, Software Programming Languages, Introduction, C, C++, JAVATM, VisualBasicTM, Scripting Languages, PHP, Hardware Description Languages, Introduction-VHDL, Verilog_HDL, Verilog_A, VHDL-AMS, Verilog_AMS, SPICE, SystemC, SystemVerilog, Mathematical Modeling Tools.

Unit 4: Introduction to Digital Logic Design with VHDL

7

Introduction, Designing with HDLs, Design Entry Methods, Introduction, Schematic Capture, HDL Design Entry, Logic Synthesis, Entities, Architectures, Packages, and Configurations, Introduction, Dataflow Description Example, Behavioral Description Example, Structural Description Example, Signals versus Variables, Data Types, Concurrent versus Sequential Statements, Loops and Program Control, Coding Styles for VHDL, Combinational Logic Design, Sequential Logic Design, Memories, Unsigned versus Signed Arithmetic, Testing the Design: The VHDL Test Bench, File I/O for Test Bench Development.


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Unit 5: System-Level Design

6

Introduction, Electronic System-Level Design ,Case Study 1: DC Motor Control ,Introduction, Motor Control System Overview,MATLAB /Simulink_ Model Creation and Simulation, Translating the Design to VHDL,Concluding Remarks ,Case Study 2: Digital Filter Design, Introduction,Filter Overview ,MATLAB /Simulink_ Model Creation and Simulation,Translating the Design to VHDL.

Total Hours:34**Course Outcomes:**

Upon the completion of this course, students will demonstrate the ability to:

- Design and analyze combinational, sequential and arithmetic circuits
- Understand digital system design flow, timing, synthesis and FPGA implementation issues. Solve engineering problems in the area of digital system design.

Text Books:

1. A VHDL Primer, Third Edition: J. Bhasker, Prentice Hall, (1999).
2. Digital System Design Using VHDL ,Second Edition Lizy Kurian John ,Charles H.Roth,Cengage(2012)
3. Fundamental of Digital Logic with VHDL Design, Third Edition, Stephen Brown, Zvonko Vranesic, McGraw Hill Education(2012)


Reference Book:

1. AnEngineeringApproachtoDigitalDesign:W.Fletcher,PrenticeHall
2. VHDLforEngineers,KennethL.Short,PearsonEducation(2009)



Course Coordinator


HoD/ECE


Principal


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Website: - www.miet.edu

Ph: 0431 - 2660 303

Willing Student list

CP1 Coordinator: Micro wind Tool for VLSI Design


CP2 Coordinator: Digital Systems Design with FPGAs and PLDs

Academic Year: 2015-16

| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|--------------------------|---|---|
| 1. | Ayesha Siddiqah. S | | ✓ |
| 2. | Deepthi. D | | ✓ |
| 3. | Karkuzhali. S | | ✓ |
| 4. | Mahabupparveen. S | | ✓ |
| 5. | Maria Sweety. P | | |
| 6. | Mohamed Rifai. M | | ✓ |
| 7. | Mohamed Yasar Arafath. M | | ✓ |
| 8. | Mohamed Rabeek. S | | ✓ |
| 9. | Monisha. A | | ✓ |
| 10. | Monisha Juliet. M | | ✓ |
| 11. | Muthu Lakshmi. C | | |
| 12. | Ramba. S | | ✓ |
| 13. | Rojini Preetha. M | | ✓ |
| 14. | Sabeena Begam. A | | ✓ |
| 15. | Sriram. S | | ✓ |
| 16. | Suresh Babu. S | | |

A. S. J.
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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|---------------------------|---|---|
| 17. | Sushmithabanu. A | | |
| 18. | Vijayabaskar. M | | |
| 19. | Vinodhini. S | | ✓ |
| 20. | Ajith. N | | ✓ |
| 21. | Arun Prasanth. K | | |
| 22. | Fathima Begum. M | | ✓ |
| 23. | Imran. F | | ✓ |
| 24. | Infant Durai Raj. C | | ✓ |
| 25. | Jayalakshmi. S | | ✓ |
| 26. | Kalaiyaran. A | | |
| 27. | Mohamed Farooq. K | | ✓ |
| 28. | Mohamed Irshad Hussain. A | | ✓ |
| 29. | Mohamed Noordeen. B | | ✓ |
| 30. | Pahalavan. R | | ✓ |
| 31. | Palaniyappan-. S | | ✓ |
| 32. | Pavithra. P | | ✓ |
| 33. | Punitha. A | | ✓ |
| 34. | Sahana. M | | ✓ |
| 35. | Shabeek Ahamed. S | | |
| 36. | Terrence. E | | |
| 37. | Thiyagaraj. S | | |
| 38. | Abdul Bessam. S | | |


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| SL. NO | STUDENT NAME | <u>CP1</u> Micro wind Tool for VLSI Design | <u>CP2</u> Digital Systems Design with FPGAs and PLDs |
|--------|----------------------|--|--|
| 39. | Abinaya. K | | ✓ |
| 40. | Abinaya. T | | ✓ |
| 41. | Abirami. M | | ✓ |
| 42. | Alexander. W | | ✓ |
| 43. | Anil Kumar. S | | ✓ |
| 44. | Anitha. R | | ✓ |
| 45. | Anna Srinivasan. T.A | | |
| 46. | Arun. J | | ✓ |
| 47. | Asif Hussain. J.M | | ✓ |
| 48. | Chindhamani. K | | ✓ |
| 49. | Deepika. R | | ✓ |
| 50. | Dhivyapriya. S | | ✓ |
| 51. | Divya. S | | ✓ |
| 52. | Gunasekar. A | | ✓ |
| 53. | Hajira. M | | ✓ |
| 54. | Ibrahim Fazil. Y | | ✓ |
| 55. | Ilakiya. A | ✓ | |
| 56. | Iyswarya. S | | ✓ |
| 57. | Jaya Priya. J | | ✓ |
| 58. | Jayasri. J | | ✓ |
| 59. | Jayasudha. M | | ✓ |
| 60. | John Meshak. S | | ✓ |


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| SL. NO | STUDENT NAME | <u>CP1</u> Micro wind Tool for VLSI Design | <u>CP2</u> Digital Systems Design with FPGAs and PLDs |
|--------|-----------------------------|--|--|
| 61. | Kalavathi. M | | ✓ |
| 62. | Kanagaraj. M | | ✓ |
| 63. | Kaviya Priya. K | ✓ | |
| 64. | Keerthana. M | ✓ | |
| 65. | Kousalya. R | ✓ | |
| 66. | Kowsalya (29-10-1995). K | | ✓ |
| 67. | Kowsalya (02-04-1996). K | | ✓ |
| 68. | Lakshmi Priyadharshini. B | | ✓ |
| 69. | Mageshwari. A | | ✓ |
| 70. | Mahadir Mohamed Vaseem. J.S | | ✓ |
| 71. | Manikandan. S | | ✓ |
| 72. | Meena. J | | ✓ |
| 73. | Mehala. C | | ✓ |
| 74. | Mohamed Firas. B | | ✓ |
| 75. | Mohamed Haameem. M | | ✓ |
| 76. | Mohamed Natharsha. A | ✓ | |
| 77. | Vivek. G | ✓ | |
| 78. | Naga Venkata Ramana. S | ✓ | |
| 79. | Nagalingam. K | ✓ | |
| 80. | Nandhini. G | | ✓ |
| 81. | Padmapriya. A | | ✓ |
| 82. | Paranika. S | | ✓ |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|------------------------|---|---|
| 83. | Pavithra (16.05.96). R | | ✓ |
| 84. | Pavithra (31.05.96). R | | ✓ |
| 85. | Prema. C | | ✓ |
| 86. | Ragavi. R | | ✓ |
| 87. | Rajachidambaram. R | | ✓ |
| 88. | Ramya. C | | ✓ |
| 89. | Rojaammal. M | | ✓ |
| 90. | Sabitha. C | | ✓ |
| 91. | Sana Bakthiyar. S | | ✓ |
| 92. | Sankari. K | | ✓ |
| 93. | Sasmitha. N | | ✓ |
| 94. | Sathiya Sheela. M | | ✓ |
| 95. | Shanmugaraj. P | | ✓ |
| 96. | Sheik Aslam Khan. A | | ✓ |
| 97. | Shofiya Stella. J | | ✓ |
| 98. | Siva. R.K | | ✓ |
| 99. | Siva Lakshmi. S | | ✓ |
| 100. | Sivaranjani. P | | ✓ |
| 101. | Stephy Beula. J | | ✓ |
| 102. | Suguna. K | | ✓ |
| 103. | Sukumar. S | | ✓ |
| 104. | Tamilselvan. T | | ✓ |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|-----------------------|---|---|
| 105. | Thulasi Brindha. S | | ✓ |
| 106. | Udhayavani. U | | ✓ |
| 107. | Umamaheshwari. P | | ✓ |
| 108. | Vengadesan. M | | ✓ |
| 109. | Victoria. R | | ✓ |
| 110. | Vidhyaleela. C | | ✓ |
| 111. | Vishnu Varthan. M | | ✓ |
| 112. | Vithiya Sri. Y | | ✓ |
| 113. | Yogesh. M | | ✓ |
| 114. | Shahad Saleem. A.S | | ✓ |
| 115. | Mohamed Ibrahim. S | | ✓ |
| 116. | Mohan Raj. Y | | ✓ |
| 117. | Syed Mohamed Ashiq. M | | ✓ |
| 118. | Virat Chouhan. S | | ✓ |
| 119. | Arthi. M | ✓ | |
| 120. | Abdul Latheef. R | ✓ | |
| 121. | Akifa Nishat. A | ✓ | |
| 122. | Akshaya. S | ✓ | |
| 123. | Ameer Sheik. M | ✓ | |
| 124. | Amudha. G | ✓ | |
| 125. | Ananda Kumar. A | ✓ | |
| 126. | Anitha. K | ✓ | |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|-------------------------|---|---|
| 127. | Anushiya. P | ✓ | |
| 128. | Anusuya]. S | ✓ | |
| 129. | Aravind. R | ✓ | |
| 130. | Arul Vendhan. M | | |
| 131. | Arun Kumar. K | ✓ | |
| 132. | Aruna. J | ✓ | |
| 133. | Aruna. M | ✓ | |
| 134. | Aruna. R | ✓ | |
| 135. | Asif. G | | |
| 136. | Bala Bharathi. B | ✓ | |
| 137. | Benadict Navin Raj. A | ✓ | |
| 138. | Bhuvana. G.V | ✓ | |
| 139. | Bhuvaneshwari. B | ✓ | |
| 140. | Bhuvaneshwari. J | ✓ | |
| 141. | Dhanalakshmi. T | | |
| 142. | Dharshni Priya. S | ✓ | |
| 143. | Divya. P | ✓ | |
| 144. | Fancy Felciya. J | ✓ | |
| 145. | Gayathri. P | ✓ | |
| 146. | Gnana Micheline Ancy. J | ✓ | |
| 147. | Halithrahman. M | ✓ | |
| 148. | Hema. M | ✓ | |

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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|---------------------------|---|---|
| 149. | Jaya. C | ✓ | |
| 150. | Juhi Jahana. R | ✓ | |
| 151. | Kamalavani. G | ✓ | |
| 152. | Karthiga. M | ✓ | |
| 153. | Karthik. K | ✓ | |
| 154. | Karthika. T | | |
| 155. | Lavanya. N | ✓ | |
| 156. | Mahesh. J | ✓ | |
| 157. | Majitha. K | ✓ | |
| 158. | Meena. K | ✓ | |
| 159. | Merlin Priseela. E | ✓ | |
| 160. | Michael. A | ✓ | |
| 161. | Mohamed Noorul Yasar. M.Z | | |
| 162. | Narmatha. B | ✓ | |
| 163. | Nasima Begam. S | ✓ | |
| 164. | Nazeerahamed. H | ✓ | |
| 165. | Neelakandan. T | ✓ | |
| 166. | Nivetha Princy. P | ✓ | |
| 167. | Priya. K | | |
| 168. | Priyanga. P | ✓ | |
| 169. | Priyanka. G | ✓ | |
| 170. | Raajsree. S.R | ✓ | |

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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|-------------------|---|---|
| 171. | Raagavendar. B | ✓ | |
| 172. | Rajarajeshwari. N | ✓ | |
| 173. | Rajeshwari. S | ✓ | |
| 174. | Ramadevi. S | ✓ | |
| 175. | Renuga Devi. S | ✓ | |
| 176. | Salman Khan. R | ✓ | |
| 177. | Santhiya. B | | |
| 178. | Saranraju. K | ✓ | |
| 179. | Shanmuga Priya. S | ✓ | |
| 180. | Solai. R | ✓ | |
| 181. | Steffi. X | ✓ | |
| 182. | Subasri. P | | |
| 183. | Sudhakar. P | ✓ | |
| 184. | Sumithra. SP | ✓ | |
| 185. | Sunafir Banu. S | ✓ | |
| 186. | Syed Basith. S | ✓ | |
| 187. | Syed Sulaiman. N | ✓ | |
| 188. | Thansira. S | ✓ | |
| 189. | Udhayaraj. K | ✓ | |
| 190. | Venkatesan. K | ✓ | |
| 191. | Vignesh. B | ✓ | |
| 192. | Vignesh. B | ✓ | |


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| SL. NO | STUDENT NAME | CP1 Micro wind Tool for VLSI Design | CP2 Digital Systems Design with FPGAs and PLDs |
|--------|----------------------|---|---|
| 193. | Vigneshwaran. M | | |
| 194. | Vigneshwari. M | ✓ | |
| 195. | Vimalan. D | ✓ | |
| 196. | Vinoth. M | ✓ | |
| 197. | Vinothini. T | ✓ | |
| 198. | Yasmeen Banu. S | ✓ | |
| 199. | Yogaraj. S | ✓ | |
| 200. | Akasten Raj. L | ✓ | |
| 201. | Arockia Ilakkia. A | | |
| 202. | Chitrarasu. K | ✓ | |
| 203. | Divakar. A | ✓ | |
| 204. | Eswari. N | ✓ | |
| 205. | George Joel. M | | |
| 206. | Harun Raseed. M | | |
| 207. | Janani. S | | |
| 208. | Karthi. V | | |
| 209. | Kavitha. C | | |
| 210. | Manivannan. M | | |
| 211. | Mohamed Ashick. P | ✓ | |
| 212. | Mohamed Farees. N | | |
| 213. | Mohamed Thaslim. M.R | | |
| 214. | Nanthini. M | | |


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| SL. NO | STUDENT NAME | <u>CP1</u> Micro wind Tool for VLSI Design | <u>CP2</u> Digital Systems Design with FPGAs and PLDs |
|--------|---------------|--|--|
| 215. | Surya. S | | |
| 216. | Vigneswari. M | | |

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T. *[Signature]*
[Signature]

Course Coordinator

[Signature]
HoD/ECE

[Signature]
Principal

hon

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[Signature]
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Ph: 0431 - 2660 303

| | |
|---|---|
| Title of the program | Digital Systems Design with FPGAs and PLDs |
| Course Code | EC15162 |
| Duration and timing of the program | 34 Hrs, 09.30AM - 05.00PM |
| Name of the resource person | Mr. K.Javid AP/ECE |
| Photo of the resource person |  |
| Email address | Javid1974@gmail.com |
| Contact number | 9443448800 |
| Designation | Assistant Professor |
| Educational qualification | <ul style="list-style-type: none">➤ B.E -Electronics and Communication Engineering, 2002 National Institute of Technology Tiruchirappalli, with 52&➤ M.E -VLSI Design 2012 M.I.E.T Engineering College, with 8.01 CGPA |
| Experience | <ul style="list-style-type: none">➤ Teaching Experience - 13 Years |

K. Javid
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Website: - www.miet.edu

Ph: 0431 - 2660 300

Resource Person Details

| | |
|------------------------------------|--|
| Title of the program | Digital Systems Design with FPGAs and PLDs |
| Course Code | EC15162 |
| Duration and timing of the program | 34 Hrs, 09.30AM - 05.00PM |
| Name of the resource person | Ms.T.Nithya AP/ECE |
| Photo of the resource person |  |
| Email address | tnithya806@gmail.com |
| Contact number | 9500675380 |
| Designation | Assistant Professor |
| Educational qualification | <ul style="list-style-type: none">➤ B.E -Electronics and Communication Engineering 2001 in Sudharsan Engineering College (Anna University), Chennai, Tamil Nadu, with 83.6%.➤ M.E -Communication System 2013 in J.J College of Engineering and Technology affiliated to Anna University Chennai with CGPA 84.7% |
| Experience | <ul style="list-style-type: none">➤ Teaching Experience - 1 year |


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 Website: - www.miet.edu

Ph: 0431 - 2660 303

Certificate Program (II Year/IV Semester and III Year/VI Semester) Attendance Sheet

Name of the course: Digital Systems Design with FPGAs and PLDs
 Course code: EC15162
 Course coordinator: Ms.T.Nithya AP/ECE & Mr. K.Javid APECE
 Academic Year: 2015-16

| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|--------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 1. | E1144002 | Ayesha Siddiqah. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 2. | E1144003 | Deepthi. D | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 3. | E1144004 | Karkuzhali. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 4. | E1144005 | Mahabupparveen. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 5. | E1144007 | Mohamed Rifai. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 6. | E1144008 | Mohamed Yasar Arafath. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 7. | E1144009 | Mohamed Rabeek. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 8. | E1144010 | Monisha. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 9. | E1144011 | Monisha Juliet. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 10. | E1144014 | Ramba. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 11. | E1144015 | Rojini Preetha. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 12. | E1144016 | Sabeena Begam. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

A. Javid
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| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|---------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 13. | E1144018 | Sriram. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 14. | E1144022 | Vinodhini. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 15. | E2154023 | Ajith. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 16. | E2154025 | Fathima Begum. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 17. | E2154026 | Imran. F | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 18. | E2154027 | Infant Durai Raj. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 19. | E2154028 | Jayalakshmi. S | / | / | / | / | / | / | / | / | / | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 |
| 20. | E2154030 | Mohamed Farooq. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 21. | E2154031 | Mohamed Irshad Hussain. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 22. | E2154032 | Mohamed Noordeen. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 23. | E2154033 | Pahalavan. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 24. | E2154034 | Palaniyappan. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 25. | E2154035 | Pavithra. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | 9 |
| 26. | E2154036 | Punitha. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 27. | E2154037 | Sahana. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 28. | E1134002 | Abinaya. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 29. | E1134003 | Abinaya. T | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 30. | E1134004 | Abirami. M | / | / | / | / | / | / | / | / | / | / | / | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 |

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M.I.E.T. ENGINEERING COLLEGE
GUNDUR, TRUCHIRAPPALLI-620 007.

| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|-------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 31. | E1134006 | Alexander. W | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 32. | E1134007 | Anil Kumar. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 33. | E1134008 | Anitha. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 34. | E1134010 | Arun. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 35. | E1134011 | Asif Hussain. J.M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 36. | E1134012 | Chindhamani. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 37. | E1134013 | Deepika. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 38. | E1134014 | Dhivyapriya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 39. | E1134015 | Divya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 40. | E1134016 | Gunasekar. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 41. | E1134017 | Hajira. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 42. | E1134018 | Ibrahim Fazil. Y | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 43. | E1134020 | Iyswarya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 44. | E1134021 | Jaya Priya. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 45. | E1134022 | Jayasri. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 46. | E1134023 | Jayasudha. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 47. | E1134024 | John Meshak. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 48. | E1134025 | Kalavathi. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |


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 GUNDUR, TIRUCHIRAPPALLI-620 007.

| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|-----------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 49. | E1134026 | Kanagaraj. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 50. | E1134030 | Kowsalya (29-10-1995). K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 51. | E1134031 | Kowsalya (02-04-1996). K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 52. | E1134032 | Lakshmi Priyadharshini. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 53. | E1134033 | Mageshwari. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 54. | E1134034 | Mahadir Mohamed Vaseem. J.S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 55. | E1134035 | Manikandan. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 56. | E1134036 | Meena. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 57. | E1134037 | Mehala. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 58. | E1134038 | Mohamed Firmas. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 59. | E1134039 | Mohamed Haameem. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 60. | E1134043 | Nandhini. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 61. | E1134044 | Padmapriya. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 62. | E1134045 | Paranika. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 63. | E1134046 | Pavithra (16.05.96). R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 64. | E1134047 | Pavithra (31.05.96). R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 65. | E1134048 | Prema. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 66. | E1134049 | Ragavi. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |


PRINCIPAL
 M.I.E.T. ENGINEERING COLLEGE
 GUNGUR, TIRUCHIRAPPALLI-620 007.

| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|-------|----------|---------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
| 67. | E1134050 | Rajachidambaram. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 68. | E1134051 | Ramya. C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 69. | E1134052 | Rojaammal. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 70. | E1134053 | Sabitha. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 71. | E1134054 | Sana Bakthiyar. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 72. | E1134055 | Sankari. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 73. | E1134056 | Sasmitha. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 74. | E1134057 | Sathiya Sheela. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 75. | E1134061 | Shanmugaraj. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 76. | E1134062 | Sheik Aslam Khan. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 77. | E1134063 | Shoffiya Stella. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 78. | E1134064 | Siva. R.K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 79. | E1134065 | Siva Lakshmi. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 80. | E1134066 | Sivaranjani. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 81. | E1134067 | Stephy Beula. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 82. | E1134068 | Suguna. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 83. | E1134069 | Sukumar. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 84. | E1134070 | Tamilselvan. T | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 18 | 20 |
|------------------------------|----------|-----------------------|-------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 85. | E1134071 | Thulasi Brindha. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 86. | E1134072 | Udhayavani. U | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 87. | E1134073 | Umamaheshwari. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 88. | E1134074 | Vengadesan. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 89. | E1134075 | Victoria. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 90. | E1134076 | Vidhyaleela. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 91. | E1134077 | Vishnu Varthan. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 92. | E1134078 | Vithiya Sri. Y | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 93. | E1134079 | Yogesh. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 94. | E2134085 | Shahad Saleem. A.S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 95. | E2134080 | Mohamed Ibrahim. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 96. | E2134081 | Mohan Raj. Y | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 97. | E2134082 | Syed Mohamed Ashiq. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 98. | E2134083 | Virat Chouhan. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| Total No Students Presents | | | 85 | 80 | 78 | 84 | 70 | 91 | 88 | 89 | 91 | 75 | 78 | 81 | 82 | 91 | 89 | 88 | 82 | 81 | 80 | |
| Total No Students Absent | | | 13 | 18 | 20 | 14 | 28 | 8 | 2 | 10 | 09 | 07 | 23 | 20 | 19 | 16 | 7 | 9 | 10 | 16 | 17 | 18 |
| Signature Course Coordinator | | | [Signature] | | | | | | | | | | | | | | | | | | | |

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PRINCIPAL
M.I.E.T. ENGINEERING COLLEGE
GUNDUR, TIRUCHIRAPPALLI-620 007.

| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|--------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| | E1144002 | Ayesha Siddiqah. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 2. | E1144003 | Deepthi. D | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 3. | E1144004 | Karkuzhali. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 4. | E1144005 | Mahabupparveen. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 5. | E1144007 | Mohamed Rifai. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 6. | E1144008 | Mohamed Yasar Arafath. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 7. | E1144009 | Mohamed Rabeek. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 8. | E1144010 | Monisha. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 9. | E1144011 | Monisha Juliet. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 10. | E1144014 | Ramba. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 11. | E1144015 | Rojini Preetha. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 12. | E1144016 | Sabeena Begam. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 13. | E1144018 | Sriram. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |


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 GUNDUR, TIRUCHIRAPPALLI-620 007.

| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|---------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 14. | E1144022 | Vinodhini. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 15. | E2154023 | Ajith. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 16. | E2154025 | Fathima Begum. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 17. | E2154026 | Imran. F | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 18. | E2154027 | Infant Durai Raj. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 19. | E2154028 | Jayalakshmi. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 20. | E2154030 | Mohamed Farooq. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 21. | E2154031 | Mohamed Irshad Hussain. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 22. | E2154032 | Mohamed Noordeen. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 23. | E2154033 | Pahalavan. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 24. | E2154034 | Palaniyappan-. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 25. | E2154035 | Pavithra. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 26. | E2154036 | Punitha. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 27. | E2154037 | Sahana. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 28. | E1134002 | Abinaya. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 29. | E1134003 | Abinaya. T | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 30. | E1134004 | Abirami. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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 GUNDUR, THIRUCHIRAPPALLI-620 007.

| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|-------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 31. | E1134006 | Alexander. W | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 32. | E1134007 | Anil Kumar. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 33. | E1134008 | Anitha. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 34. | E1134010 | Arun. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 35. | E1134011 | Asif Hussain. J.M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 36. | E1134012 | Chindhamani. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 37. | E1134013 | Deepika. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 38. | E1134014 | Dhivyapriya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 39. | E1134015 | Divya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 40. | E1134016 | Gunasekar. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 41. | E1134017 | Hajira. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 42. | E1134018 | Ibrahim Fazil. Y | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 43. | E1134020 | Iyswarya. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 44. | E1134021 | Jaya Priya. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 45. | E1134022 | Jayasri. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 46. | E1134023 | Jayasudha. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 47. | E1134024 | John Meshak. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 48. | E1134025 | Kalavathi. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

A. A. J.

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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|--------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 49. | E1134026 | Kanagaraj. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 50. | E1134030 | Kowsalya (29-10-1995). K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 51. | E1134031 | Kowsalya (02-04-1996). K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 52. | E1134032 | Lakshmi Priyadharshini. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 53. | E1134033 | Mageshwari. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 54. | E1134034 | Mahadir Mohamed Vaseem. J.S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 55. | E1134035 | Manikandan. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 56. | E1134036 | Meena. J | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 57. | E1134037 | Mehala. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 58. | E1134038 | Mohamed Fimas. B | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 59. | E1134039 | Mohamed Haameem. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 60. | E1134043 | Nandhini. G | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 61. | E1134044 | Padmapriya. A | / | / | / | / | / | / | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| 62. | E1134045 | Paranika. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 63. | E1134046 | Pavithra (16.05.96). R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 64. | E1134047 | Pavithra (31.05.96). R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 65. | E1134048 | Prema. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 66. | E1134049 | Ragavi. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 67. | E1134050 | Rajachidambaram. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 68. | E1134051 | Ramya. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 69. | E1134052 | Rojaammal. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 70. | E1134053 | Sabitha. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 71. | E1134054 | Sana Bakthiyar. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 72. | E1134055 | Sankari. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 73. | E1134056 | Sasmitha. N | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 74. | E1134057 | Sathiya Sheela. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 75. | E1134061 | Shanmugaraj. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 76. | E1134062 | Sheik Aslam Khan. A | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 77. | E1134063 | Shofiya Stella. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 78. | E1134064 | Siva. R.K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 79. | E1134065 | Siva Lakshmi. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 80. | E1134066 | Sivaranjani. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 81. | E1134067 | Stephy Beula. J | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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| SL.NO | ROLL NO | STUDENT NAME | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
|-------|----------|-----------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 82. | E1134068 | Suguna. K | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 83. | E1134069 | Sukumar. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 84. | E1134070 | Tamilselvan. T | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 85. | E1134071 | Thulasi Brindha. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 86. | E1134072 | Udhayavani. U | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 87. | E1134073 | Umamaheshwari. P | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 88. | E1134074 | Vengadesan. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 89. | E1134075 | Victoria. R | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 90. | E1134076 | Vidhyaleela. C | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 91. | E1134077 | Vishnu Varthan. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 92. | E1134078 | Vithiya Sri. Y | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 93. | E1134079 | Yogesh. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 94. | E2134085 | Shahad Saleem. A.S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 95. | E2134080 | Mohamed Ibrahim. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 96. | E2134081 | Mohan Raj. Y | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 97. | E2134082 | Syed Mohamed Ashiq. M | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |
| 98. | E2134083 | Virat Chouhan. S | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / | / |

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|-------|---------|------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | | Total No Students Presents | 82 | 92 | 94 | 97 | 98 | 99 | 99 | 97 | 92 | 92 | 91 | 97 | 91 | 90 | 87 | 84 | 82 |
| | | Total No Students Absent | 2 | 2 | 2 | 1 | 1 | 3 | 3 | 5 | 6 | 6 | 7 | 5 | 7 | 8 | 11 | 12 | 12 |
| | | Signature Course Coordinator | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> | <i>[Signature]</i> |

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Certificate Program Assessment Test

Name of the course: Digital Systems Design with FPGAs and PLDs

Date: 31.12.2015

Course Code: EC15162

Time: 01:30

hrs

Academic Year: 2015-16

1. The inputs in the PLD is given through _____
 - a) NAND gates
 - b) OR gates
 - c) NOR gates
 - d) AND gates
2. PAL refers to _____
 - a) Programmable Array Loaded
 - b) Programmable Logic Array
 - c) Programmable Array Logic
 - d) Programmable AND Logic
3. Outputs of the AND gate in PLD is known as _____
 - a) Input lines
 - b) Output lines
 - c) Strobe lines
 - d) Control lines
4. PLA contains _____
 - a) AND and OR arrays
 - b) NAND and OR arrays
 - c) NOT and AND arrays
 - d) NOR and OR arrays

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5. PLA is used to implement _____
- a) A complex sequential circuit
 - b) A simple sequential circuit
 - c) A complex combinational circuit
 - d) A simple combinational circuit
6. A PLA is similar to a ROM in concept except that _____
- a) It hasn't capability to read only
 - b) It hasn't capability to read or write operation
 - c) It doesn't provide full decoding to the variables
 - d) It hasn't capability to write only
7. For programmable logic functions, which type of PLD should be used?
- a) PLA
 - b) PAL
 - c) CPLD
 - d) SLD
8. The complex programmable logic device contains several PLD blocks and _____
- a) A language compiler
 - b) AND/OR arrays
 - c) Global interconnection matrix
 - d) Field-programmable switches
9. Which type of device FPGA are?
- a) SLD
 - b) SRAM
 - c) EPROM
 - d) PLD
10. The difference between a PAL & a PLA is _____
- a) PALs and PLAs are the same thing
 - b) The PLA has a programmable OR plane and a programmable AND plane, while the PAL only has a programmable AND plane
 - c) The PAL has a programmable OR plane and a programmable AND plane, while the

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PLA only has a programmable AND plane

d) The PAL has more possible product terms than the PLA

11. If a PAL has been programmed once _____

- a) Its logic capacity is lost
- b) Its outputs are only active HIGH
- c) Its outputs are only active LOW
- d) It cannot be reprogrammed

12. The FPGA refers to _____

- a) First programmable Gate Array
- b) Field Programmable Gate Array
- c) First Program Gate Array
- d) Field Program Gate Array

13. The full form of VLSI is _____

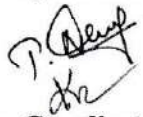
- a) Very Long Single Integration
- b) Very Least Scale Integration
- c) Very Large Scale Integration
- d) Very Long Scale Integration

14. In FPGA, vertical and horizontal directions are separated by _____

- a) A line
- b) A channel
- c) A strobe
- d) A flip-flop

15. Applications of PLAs are _____

- a) Registered PALs
- b) Configurable PALs
- c) PAL programming
- d) All of the Mentioned


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Report

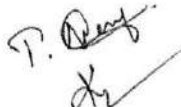
Name of the course: Digital Systems Design with FPGAs and PLDs
Course Code: EC15162
Course Coordinator: Ms.T.Nithya AP/ECE & Mr. K.Javid AP/ECE
Total Hours: 34


Academic Years: 2015-16


I hereby affirm that the entire course contents listed in the course syllabus of the certificate program "**Digital Systems Design with FPGAs and PLDs**" have educated to the students as the part of the prescribed co - curricular activities through Certificate Program.


Students can Design and analyze combinational, sequential and arithmetic circuits and had knowledge in Understanding digital system design flow, timing, synthesis and FPGA implementation issues.

I confirmed that the certificate program titled as "**Digital Systems Design with FPGAs and PLDs**" has been conducted in the beginning of the semester and course delivery along with attendance of the students was recorded. I confirmed that all the students were actively attended this certificate Program and performed well throughout the program and eligible students received the certificate.


Course Coordinator


HoD/ECE
hor


Principal
sw


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Course Completion Certificate

15.06.15

This is to Certify that Mr/Ms. M. Suleef Mohamed Askiy
of M ECE has Completed the Course on

Digital System Design with FPGA from 21.12.2015 to 20.12.2015
and PCB

[Signature]

Course Coordinator

[Signature]

HOD

[Signature]

Principal

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Course Completion Certificate

15/11/16

This is to Certify that Mr/Ms. H. Yogesh
of M ETE has Completed the Course on

Digital System Design using pspice from 21.12.2015 to 20.12.2015
and PCD

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Course Coordinator

[Signature]
Hod

[Signature] Principal
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