

1.3.2 Details of value-added courses for imparting transferable and life skills offered during the year  
 1.3.3 Number of students enrolled in the courses under 1.3.2

Name of the value-added courses (with 30 or more contact hours) offered	Course Code, if any	No. of times offered during the year	Duration of course (in hours)	Number of students enrolled during the year	1.3.3 Number of students who completed the course during the year
Design and implementation of digital circuits using verilog	ECEVA001	1	42	104	104
Embedded programming and IoT applications with energia IDE Tool	ECEVA002	1	42	106	106



*H. Kumar*

HEAD OF THE DEPARTMENT  
 Electronics And Communication Engineering  
 Excel Engineering College  
 Komurapalayam - 637 303.

1.3.3 Number of students enrolled in the courses under 1.3.2

Target = 80% of total strength  
Total Number of Students :244

Name of the value-added courses (with 30 or more contact hours) offered	Course Code, if any	No. of times offered during the year	Duration of course (in hours)	Number of students enrolled during the year	1.3.3 Number of students who completed the course during the year
Design and implementation of digital circuits using verilog	ECEVA001	1	42	104	104
Embedded programming and IoT applications with energia IDE Tool	ECEVA002	1	42	106	106



*K. Anni*  
HEAD OF THE DEPARTMENT  
Electronics And Communication Engineering  
Excel Engineering College  
Kumarapalayam - 637 303.



# EXCEL ENGINEERING COLLEGE (Autonomous)

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KOMARAPALAYAM - 637303

vc  
Sir, → Finally they agreed for 1,50,000.  
→ Students pay the amount  
may be permitted  
18/01/23

## PERMISSION LETTER

From

S.Theivanayaki,  
Assistant Professor/ECE,  
Excel Engineering College (Autonomous),  
Komarapalayam.

To

The Principal,  
Excel Engineering College (Autonomous),  
Komarapalayam.

Academics  
Dept. (Administrative)  
Permitted.  
→ Fee 1200/- and are there  
to proceed. This includes  
→ course material etc

Date: 02.01.2023  
Place: Komarapalayam

Maybe Consider if  
fund to ED  
10/01/23

Good Company  
Tessolve Semiconductor

Respected Sir,

Sub: Seeking permission to conduct the "Value added course" - Reg.,

We would like to bring to your kind notice that we have planned to conduct two "Value added course (1.VLSI Design, 2.Embedded and IoT)" from 23.01.2023 to 28.01.2023 with the help of Tessolve Semiconductor PVT LTD, Bangalore for our third and final year students. I have enclosed the syllabus and students name list. In this connection, we seek your kind permission to conduct the function in an effective manner.

1. VLSI stream - Title: Design and Implementation of digital circuits  
ECEVA001

Thanking you,

Yours Faithfully,

2. Embedded and IoT stream - Title: Embedded programming and IoT applications  
ECEVA002

With Energian IDE Tool.  
21/1/23  
HOD/ECE

21/01/23  
Dear Sir,

\* Tessolve Semiconductor willing to handle and work  
Value added course for placement and internship.

\* They are willing to conduct programming in PIC MC (8051/8086)  
one credit course for free of cost.

10/12/22, 2:17 PM

Excel Group of Institutions Mail - Value Added Training Program - Tessolve Semiconductor PVT LTD, Bangalore



placement excel <placement@excelcolleges.com>

## Value Added Training Program - Tessolve Semiconductor PVT LTD, Bangalore

Sivakumar Krishnamoorthy <sivakumar.krishnamoorthy@tessolve.com>  
To: "tamilarasinachimuthu@gmail.com" <tamilarasinachimuthu@gmail.com>  
Cc: "placement@excelcolleges.com" <placement@excelcolleges.com>

Wed, Oct 12, 2022 at 1:34 PM

Hello Mam

Greetings From Tessolve semiconductor Pvt. Ltd.

As Discussed, We are planning to Conduct Continuing Education Program for III Year & IV Year 2023,24 Batch students. This course is mainly focused on Industry expectation in Semiconductor areas. The Advantage of this program is understanding the core electronics field - Job Opportunities, Project exposure, Tessolve Value based Certificates.

### VLSI Design: 2 Credit

Total No of Hrs: 42 Hrs

Eligible: BE - III Year 2023 Batch, IV Year 2022 Batch - ECE, EEE

Tessolve Softcopy Certificate and Materials will be provided

Offline [Theory & Practical] - Chargeable - Rs. 1500 incl GST

② May be explored. Details further and submit

### Embedded & IOT Programming: 2 Credit

Total No of Hrs: 42 Hrs

Eligible: BE - III Year 2023 Batch, IV Year 2022 Batch - CSE, ECE, EEE, Bio-Med

Tessolve Softcopy Certificate and Materials will be provided

Offline [Theory & Practical] - Chargeable - Rs. 1500 incl GST

The last day Assessment will be conducted, Based on performance the top students will be getting 1 Month work project internship.

Please find the company Brochure and Course details

Thank you.

Regards

Mr. Sivakumar K

Senior Manager

Tessolve Semiconductor Pvt. Ltd

Email: [sivakumar.krishnamoorthy@tessolve.com](mailto:sivakumar.krishnamoorthy@tessolve.com)

<http://www.tessolve.com>

### Commitment

\*

10% of registered will be placed in core industries  
Package: TL+

### Disclaimer

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# TESSOLVE

## VLSI Course Content and Schedule

<p><b>Introduction to VLSI:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>* VLSI Design Flow</li> <li>* Types of VLSI / ASIC</li> <li>* CMOS concepts</li> <li>* Advanced Technologies</li> <li>* Various fields and scope of VLSI</li> </ul>	<p><b>Digital Design:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>* Combinational and sequential circuit design</li> <li>* Advanced Concepts</li> <li>* Timing parameters</li> </ul>	<p><b>Digital Design:</b> [Exercises &amp; Discussion]</p> <ul style="list-style-type: none"> <li>* Based on the concept learn</li> </ul>
<p><b>Verilog:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>* Concepts in Verilog</li> <li>* Different types of modeling</li> <li>* Operators</li> <li>* Port mapping</li> <li>* Timing control</li> <li>* Task and Functions</li> </ul>	<p><b>Verilog:</b> [Exercise &amp; Lab]</p> <ul style="list-style-type: none"> <li>* Design and implementing combinational circuits in different levels of abstraction</li> <li>* Writing Testbench</li> </ul>	<p><b>Verilog:</b> [Exercise &amp; Lab]</p> <ul style="list-style-type: none"> <li>* Design and implementing sequential circuits</li> <li>* Design and implementing FSM and Sequence detector</li> <li>* Develop testbench</li> </ul>
<p><b>System Verilog:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>* Basics of System verilog</li> <li>* Need and Introduction</li> <li>* SV Test bench architecture</li> <li>* Features</li> </ul>	<p><b>System Verilog:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>* Data types</li> <li>* Arrays and structure</li> <li>* Scheduler</li> <li>* Program Control</li> <li>* Dynamic process</li> <li>* Interprocess synch. &amp; communication</li> </ul>	<p><b>System Verilog :</b> [Exercise &amp; Lab]</p> <ul style="list-style-type: none"> <li>* Based on the concept learn</li> </ul>

# TESSOLVE

## VLSI Course Content and Schedule

<p><b>Introduction to VLSI:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>• VLSI Design Flow</li> <li>• Types of VLSI / ASIC</li> <li>• CMOS concepts</li> <li>• Advanced Technologies</li> <li>• Various fields and scope of VLSI</li> </ul>	<p><b>Digital Design:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>• Combinational and sequential circuit design</li> <li>• Advanced Concepts</li> <li>• Timing parameters</li> </ul>	<p><b>Digital Design:</b> [Exercises &amp; Discussion]</p> <ul style="list-style-type: none"> <li>• Based on the concept learn</li> </ul>
<p><b>Verilog:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>• Concepts in Verilog</li> <li>• Different types of modeling</li> <li>• Operators</li> <li>• Port mapping</li> <li>• Timing control</li> <li>• Task and Functions</li> </ul>	<p><b>Verilog:</b> [Exercise &amp; Lab]</p> <ul style="list-style-type: none"> <li>• Design and implementing combinational circuits in different levels of abstraction</li> <li>• Writing Testbench</li> </ul>	<p><b>Verilog:</b> [Exercise &amp; Lab]</p> <ul style="list-style-type: none"> <li>• Design and implementing sequential circuits</li> <li>• Design and implementing FSM and Sequence detector</li> <li>• Develop testbench</li> </ul>
<p><b>System Verilog:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>• Basics of System verilog</li> <li>• Need and Introduction</li> <li>• SV Test bench architecture</li> <li>• Features</li> </ul>	<p><b>System Verilog:</b> [Teaching &amp; Discussion]</p> <ul style="list-style-type: none"> <li>• Data types</li> <li>• Arrays and structure</li> <li>• Scheduler</li> <li>• Program Control</li> <li>• Dynamic process</li> <li>• Interprocess synch. &amp; communication</li> </ul>	<p><b>System Verilog: [Exercise &amp; Lab]</b></p> <ul style="list-style-type: none"> <li>• Based on the concept learn</li> </ul>

<b>System Verilog:</b> [Teaching & Discussion] <ul style="list-style-type: none"> <li>• Classes and OOP concepts</li> <li>• Interface</li> <li>• Constraint and randomization</li> </ul>	<b>System Verilog:</b> [Teaching & Discussion] <ul style="list-style-type: none"> <li>• Coverage</li> <li>• Assertions</li> </ul>	<b>System Verilog :</b> [Exercise & Lab] <ul style="list-style-type: none"> <li>• Based on the concept learn</li> </ul>
<b>System Verilog:</b> [Teaching & Discussion] <ul style="list-style-type: none"> <li>• Developing testbench components with an example</li> </ul>	<b>UVM Basics:</b> [Teaching & Discussion] <ul style="list-style-type: none"> <li>• Introduction and needs</li> <li>• Features</li> <li>• Testbench architecture and hierarchy</li> </ul>	<b>System Verilog :</b> [Exercise & Lab] <ul style="list-style-type: none"> <li>• Mini-project: Developing testbench to verify FIFO</li> </ul>



# TESSOLVE

^ Hero Electronix Venture

## Embedded IOT Course Content and Schedule

SI NO	Topic	Type	Content
1	Introduction to Embedded Application	L	Embedded System basics, processor architecture, applications.
2	Introduction to Energia IDE	L	Energia IDE Introduction and explore
3	Tools	L	C Compiler Installation, Privileges, Compilation process
4	Embedded C	L	Embedded C basics, Project creation and verification of compiler, simulator functionalities.
5	I/O Port Output Interface	L / H	I/O port basics-output, application and exercise
6	Serial Monitor Interface	L / H	Serial Monitor - output, application and exercise
7	ADC Interfacing	L	ADC & Comparator basics, requirement, Configurations, Exercise
8	Sensor Interface	L / H	Sensor Interface with Task Execution
9	Peripheral - I/O Port LED Interface	L / H	I/O port basics, configuration - output, application and exercise
10	Peripheral - I/O Port, Keypad Interface	L / H	Configuration - output, application and exercise



11	Peripheral –I/O Port LCD	L / H	Basics of LCD interface, 4 bit and 3 bit modes of operation, Exercise – 8 bit Mode
12	Peripheral – Timer	L / H	Interrupts, Basics of Timer, Internals and hardware configurations of Timer, Modes, Exercise
13	Peripheral – ADC, Comparator	L	ADC & Comparator basics, requirement, Configurations, Exercise
14	Peripheral – UART	L / H	Basics of Serial communication, configuration, Transmission and Reception, Exercise
15	Peripheral – SPI, I2C	L	Basics of SPI and I2C, configuration, RTC interface, Exercise
16	RTOS	L	Real Time Task on Embedded systems
17	IoT-Introduction	L	Overview of IoT and its roadmap, Opportunities
18	IoT- Thingspeak Login	L / H	Creation of Thingspeak page and Exercise on web server with different web pages to control the Hardware.
19	IoT-Upload ThingSpeak	L / H	Getting connected with Thingspeak Cloud platform and sending sensor information.
20	IoT-Data Acquisition	L / H	Sensor data acquisition using Thingspeak server.
21	Project	H	Real Time Task on IoT Platform and Mini Project
22	Discussion	L	Discussion about Placement interview question

## Dr.S.MADHAVAPANDIAN

Design Lead,

Tessolve Semiconductor Pvt. Ltd.

Mobile: +91 – 99444 74026

Email Id: madhavapandian.sankarapandian@tessolve.com.



### ACADEMIC CHRONICLE

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- Completed Ph.D. in Electrical Engineering from Anna University, Chennai
- Completed Master of Engineering in Embedded System Technologies from Raja College of Engineering & Technology, Madurai
- Completed Bachelor of Engineering in Electronics and Communication Engineering

### EXPERISE IN TECHNOLOGIES

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- Embedded Systems using
  - 8051
  - PIC Microcontrollers
  - MSP430
  - CC3200
  - ARM Processors
  - Arduino
  - Raspberry PI
- IOT
- Machine Learning
- Artificial Intelligence

### WORK EXPERIENCE

---

More than 12 years

### PROFESSIONAL MEMBERSHIP

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- Senior Member of *IEEE* (Member No: 80573367) for 12 years.
- Member in *IEEE Young Professional Affinity Group*.
- Life Member in *ISTE* (Member No.84602).
- IAENG (Membership number:172003).

### JOURNALS/PAPERS PUBLISHED

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- Published more than 10 paper in reputed journals and Conferences

## Nepolean Mani

RTL Design Engineer, Tessolve Semiconductor - Bangalore. Ph: +91-9677427218

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### Experience **RTL Design Engineer / Trainer**

4/2022

- Working with Serial Protocol design team.
- Training and co-ordinating Students for client role.
- Providing project guidance for Internship students and handling training sessions.

11/2020

- Working with USB Verification team.
- Work with DFT team to develop test cases and debug for SOC-IOPad.
- Usage of EDA tools, including simulators (Questa, Modelsim), synthesis tools.
- Familiar with Altera FPGA placement.
- Trained and guided DV Engineering Students for client role.

03/2020

- Communicate and work with team members across multiple disciplines
- Develop detailed design specifications
- Developing serial protocol RTL code using Verilog for various interfaces.
- Worked in AHB to USB 2.0 protocol, AHB to External Memory interface and developed LINT check design.

### Education

- M.E. Applied Electronics at K.S. Rangasamy College of Technology - Tiruchengode (2014-16)
- B.E. ECE in Anna University - Trichy (BIT-Campus) (2011-14).
- Diploma in ECE at Muthayammal Polytechnic College - Rasipuram (2008-11).

### Skills

- Skilled in developing a design specification document and establish planned and organized work.
- Able to work independently and in a team environment effectively and has interpersonal skills.
- Good understanding of digital design and implementation.
- Immense ability in developing Synthesizable RTL design and take through LINT and CDC checks.
- Hands on expertise in RTL coding, FSM based design, Simulation and Synthesis of design.
- Knowledge on how to use EDA tools (Questa sim, Cadence (Jaspergold), Vivado, Intel Quartus).



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KOMARAPALAYAM - 637303

### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### Course Objective and Course Outcome

##### ECEVA001 - Design and Implementation of Digital circuits using Verilog

##### Course Objectives :

The course is intended to

- 1 Acquire the knowledge about CMOS basics.
- 2 Study the concept of combinational and sequential circuit design.
- 3 Expose the combinational and sequential circuit design using Verilog.

##### Course Outcomes:

CO.No. Course Outcome

- |     |  |
|-----|--|
| CO1 | Explain the working principles of CMOS and Verilog concepts.   |
| CO2 | Design the various combinational circuit design using Verilog. |
| CO3 | Analyze the implementation of FSM and Sequential detector.     |

##### Bloom's Level

Understand

Apply

Apply

**ECEVA002 - Embedded Programming and IoT applications with Energia IDE Tool****Course Objectives :**

The course is intended to

- 1 Acquire the knowledge about Energia IDE.
- 2 Learn the concept of Embedded C and Thingspeak.
- 3 Expose the interfacing of various peripheral.

**Course Outcomes:**

CO.No.	Course Outcome	Bloom's Level
CO1	Explain the Energia IDE and Compilation process.	Understand
CO2	Design the interfacing of various peripherals.	Apply
CO3	Analyze the sensor information using Thingspeak cloud platform.	Apply

  
Staff Coordinator

  
HOD



**EXCEL ENGINEERING COLLEGE**  
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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**Circular**

Our Department is planned to conduct two "Value Added Courses titled as Design and Implementation of Digital circuits using Verilog, Embedded Programming and IoT applications with Energia IDE Tool" from 23.01.2023 to 28.01.2023 in MB 207 - Signal processing Laboratory and Kandhasamy hall for students. We request the students for the kind co-operation to conduct the event in an effective manner. On behalf of our Department, all the students and faculties are invited.

Staff Coordinator

HOD

To

1. Department Notice Board

Copy To,

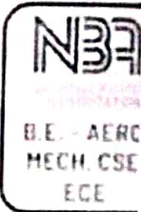
1. Circulated to all faculty members
2. File



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Recognized by UGC (21 & 12B)



Date  
23 to 28 Jan'23  
Time  
09.30am  
to  
4.30pm

Department of  
Electronics and Communication  
Engineering in association with Tessolve  
Semiconductor Technologies along with  
IoT Club

Organizing  
a  
Value Added Course

Title : Embedded Programming and  
IoT

Applications with Energia  
IDE Tool

Ms S Theivanayaki  
Mr M Ramesh  
Program Coordinators

Dr K Tamilarasi  
Department Coordinator





# Excël ENGINEERING COLLEGE (AUTONOMOUS)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai  
Accredited by NBA (AERO, MECH, CSE & ECE) NAAC (A+ Grade - 3.26)  
Recognized by UGC (21 & 12B)



**Date**  
23 to 28 Jan '23  
**Time**  
09.30am  
to  
4.40pm

**Department of  
Electronics and  
Communication Engineering in  
association with Tessolve Semiconductor  
Technologies  
Organizing  
a  
Value Added Course**

**Title : Design and  
Implementation of Digital  
circuits using Verilog**

**Ms S Theivanayaki  
Ms K Kodeeswari  
Program Coordinators**

**Dr K Tamarasi  
Department Coordinator**







**EXCEL ENGINEERING COLLEGE**  
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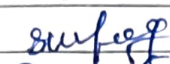
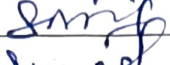

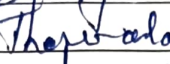
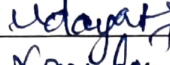
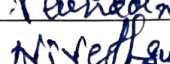
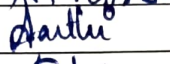
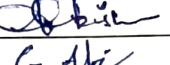
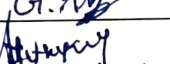
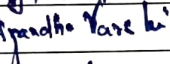
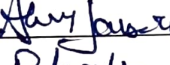
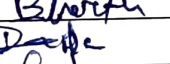

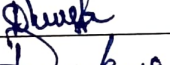

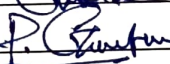
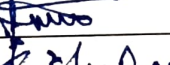
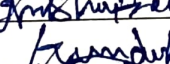
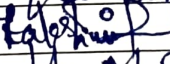
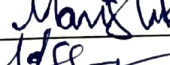
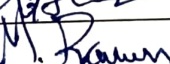
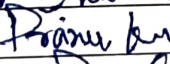


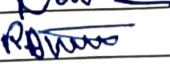





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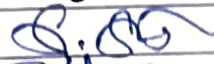
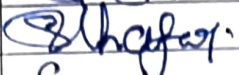

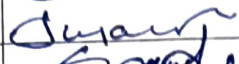
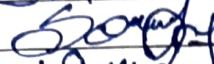
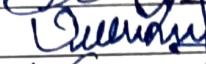
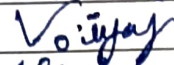
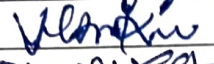
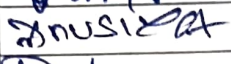
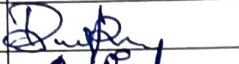
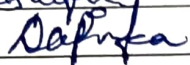
Department of Electronics and Communication Engineering

Design and implementation of digital circuits using verilog

S.No	Roll Number	Name	Signature	Remarks
1	19EC001	AARTHI A	A. A	
2	19EC002	AASHA SAPKOTA .	A	
3	19EC004	ABISHEK S	Abhishek S	
4	19EC005	ANAN KUMAR SAHA	Anan K	
5	19EC006	ARUN K	Arun K	
6	19EC007	ASHISH ANAND	Ashish Anand	
7	19EC010	BITU KUMAR .	Bitu Kumar	
8	19EC013	DEVARAJ S	Devaraj S	
9	19EC014	DEVASHREE A	Devashree A	
10	19EC015	DHANISHKUMAR S	Dhanish Kumar S	
11	19EC017	DINESH E	Dinesh E	
12	19EC019	GAUTAM KUMAR SINGH	Gautam Kumar Singh	
13	19EC020	GNANA SEKAR.M .	Gnana Sekar M	
14	19EC024	BHANDARI	B	
15	19EC025	IRFAN A	Irfan A	
16	19EC026	JANANI J	Janani J	
17	19EC027	JEEVAN KUMAR	Jeevan	
18	19EC028	JEEVARASAN M	Jeevarasan M	
19	19EC029	JEEVITHA P	P. Jeevitha	
20	19EC030	JENIFER VINOTHINI P	Jenifer Vinothini P	
21	19EC032	JOYDEEP PANJA .	Joydeep Panja	
22	19EC033	KAALEESWARI G	Kaaleeswari G	
23	19EC034	KAMALI C	Kamali C	
24	19EC035	KARTHIKEYAN T	Karthikeyan T	
25	19EC036	KAVIRAJ M	Kaviraj M	

S.No	Roll Number	Name	Signature	Remarks
26	19EC037	KEERTHANA S		
27	19EC038	LINDA C		
28	19EC039	LOGESH T		
29	19EC040	MADHUPRIYA V		
30	19EC041	MAHALAKSHMI T		
31	19EC042	MANISH KUMAR .		
32	19EC044	MD FAIYAZ .		
33	19EC049	MOTIUR RAHMAN		
34	19EC046	MD KHALID SAIFULLAH		
35	19EC047	MERCY I		
36	19EC048	MOHAMMAD IRFAN		
37	19EC050	NAVEENKUMAR R		
38	19EC051	NITESH KUMAR		
39	19EC053	NITU JHA		
40	19EC054	PRABHA M		
41	19EC055	PRAVEEN KUMAR S		
42	19EC056	PRAVEENKUMAR V		
43	19EC057	PUSHPAVENI M		
44	19EC058	RAGUL P		
45	19EC059	RAHUL PATEL		
46	19EC060	RAJATHI S		
47	19EC061	RAKESH KUMAR		
48	19EC062	RAMCHANDRA SHARMA		
49	19EC064	REVATHI A		
50	19EC065	RINSHU KUMARI		
51	19EC066	RITU JHA		
52	19EC067	SAKTHI SOWNTHARYA G		
53	19EC068	SANKAR S		
54	19EC069	SANNY KUMAR		
55	19EC071	SATYAJIT SAMANTA		
56	19EC072	SHALINI NARAYANI T		
57	19EC074	SHIYAMSUNDAR R		
58	19EC077	SOUNDHARARAJ M		
59	19EC078	SOWMIYADEVI K		

S.No	Roll Number	Name	Signature	Remarks
60	19EC079	SUBASH K		
61	19EC080	SUDHARSANAM P S		
62	19EC083	SURESH KUMAR K		
63	19EC084	SWATHI P B		
64	19EC085	THAVAMALAR S		
65	19EC086	UTHAYAKUMAR S		
66	19EC087	VEERENDRANATH G		
67	20LECO88	NIVEDH SUNIL		
68	20EC001	AARTHI.S		
69	20EC002	ABISHA.S		
70	20EC003	ABIWIN.G		
71	20EC005	AJITHKUMAR.G		
72	20EC006	ANANDHAVARSHINI.M		
73	20EC007	ARUNJABARAJ.M		
74	20EC008	BHARAT.S		
75	20EC010	DEEPA.E		
76	20EC011	DHARMASAMVARTHINI.		
77	20EC012	DHURGA.K		
78	20EC013	DINESHKUMAR.R		
79	20EC015	GOPI.C		
80	20EC016	GOWTHAMAN.P		
81	20EC017	HAROON AHAMAD DAR		
82	20EC018	KRISHNA PRASATH.R		
83	20EC019	KUNDAN KUMAR		
84	20EC020	LAKSHMI PRIYA.S		
85	20EC021	MANISH RAJ		
86	20EC022	NITHYA.S		
87	20EC025	PRAVEEN.M		
88	20EC026	PRINCEKUMAR		
89	20EC027	RAHULKUMAR		
90	20EC028	RAJAMANI.G		
91	20EC029	RAMAKRISHNAN.M		
92	20EC030	RAMSEVAKDAS		
93	20EC031	ROHIT RAJ.A		

S.No	Roll Number	Name	Signature	Remarks
94	20EC032	SENTHIL KUMAR.S		
95	20EC033	SHAIK JAFAR SADIQ.S		
96	20EC034	SOURAVKUMAR		
97	20EC036	SURAJKUMAR		
98	20EC037	VENNILA.G		
99	20EC038	VICKY KUMAR		
100	20EC039	VIJAY.N		
101	20EC040	VINAY KUMAR.N		
102	21LEC041	ANUSUYA .R		
103	21LEC042	BIPIN KUMAR		
104	21LEC043	DEEPIKA .J		

  
VAC Coordinator

  
HOD



# EXCEL ENGINEERING COLLEGE (Autonomous)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

Accredited by NBA(AERO,CSE,ECE&MECH), NAAC with "A" and Recognised by UGC (2f &12B)

KOMARAPALAYAM - 637303

Department of Electronics and Communication Engineering  
Embedded programming and IoT applications with energia IDE Tool

S.No	Roll Number	Name	Signature	Remarks
1	21LEC044	KAVINESH .M		
2	21LEC045	KAVIYAN .P		
3	21LEC048	MOHANRAJ S		
4	21LEC049	SABARIMUTHU.S		
5	21LEC050	SOWMIYA S		
6	21LEC051	VIMALKUMAR .M		
7	21LEC052	YUVASRI .S		
8	21LEC054	DP KODUN MARING		
9	21LEC055	NAVEENKUMAR .S		
10	21LEC056	RAHUL KUMAR		
11	21LEC057	NAVEENKUMAR.JR		
12	21REC053	SINDUJA.R		
13	21REC058	RATCHAYA .G		
14	21EC001	AASAITHAMBI V		
15	21EC002	AJAY KUMAR		
16	21EC003	AMAN		
17	21EC004	AMARJEET KUMAR		
18	21EC005	AMBITION SHIMPHRUI		
19	21EC006	AMUTHA S		
20	21EC007	ANGAJALA BHASKAR		
21	21EC008	ANJALI KUMARI		
22	21EC009	ANUSHKA BHARTI		
23	21EC010	ARAVINDHAN S		
24	21EC011	ARAVIND KUMAR K		
25	21EC012	ARCHANAA M		
26	21EC013	ARUN.S		
27	21EC014	ARVIND KUMAR S/O		
28	21EC015	ASHISH KUMAR		
29	21EC016	AYYANRAJAN A		
30	21EC017	BHUVANESH S		
31	21EC019	BITTU KUMAR		
32	21EC020	BOOPESH S		
33	21EC021	DEVIKA S		
34	21EC022	DHANUSH K		
35	21EC023	DHANUSHKUMAR S		
36	21EC024	DHANUVARSHINI R		
37	21EC025	DHARMVEER KUMAR		

S.No	Roll Number	Name	Signature	Remarks
38	21EC026	DHINESHKUMAR V	Dhinesh	
39	21EC027	DHIVYA A	Dhivya	
40	21EC028	DHIVYA PRAKASHI S	Dhivya	
41	21EC029	DURGA DEVI S	Durga Devi	
42	21EC030	GAYATHRI S	S. Gayatri	
43	21EC031	GOKUL RAJ .E	Gokulraj E.	
44	21EC032	GOKUL S	Gokul S.	
45	21EC033	GOKULARASU S	Gokularasu S.	
46	21EC034	GOKULNATH M	Gokulnath M.	
47	21EC035	GOPAL KUMAR	Gopal Kumar	
48	21EC037	HARISH.M	Harish M.	
49	21EC039	JAISURYA S	Jaisurya S.	
50	21EC040	JAMALDDIN	Jamalddin	
51	21EC041	JANA .N	Jana N.	
52	21EC042	JYOTI KUMARI	Jyoti Kumari	
53	21EC043	KABILAN S	Kabilan S.	
54	21EC044	KAMALESWARAN S	Kamaleswaran S.	
55	21EC045	KAMMARA ARAVIND	Kammara Aravind	
56	21EC046	KANIGA S	Kaniga S.	
57	21EC047	KANNAN S	Kannan S.	
58	21EC049	KARTHIKA K	Karthika K.	
59	21EC050	KARTHIKEYAN V	Karthikeyan V.	
60	21EC051	KAVIN J	Kavin J.	
61	21EC052	KAYALVIZHI P	Kayalvizhi P.	
62	21EC053	KIRAN J	Kiran J.	
63	21EC054	KRISHNAN A	Krishnan A.	
64	21EC055	KRISHNAN R	Krishnan R.	
65	21EC056	KUNAL RAJ	Kunal Raj	
66	21EC058	MADHAN M	Madhan M.	
67	21EC059	MADHAVARAJ S	Madhavaraj S.	
68	21EC060	MANISH D	Manish D.	
69	21EC061	MANISH KUMAR M	Manish Kumar M.	
70	22LEC122	DINESH KRISHNA B	Dinesh Krishna B.	
71	22LEC123	DINESH R	Dinesh R.	
72	22LEC124	ELAVARASAN U	Elavarasan U.	
73	22LEC126	GOWRI M	Gowri M.	
74	22LEC128	LOGESHWARAN M G	Logeshwaran M G.	
75	22LEC129	MANIKANDAN P	Manikandan P.	
76	22LEC131	SUBASRI P	Subasri P.	
77	22LEC133	SURIYA S	Suriya S.	
78	21EC062	MANJU M	Manju M.	
79	21EC063	MERTHUNJAYAN A	Mertunjayan A.	
80	21EC064	MOHAMMAD TABREZ	Mohammad Tabrez	
81	21EC065	MOHAMMED NAVEETH	Mohammed Naveeth	
82	21EC066	MOUNIKA S	Mounika S.	

S.No	Roll Number	Name	Signature	Remarks
83	21EC067	MUCHUKOTTA		
84	21EC069	MUTHU KUMAR MK		
85	21EC070	NARASIMMAN N		
86	21EC071	NAVEEN V S		
87	21EC072	NEHA KUMARI		
88	21EC073	NIKIL SHABU S		
89	21EC074	NIMITHA S		
90	21EC075	NITHISHKUMAR M		
91	21EC076	NITISH KUMAR		
92	21EC077	PALLAV KARN		
93	21EC078	PANDETI KALYANA		
94	21EC079	PAVITHRA S		
95	21EC080	PHURITSHABAM		
96	21EC081	PRADEEP G		
97	21EC082	PRAGATHEESWARAN		
98	21EC083	PRAVEEN KUMAR K		
99	21EC084	RAGHAV A B		
100	21EC085	RAGHUL M		
101	21EC086	RAGUPRASATH M		
102	21EC087	RAGURAM P		
103	21EC088	RAHUL KUMAR S/O		
104	21EC090	RAJESH KUMAR		
105	21EC094	RUBIKA N		
106	21EC095	SACHINKUMAR S		

VAC Coordinator

HOD







78	730919106066	PRAVEENKUMAR V	/	/	/	/	/	/	/	/	/	/	/	/
79	730919106067	PUSHPAVENI M	/	/	/	/	/	/	/	/	/	/	/	/
80	730919106068	RAGHU P	/	/	/	/	/	/	/	/	/	/	/	/
81	730919106069	RAHUL PATEL	/	/	/	/	/	/	/	/	/	/	/	/
82	730919106071	RAJATH S	/	/	/	/	/	/	/	/	/	/	/	/
83	730919106075	RAKESH KUMAR	/	/	/	/	/	/	/	/	/	/	/	/
84	730919106076	RAMU HANDRA SHARMA	/	/	/	/	/	/	/	/	/	/	/	/
85	730919106082	RIVATHA A	/	/	/	/	/	/	/	/	/	/	/	/
86	730919106083	RINSHU KUMARI	/	/	/	/	/	/	/	/	/	/	/	/
87	730919106085	RITU JHA	/	/	/	/	/	/	/	/	/	/	/	/
88	730919106088	SAKTHI SOWNTHARYA G	/	/	/	/	/	/	/	/	/	/	/	/
89	730919106089	SANKAR S	/	/	/	/	/	/	/	/	/	/	/	/
90	730919106094	SATYAJIT SAMANTA	/	/	/	/	/	/	/	/	/	/	/	/
91	730919106095	SHALINI NARAYANI T	/	/	/	/	/	/	/	/	/	/	/	/
92	730919106098	SHYAM SUNDAR R	/	/	/	/	/	/	/	/	/	/	/	/
93	730919106101	SOUNDHARAKA M	/	/	/	/	/	/	/	/	/	/	/	/
94	730919106102	SOWMYA DEVI E	/	/	/	/	/	/	/	/	/	/	/	/
95	730919106103	SUBASH K	/	/	/	/	/	/	/	/	/	/	/	/
96	730919106104	SUDHARSANAMP S	/	/	/	/	/	/	/	/	/	/	/	/
97	730919106107	SURESH KUMAR K	/	/	/	/	/	/	/	/	/	/	/	/
98	730919106108	SWATHI P B	/	/	/	/	/	/	/	/	/	/	/	/
99	730919106109	THAVAMALAR S	/	/	/	/	/	/	/	/	/	/	/	/
100	730919106110	UTHAYAKUMAR S	/	/	/	/	/	/	/	/	/	/	/	/
101	730919106111	VEERENDRANATH G	/	/	/	/	/	/	/	/	/	/	/	/
102	730919106301	NIVEDI SUNIL	/	/	/	/	/	/	/	/	/	/	/	/
103	730919106022	GAUTAM KUMAR SINGH	/	/	/	/	/	/	/	/	/	/	/	/
104	730919106023	GNANA SEKAR M	/	/	/	/	/	/	/	/	/	/	/	/

Activity Coordinator

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79	730919106008	ARUN K	/	/	/	/	/	/	/	/	/	/	/	/
80	730919106009	ASHISH ANAND	/	/	/	/	/	/	/	/	/	/	/	/
81	730919106013	BHU KUMAR	/	/	/	/	/	/	/	/	/	/	/	/
82	730919106016	DEVARAJ S	/	/	/	/	/	/	/	/	/	/	/	/
83	730919106017	DEVASHREE A	/	/	/	/	/	/	/	/	/	/	/	/
84	730919106020	DINESH E	/	/	/	/	/	/	/	/	/	/	/	/
85	730919106028	INDRAJEE KUMAR BEANDARI	/	/	/	/	/	/	/	/	/	/	/	/
86	730919106029	IRIFAN A	/	/	/	/	/	/	/	/	/	/	/	/
87	730919106030	JANANI E	/	/	/	/	/	/	/	/	/	/	/	/
88	730919106031	JEEVAN KUMAR	/	/	/	/	/	/	/	/	/	/	/	/
89	730919106033	JEEVITHA P	/	/	/	/	/	/	/	/	/	/	/	/
90	730919106034	JENIFER VINOTHINI P	/	/	/	/	/	/	/	/	/	/	/	/
91	730919106036	JOYDEEP PANJA	/	/	/	/	/	/	/	/	/	/	/	/
92	730919106037	KAALEESWARIG	/	/	/	/	/	/	/	/	/	/	/	/
93	730919106038	KAMAL C	/	/	/	/	/	/	/	/	/	/	/	/
94	730919106039	KARTHIKEYAN T	/	/	/	/	/	/	/	/	/	/	/	/
95	730919106040	KAVIRAJ M	/	/	/	/	/	/	/	/	/	/	/	/
96	730919108041	KEERTHANA S	/	/	/	/	/	/	/	/	/	/	/	/
97	730919106042	LINDA C	/	/	/	/	/	/	/	/	/	/	/	/
98	730919106043	LOGESH T	/	/	/	/	/	/	/	/	/	/	/	/
99	730919106044	MADHUPRIYA V	/	/	/	/	/	/	/	/	/	/	/	/
100	730919106045	MAHAJ AKSHINI T	/	/	/	/	/	/	/	/	/	/	/	/
101	730919106046	MANISH KUMAR	/	/	/	/	/	/	/	/	/	/	/	/
102	730919106049	MIDFAIYAZ	/	/	/	/	/	/	/	/	/	/	/	/
103	730919106051	MIDKHALID SAIFULLAH	/	/	/	/	/	/	/	/	/	/	/	/
104	730919106052	MERCY T	/	/	/	/	/	/	/	/	/	/	/	/
105	730919106053	MOHAMMAD IRIFAN	/	/	/	/	/	/	/	/	/	/	/	/
106	730919106055	NAVEENKUMAR R	/	/	/	/	/	/	/	/	/	/	/	/

Activity Coordinator

K. Anand  
HOD



## EXCEL ENGINEERING COLLEGE

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KOMARAPALAYAM - 637303

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Summary Report

One week Value Added Course from 23.01.2023 to 28.01.2023 in association with Tessolve Semiconductor Technologies, Bangalore for third year students.

**Course 1-VLSI Stream**

**Course 2-Embedded Iot Stream**

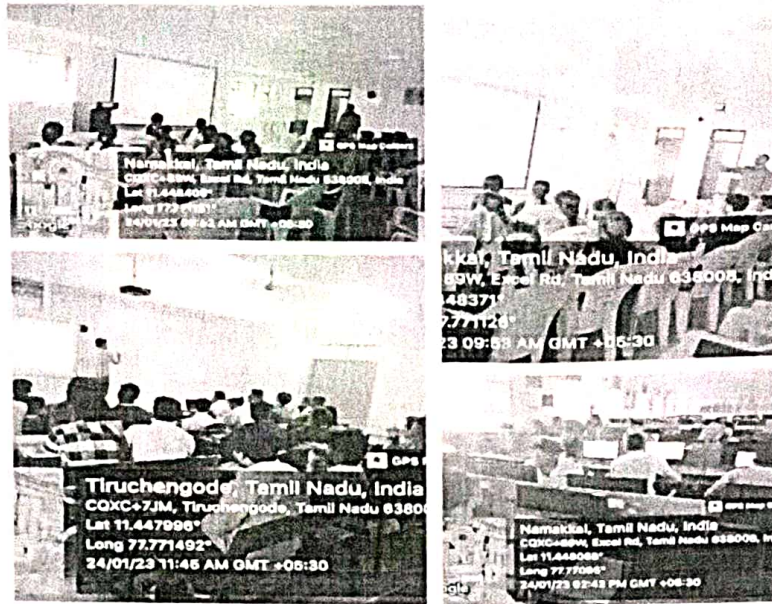
**DAY 1**



Organized two Value Added Course titled as

- Design and Implementation of Digital Circuits
- Embedded Programming and IoT applications with Energia IDE Tool for third year students in association with Tessolve Semiconductor Technologies, Bangalore.

## Day 2



### Course 1 - Design and Implementation of Digital Circuits

#### Topics Covered

- Combinational Circuits
- Sequential Circuits
- Verilog HDL

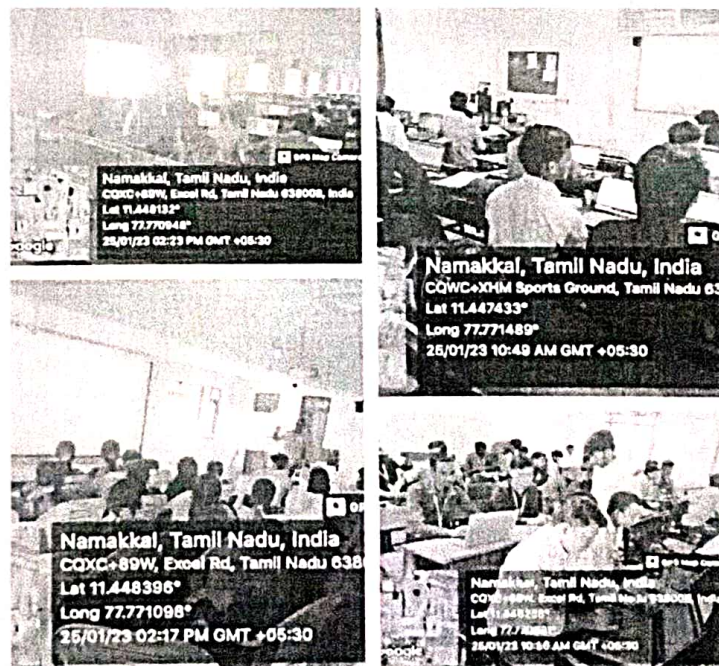
### Course 2 - Embedded Programming and IoT applications with Energia IDE Tool

#### Topics covered

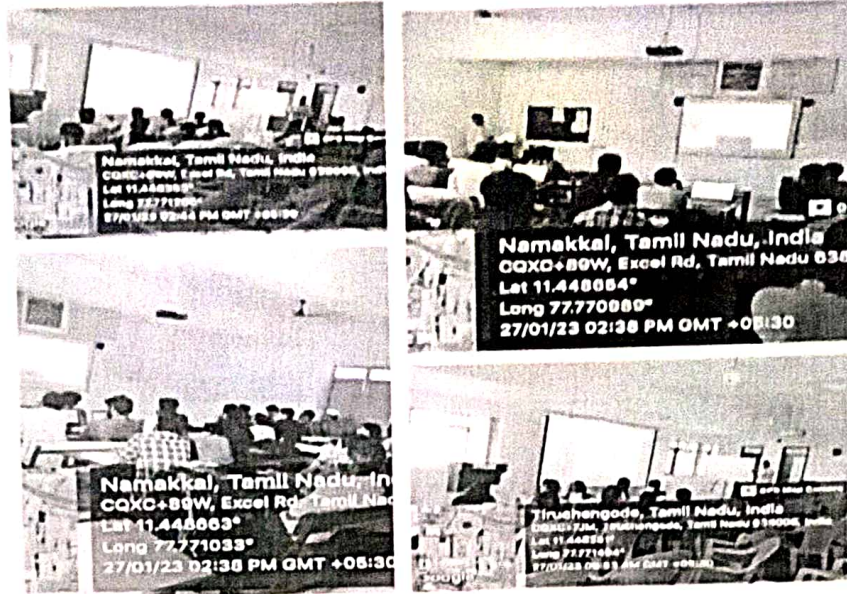
- GPIO
- Digital I/O
- TINKERCAD

### Practical Session with simple Program

#### Day 3 - 25.01.2023



## Day 5



### Course 1 - Design and Implementation of Digital Circuits

#### Topics Covered

- Data types, Arrays and Structures
- FSM and Scheduler
- Practice of program

### Course 2 - Embedded Programming and IoT applications with Energia IDE Tool

#### Topics covered

- Peripheral Interface - LCD, Timer, Comparator, UART
- Hands on of Interfaces

## Day 6





## Course 1 - Design and Implementation of Digital Circuits

### Topics Covered

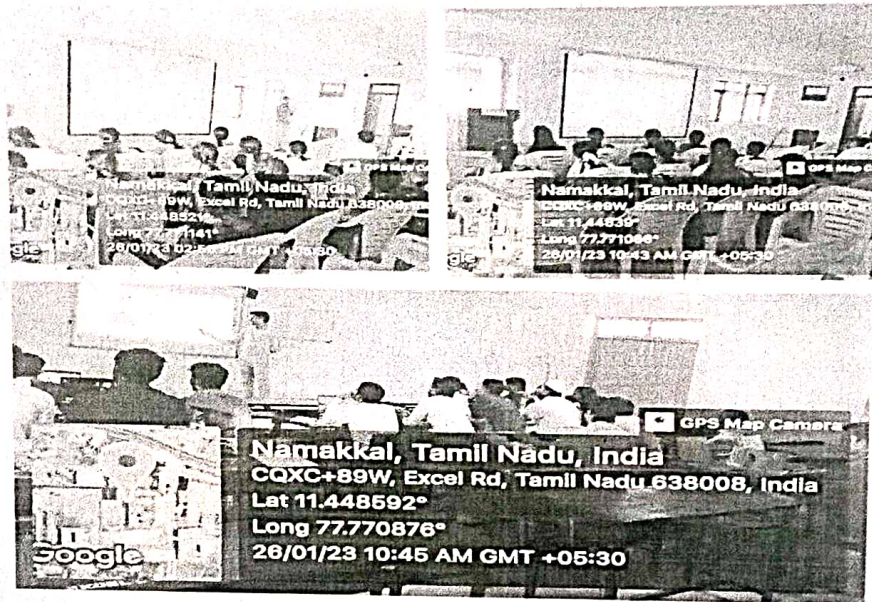
- Operators
- Assignment
- Basic program using Verilog

## Course 2 - Embedded Programming and IoT applications with Energia IDE Tool

### Topics covered

- Switch Configuration
- Negative and Positive Switch Interface
- Analog peripheral Interface - Practical session

Day 4 - 26.01.2023



## Course 1 - Design and Implementation of Digital Circuits

### Topics Covered

- Combinational circuits concepts
- Verilog Programs for Combinational circuits and Hands on session

## Course 2 - Embedded Programming and IoT applications with Energia IDE Tool

### Topics covered

- Sensor Interface
- Interfacing program concepts
- Interfaces Hands on session

Course 1 - Design and Implementation of Digital Circuits

Topics Covered

- Finite state machine and Verilog Program
- Assesment

Course 2 - Embedded Programming and IoT applications with Energia IDE Tool

Topics covered

- Communication Protocols
- Assesment

*K.omi*  
HoD/ECE

# EXCEL ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

Accredited by NBA, NAAC with "A" and Recognised by UGC (2f & 12B)

Komarapalayam – 637303

Department of Electronics and Communication Engineering

VALUE ADDED COURSE

EMBEDDED IOT Stream TITLE - Embedded Programming and IoT applications with Energia IDE Tool

## Assesment Marks

S.No.	Register Number	Name	Marks
1	730920106033	VICKY KUMAR	51
2	730920106015	KRISHNAPRASATH.R	63
3	730920106030	SOURAV KUMAR A	78
4	730920106021	M.Praveen	57
5	730920106302	bipin kumar	60
6	730920106011	DINESHKUMAR.R	65
7	730920106027	ROHIT RAJ	62
8	730920106035	Vinay kumar	56
9	730920106018	Manish raj	56
10	73092010613	GOWTHAMAN	74
11	730920106029	SHAIK7JAFARSADIQ	65
12	730920106304	DP KODUN MARING	74
13	730920106025	RAMAKRISHNA	55
14	7304224742	Prince kumar	57
15	730920106031	suraj kumar	47
16	730920106023	RAHUL KUMAR	45
17	730920106316	NAVEEN KUMAR.JR	53
18	730920106028	SENTHILKUMAR.S	52
19	730920106016	Kundan kumar	52
20	730920106311	RAHUL KUMAR MAHATO	61
21	730920106310	Naveenkumar.s	58
22	730920106003	ABIWING	47


23	730920106007	BHARAT S	32
24	730920106034	VIJAY N	46
25	730920106024	RAJAMANI G	31
26	730921106001	AYYANRAJAN A	55
27	730921106002	AASAITHAMBI V	57
28	730921106003	AJAY KUMAR	47
29	730921106004	AMAN	45
30	730921106005	AMARJEET KUMAR SINGH	53
31	730921106006	AMBITION SHIMPHRUI	52
32	730921106007	AMUTHA S	52
33	730921106008	ANGAJALA BHASKAR	61
34	730921106009	ANJALI KUMARI	58
35	730921106010	ANUSHKA BHARTI	51
36	730921106011	ARCHANAA M	63
37	730921106012	ARUN.S	63
38	730921106013	ARVIND KUMAR S/O LALAN RAY	57
39	730921106014	ASHISH KUMAR	60
40	730921106015	BHUVANESH S	65
41	730921106017	BITTU KUMAR SHRIVASTAV	62
42	730921106018	BOOPESH S	56
43	730921106019	DEVIKA S	56
44	730921106020	DHANUSH K	55
45	730921106021	DHANUSHKUMAR S	57
46	730921106022	DHANUVARSHINI R	47
47	730921106023	DHARMVEER KUMAR	45
48	730921106024	DHINESHKUMAR V	53
49	730921106025	DHIVYA A	52
50	730921106026	DHIVYA PRAKASH S	52
51	730921106028	GOKUL RAJ.E	61
52	730921106029	GAYATHIRI S	58
53	730921106030	GOKUL S	55
54	730921106031	GOKULARASU S	57

55	730921106032	GOKULNATH M	47
56	730921106033	GOPAL KUMAR	57
57	730921106035	HARISH M	60
58	730921106037	JAISURYA S	65
59	730921106038	JAMALDDIN	62
60	730921106039	JANA N	56
61	730921106040	JYOTI KUMARI	56
62	730921106041	ARAVIND KUMAR K	55
63	730921106042	KABILAN S	57
64	730921106043	KAMALESWARAN S	47
65	730921106044	KAMMARA ARAVIND	45
66	730921106046	KARTHIKA K	62
67	730921106047	KARTHIKEYAN V	56
68	730921106048	KAVIN J	56
69	730921106049	KAYALVIZHIP	55
70	730921106050	KIRAN J	57
71	730921106051	KRISHNAN A	62
72	730921106052	KRISHNAN R	61
73	730921106053	KUNAL RAJ	59
74	730921106055	MADHAN M	62
75	730921106056	MADHAVARAJ S	74
76	730919106001	AARTHI A	65
77	730919106004	ABISHEK S	74
78	730919106007	ANAN KUMAR SAHA	55
79	730919106008	ARUN K	57
80	730919106009	ASHISH ANAND	47
81	730919106013	BITU KUMAR .	45
82	730919106016	DEVARAJ S	53
83	730919106017	DEVASHREE A	52
84	730919106020	DINESH E	61
85	730919106028	INDRAJEET KUMAR BHANDARI	58
86	730919106029	IRFAN A	55

55	730921106032	GOKULNATH M	47
56	730921106033	GOPAL KUMAR	57
57	730921106035	HARISH M	60
58	730921106037	JAISURYA S	65
59	730921106038	JAMALDDIN	62
60	730921106039	JANA N	56
61	730921106040	JYOTI KUMARI	56
62	730921106041	ARAVIND KUMAR K	55
63	730921106042	KABILAN S	57
64	730921106043	KAMALESWARAN S	47
65	730921106044	KAMMARA ARAVIND	45
66	730921106046	KARTHIKA K	62
67	730921106047	KARTHIK FYAN V	56
68	730921106048	KAVIN J	56
69	730921106049	KAYALVIZHI P	55
70	730921106050	KIRAN J	57
71	730921106051	KRISHNAN A	62
72	730921106052	KRISHNAN R	61
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74	730921106055	MADHAN M	62
75	730921106056	MADHAVARAJ S	74
76	730919106001	AARTHI A	65
77	730919106004	ABISHEK S	74
78	730919106007	ANAN KUMAR SAHA	55
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85	730919106028	INDRAJEET KUMAR BHANDARI	58
86	730919106029	IRFAN A	55

87	730919106030	JANANI J	57
88	730919106031	JEEVAN KUMAR	47
89	730919106033	JEEVITHA P	57
90	730919106034	JENIFER VINOTHINI P	60
91	730919106036	JOYDEEP PANJA .	51
92	730919106037	KAALEESWARI G	63
93	730919106038	KAMALI C	63
94	730919106039	KARTHIKEYAN T	57
95	730919106040	KAVIRAJ M	60
96	730919108041	KEERTHANA S	65
97	730919106042	LINDA C	25
98	730919106043	LOGESH T	21
99	730919106044	MADHUPRIYA V	26
100	730919106045	MAHALAKSHMI T	27
101	730919106046	MANISH KUMAR .	21
102	730919106049	MD FAIYAZ .	19
103	730919106051	MD KHALID SAIFULLAH	18
104	730919106052	MERCY I	14
105	730919106053	MOHAMMAD IRFAN	16
106	730919106055	NAVEENKUMAR R	17

Activity  Coordinator

  
HoD

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Komarapalayam – 637303

Department of Electronics and Communication Engineering

VALUE ADDED COURSE

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VLSI Stream TITLE - Design and Implementation of Digital circuits using Verilog

## Assesment Marks

S.No.	Register Number	Name	Marks
1	730920106001	AARTH.S	18
2	730920106002	ABISHA.S	20
3	730920106004	AJITHKUMAR.G	18
4	730920106005	ANANDHAVARSHINI.M	A
5	730920106006	ARUNJABARAJ.M	8
6	730920106008	DEEPA.E	28
7	730920106009	DHARMASAMVARTHINI.L	A
8	730920106010	DHURGA.K	24
9	730920106012	GOPI.C	21
10	730920106017	LAKSHMI PRIYA.S	27
11	730920106019	NITHYA.S	A
12	730920106026	RAMSEVAKDAS	17
13	730920106032	VENNILA.G	23
14	73092010301	ANUSUYA .R	21
15	730920106303	DEEPIKA .J	28
16	730920106304	KAVINESH .M	24
17	730920106306	KAVIYAN .P	13
18	730920106309	MOHANRAJ S	14
19	730920106312	SABARIMUTHU.S	24
20	730920106313	SOWMIYA S	28
21	730920106314	VIMALKUMAR .M	24
22	730920106315	YUVASRI .S	14



23	730920106501	SINDUJA R	22
24	730920106502	RATCHAYA G	18
24	730921106057	MANISH D	17
25	730921106058	MANISH KUMAR M	18
26	730921106059	ARAVINDHAN S	15
27	730921106060	KANIGA S	13
28	730921106061	KANNAN S	14
29	730921106301	DINESH KRISHNA B	A
30	730921106302	DINESH R	12
31	730921106303	ELAVARASAN U	16
32	730921106305	GOWRI M	17
33	730921106307	LOGESHWARAN M G	18
34	730921106308	MANIKANDAN P	15
35	730921106310	SUBASRI P	14
36	730921106312	SURIYA S	A
37	730921106062	MANJU M	13
38	730921106063	MERTHUNJAYAN A	12
39	730921106064	MOHAMMAD TABREZ ALAM	11
40	730921106065	MOHAMMED NAVEETH S	A
41	730921106066	MOUNIKA S	12
42	730921106067	MUCHUKOTTA MANIKANTA	16
43	730921106069	MUTHU KUMAR MK	17
44	730921106070	NARASIMMAN N	18
45	730921106071	NAVEEN V S	15
46	730921106072	NEHA KUMARI	14
47	730921106073	NIKIL SHABU S	12
48	730921106074	NIMITHA S	14
49	730921106075	NITHISHKUMAR M	16
50	730921106076	NITISH KUMAR	17
51	730921106077	PALLAV KARN	19
52	730921106078	PANDETI KALYAN VARMA	11
53	730921106079	PAVITHRA S	11

54	730921106080	PHURITSHABAM SUSHILKUMAR SINGH	A
55	730921106081	PRADEEP G	12
56	730921106082	PRAGATHEESWARAN M	16
57	730921106083	PRAVEEN KUMAR K	17
58	730921106084	RAGHAV A B	18
59	730921106085	RAGHUL M	15
60	730921106086	RAGUPRASATH M	14
61	730921106087	RAGURAM P	12
62	730921106088	RAHUL KUMAR S O AJAY RAY	14
63	730921106090	RAJESH KUMAR	16
64	730921106091	RAJKUMAR P	17
65	730921106093	RAMAMOORTHI K	19
66	730921106094	RUBIKA N	11
67	730921106095	SACHINKUMAR S	15
68	730921106096	SAHIL KUMAR	14
69	730921106097	SAHIL RAJ	12
70	730921106099	SANDHIYA S	14
71	730921106100	SANTHOSH V	16
72	730921106101	SANTHOSHKUMAR J	15
73	730921106102	SATHIYA PRAKASH	14
74	730919106060	NITESH KUMAR	24
75	730919106062	NITU JHA	28
76	730919106063	PRABHA M	24
77	730919106065	PRAVEEN KUMAR S	14
78	730919106066	PRAVEENKUMAR V	22
79	730919106067	PUSHPAVENI M	18
80	730919106068	RAGUL P	17
81	730919106069	RAHUL PATEL	18
82	730919106071	RAJATHI S	15
83	730919106075	RAKESH KUMAR	13

84	730919106076	RAMCHANDRA SHARMA	14
85	730919106082	REVATHI A	A
86	730919106083	RINSHU KUMARI	12
87	730919106085	RITU JHA	16
88	730919106088	SAKTHI SOWNTHARYA G	A
89	730919106089	SANKAR S	12
90	730919106094	SATYAJIT SAMANTA	16
91	730919106095	SHALINI NARAYANI T	17
92	730919106098	SHIYAMSUNDAR R	18
93	730919106101	SOUNDHARARAJ M	15
94	730919106102	SOWMIYADEV I K	14
95	730919106103	SUBASH K	12
96	730919106104	SUDHARSANAM P S	14
97	730919106107	SURESH KUMAR K	16
98	730919106108	SWATHI P B	17
99	730919106109	THAVAMALAR S	19
100	730919106110	UTHAYAKUMAR S	11
101	730919106111	VEERENDRANATH G	24
102	730919106301	NIVEDH SUNIL	21
103	730919106022	GAUTAM KUMAR SINGH	22
104	730919106023	GNANA SEKAR.M .	24

Activity Coordinator

HOD

16/20

Name: V. Saathash

Class: ECE - 'B'

Subject: VLSI <sup>Stream</sup> ~~Design~~.

Roll No: 21EC100

1. Impurities are added to the wafers of the crystal

Ans: - b) p impurities are introduced as the crystal is grown. This increases the hole concentration in the device.

2. What kind of substrate is provided above the barrier to deposits?

Ans: a) insulating layer is provided upon other layers deposited and patterned.

3. The photoresist layer is exposed to.

Ans: b) ultraviolet light to mask the regions diffusion to take place

4. In nMOS device, gate material could be

Ans: b) polysilicon

5. The commonly used bulk substrate in nMOS fabrication is

Ans: c) Phosphorus

6. In nMOS fabrication, etching is done using.

Ans: a) plasma.

7. Heavily doped polysilicon is deposited using

Ans: b) chemical vapour deposition

8. In diffusion process impurity is desired.

Ans: a) n type

9. Contact cuts are made in

Ans: Contact cuts are made in the desired polysilicon area, source and gate. Contact cuts are those places where connection has to be made.

10. Interconnection pattern is made on.

Ans: c) The metal layer is masked and etched to form interconnection pattern. The metal layer was formed using aluminium deposited over the formed surface.

11. Silicon-di-oxide is a good insulator.

Ans: a) Silicon-di-oxide is a very good insulator so very thin layer is required in the fabrication of MOS transistor

12. is used to suppress unwanted conduction.

Ans: b) Boron is used to suppress the unwanted conduction between transistor sites. It is implanted in exposed regions

13. which is used for the interconnection?

Ans: c) Aluminium is the suitable material used for the circuit interconnection or connecting two layers

14. CMOS technology is used in developing

Ans: d) CMOS technology is used in developing microcontrollers, microprocessors, digital logic circuits and other integrated

Circuits

CMOS has

Ans) b) Some of properties of CMOS are that it has low power dissipation, high packing density and low noise margin.

In CMOS fabrication, nMOS and pMOS are integrated in same substrate.

Ans: a) In CMOS fabrication, nMOS and pMOS are integrated

in the same chip substrate. n-type and p-type devices are formed in same structure

p-well is created on

Ans) b) p-well is created on n substrate to accommodate n-type devices whereas p-type devices are formed in n-type substrate.

8. Oxidation process is carried out using

Ans: a) Oxidation process is carried out using high purity oxygen and hydrogen. Oxidation is a process of oxidizing or being oxidised.

9. Photo resist layer is formed using

Ans: b) Light sensitive polymer is used to form the photoresist layer. Photoresist is a light sensitive material used to form patterned coating on a surface.

Name : N. ROBIKA

Roll no : 21EC094

Class : ECE - B

Subject : VLSI  
Stream

11/20  
Q

1. c) aluminium ✓
2. d) all of the mentioned ✓
3. b) high packing density ✓
4. a) true ✓
5. b) n substrate ✓
6. a) hydrogen ✓
7. b) light sensitive polymer ✓
8. b) ultraviolet light ✓
9. a) acidic solution ✓
10. a) threshold voltage ✓
11. b) n well ✓
12. b) diffusion ✓

13. a) admittance ✓

14. b) false ✓

15. a) limited current source ✓

16. a) all of the methods ✓

17. a) low input impedance ✓

18. b) false ✓

19. a) unbalanced ✓

20. b) increasing collector resistance ✓



NAME : S. Sandhya

CLASS : BE-ECE-B

ROLL NO : 21ECL099

SUBJECT : VLSI ~~Design~~ <sup>Stream</sup>

14/20

Q

1. c) P-type substrate of moderate doping level.
2. b) two diodes ✓
3. b) ~~old~~ conducting channel ✓
4. c)  $V_{ds}$  lesser than  $V_{gs} - V_t$  ✓
5. b) non-conducting ✓
6. d)  $V_{gs} = V_{ds} = V_s = 0$  ✓
7. b) none of the mentioned ✓
8. a) symmetrical ✓
9. a) donor doped ✓
10. b) negative carriers ✓
11. b)  $V_{gs}$  greater than  $V_t$  ✓
12. b) decreases ✓

13. d) all of the mentioned.
14. c) polysilicon
15. a) Source to drain
16. a) Current source
17. a) transverse electric field.
18. b) finite off resistance.
19. a) high
20. a) low output capacitance.

20/10

S. Abisha

$$10 \times 3 = 30$$

Q

$$10 \times 1 = 10 \\ \underline{40.}$$

- |                                    |   |
|------------------------------------|---|
| 1. Manage data (b) X               | 14. Smart business center (b) X               |
| 2. X - GSN (c) ✓                   | 15. 4 (a) X                                   |
| 3. .jar (d) X                      | 16. Intelligent transportation services (c) X |
| 4. 3 (c) X                         | 17. Endpoints (d) X                           |
| 5. 48 bits (b) ✓                   | 18. bits (a) X                                |
| 6. virtual network computing (B) ✓ | 19. Service level agreement (d) X             |
| 7. Python (a) ✓                    | 20. Selective recovery (a) ✓                  |
| 8. IoT Service Provider (c) ✓      |   |
| 9. Security (d) X                  |   |
| 10. Kevin Ashton (b) ✓             |   |
| 11. Business Service (c) ✓         |   |
| 12. System (d) X                   |   |
| 13. Presence detection (c) X       |   |

28  
40

$$\begin{array}{r} 10 \times 3 = 30 \\ 10 \times 1 = 10 \\ \hline 40 \end{array}$$

- 1) 2 (a) ✗
- 2, Infrastructure as a service (b) ✓
- 3, HTTP (d) ✗
- 4, UDP (b) ✓
- 5, session (c) ✓
- 6, Traffic Analyzer (b) ✗
- 7, True (a) ✓
- 8, Hardware device (d) ✓
- 9, Inter-Integrated Communication (b) ✓
- 10, Publish subscribe architecture (a) ✓
- 11, 7 elements (b) ✗
- 12, Internet of things architecture (d) ✓
- 13, It has 256MB SDRAM (a) ✗
- 14, Broadcom BCM2837 (b) ✓
- 15, Wire (b) ✓
- 16, Terminate (d) ✓
- 17, Belkin's WeMo (a) ✓
- 18, Protocol abstraction (a) ✓
- 19, Machine generated data (b) ✗
- 20, Manage data (c) ✓

21/40

C. Gopi

10 \* 3 = 30

10 \* 1 = 10

40

- |  |   |
|--|---|
| 1. Internet of Things (A) ✓                      | 14. RESTful API (C) ✓                       |
| 2. 1999 (b) X                                    | 15. MQTT (b) X                              |
| 3. Flipkart (d) X                                | 16. Message Query Telemetry Transport (A) ✓ |
| 4. Industrial Internet of Things (c) ✓           | 17. 8853 (d) ✓                              |
| 5. Transformers (c) X                            | 18. 30-100m (A) ✓                           |
| 6. Datalink Layer (A) X                          | 19. Queued SPI (B) ✓                        |
| 7. 7 (c) X                                       | 20. 908.42 GHz (c) ✓                        |
| 8. protocol abstraction (A) ✓                    |   |
| 9. TCP/IP (b) X                                  |   |
| 10. update (c) ✓                                 |   |
| 11. C/C++ (b) ✓                                  |   |
| 12. short-range wireless network (c) ✓           |   |
| 13. Improve usability and Interoperability (d) ✓ |   |

TESSOLVE  
A Hero Electronix Venture

# Certificate of Completion

*This is to certify that*

**ABISHA.S**

*Has successfully completed the Certification Training on*

**DESIGN AND IMPLEMENTATION OF DIGITAL CIRCUITS USING VERILOG**

*Authorised by Excel Engineering College*

*From 23-01-2023 to 28-01-2023*

*Certificate No. : Tessolve/CBL/2023-24/78*  
*Date of Issue : 30th Jan 2023*

*Srinivas Chinamilli*

Srinivas Chinamilli  
CEO

**TESSOLVE**  
A Hero Electronix Venture

# *Certificate of Completion*

*This is to certify that*

**RAMSEVAKDAS**

*Has successfully completed the Certification Training on*

**DESIGN AND IMPLEMENTATION OF DIGITAL CIRCUITS USING VERILOG**

*Authorised by Excel Engineering College*

*From 23-01-2023 to 28-01-2023*

*Certificate No. : Tessolve/CBE/2023-24/87*

*Date of Issue : 30th Jan 2023*

*Srinivas Chinamilli*

**Srinivas Chinamilli**  
CEO

**TESSOLVE**  
A Hero Electronix Venture

# *Certificate of Completion*

*This is to certify that*

**BIPIN KUMAR**

*Has successfully completed the Value Added Training on*

*Embedded Programming and IoT applications with Energia IDE Tool*

*Authorised by Excel Engineering College*

*From 23-01-2023 to 28-01-2023*

*Certificate No. : Tessolve/CBE/2023-24/73*

*Date of Issue : 30th Jan 2023*

*Srinivas Chinamilli*

*Srinivas Chinamilli*  
CEO



**TESSOLVE**  
A Hero Electronix Venture

## Certificate of Completion

This is to certify that

**PRAVEEN.M**

Has successfully completed the Value Added Training on  
Embedded Programming and IoT applications with Energia IDE Tool

Authorised by Excel Engineering College

From 23-01-2023 to 28-01-2023

Certificate No. : Tessolve/CBL/2023-24/55  
Date of Issue : 30th Jan 2023

*Srinivas Chinamilli*

Srinivas Chinamilli  
CEO



# EXCEL ENGINEERING COLLEGE (Autonomous)

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KOMARAPALAYAM - 637303

DEPARTMENT OF ECE

ACADEMIC YEAR: ~~2020~~ - 2023

## Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

Student Name : M. Praveen

Date: 1.2.23

Batch : 2020 - 2024

Year/Semester: II / VI

Type of Activity: Value added course / Industrial Visit / Implant Training / Guest Lecturer/ Seminar /

Conference / Workshop / Design Contest/ Project Contest / Sports / Games / Social Activities /

Certificate Program / Diploma Course /hackathon/ Ideathon / or any other \_\_\_\_\_

Organizing Institute: Excel Engineering college (Tessolve Semiconductor)

Place: Komarpalayam (Namakkal)

Provide your level of attainment for the following questions by ✓ in the given

[3 / 2 / 1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?

3  2  1

2. Does this Activity /Course improve your Problem Solving Skill?

3  2  1

3. Does this training / Course improve your practical Exposure?

3  2  1

4. Have you learnt any modern tools through this activity/ training?

Yes  No  if yes name of tool \_\_\_\_\_

5. Does this activity /training useful to improve your professional ethics?

3  2  1



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KOMARAPALAYAM - 637303

6. Does this activity /training useful to apply for any modern research programs?

3  2  1

7. Have you got any ideas to improve our environmental & social needs?

3  2  1

8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?

3  2  1

9. Does this Activity / training useful to improve learning attitude with zeal?

3  2  1

10. Does this Activity /training useful for you to work in multi-disciplinary team?

3  2  1

11. Does this Activity /training improve your mind to face any changes in your life?

3  2  1

Any other Comments:

Signature 



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KOMARAPALAYAM - 637303

DEPARTMENT OF ECE

ACADEMIC YEAR: 2022-2023

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

Student Name : J. R. NAVEENKUMAR

Date: 01/02/2023

Batch : 2021-2024

Year/Semester: IV / VI

Type of Activity: Value added course / Industrial Visit / Implant Training / Guest Lecturer/ Seminar /

Conference / Workshop / Design Contest/ Project Contest / Sports / Games / Social Activities /

Certificate Program / Diploma Course /hackathon/ Ideathon / or any other \_\_\_\_\_

Organizing Institute: EXCEL ENGINEERING COLLEGE (TESSOLVE)

Place: KOMARAPALAYAM, NAMAKKAL (DT)

Provide your level of attainment for the following questions by ✓ in the given

[3 / 2 / 1 Indicates Level of Attainment; 3 - Very Much, 2 - Moderate, 1 - Some Extent]

1. Does this Activity/ Course improve your Technical Skill?

3  2  1

2. Does this Activity /Course improve your Problem Solving Skill?

3  2  1

3. Does this training / Course improve your practical Exposure?

3  2  1

4. Have you learnt any modern tools through this activity/ training?

Yes  No  if yes name of tool AUDIO, ENGINEER SOFTWARE,

5. Does this activity /training useful to improve your professional ethics?

3  2  1



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6. Does this activity /training useful to apply for any modern research programs?

3  2  1

7. Have you got any ideas to improve our environmental & social needs?

3  2  1

8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?

3  2  1

9. Does this Activity / training useful to improve learning attitude with zeal?

3  2  1

10. Does this Activity /training useful for you to work in multi-disciplinary team?

3  2  1

11. Does this Activity /training improve your mind to face any changes in your life?

3  2  1

Any other Comments:

Signature



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DEPARTMENT OF ECE

ACADEMIC YEAR: 2020-2021

## Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

Student Name : R. Krishna Prasad

Date: 01.02.2023

Batch : 2020 - 2021

Year/Semester: III / VII

Type of Activity: Value added course / Industrial Visit / Implant Training / Guest Lecturer/ Seminar /

Conference / Workshop / Design Contest/ Project Contest / Sports / Games / Social Activities /

Certificate Program / Diploma Course /hackathon/ Ideathon / or any other \_\_\_\_\_

Organizing Institute: Excel Engineering College (TESSOLVE)

Place: Komarapalayam Namakkal

Provide your level of attainment for the following questions by ✓ in the given

[ 3 / 2 / 1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?

3  2  1

2. Does this Activity /Course improve your Problem Solving Skill?

3  2  1

3. Does this training / Course improve your practical Exposure?

3  2  1

4. Have you learnt any modern tools through this activity/ training?

Yes  No  if yes name of tool AVRDUINO, energia software, Tinkercad

5. Does this activity /training useful to improve your professional ethics?

3  2  1



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6. Does this activity /training useful to apply for any modern research programs?

3  2  1

7. Have you got any ideas to improve our environmental & social needs?

3  2  1

8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?

3  2  1

9. Does this Activity / training useful to improve learning attitude with zeal?

3  2  1

10. Does this Activity /training useful for you to work in multi-disciplinary team?

3  2  1

11. Does this Activity /training improve your mind to face any changes in your life?

3  2  1

Any other Comments:

Signature

*R. Jayaprath*



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KOMARAPALAYAM - 637303

DEPARTMENT OF BE - EEE

ACADEMIC YEAR: 2021 - 2023

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

Student Name : Sowmiya S

Date: 01.03.2023

Batch : 2021 - 2024

Year/Semester: 3/5

Type of Activity:  Value added course /  Industrial Visit /  Implant Training /  Guest Lecturer /  Seminar /

Conference /  Workshop /  Design Contest /  Project Contest /  Sports /  Games /  Social Activities /

Certificate Program /  Diploma Course /  Hackathon /  Ideathon / or any other \_\_\_\_\_

Organizing Institute: Excel Engineering College (Tessolve Semiconductor)

Place: Komarapalayam.

Provide your level of attainment for the following questions by  in the given

[ 3 / 2 / 1 Indicates Level of Attainment; 3 - Very Much, 2 - Moderate, 1 - Some Extent]

1. Does this Activity/ Course improve your Technical Skill?

3  2  1

2. Does this Activity /Course improve your Problem Solving Skill?

3  2  1

3. Does this training / Course improve your practical Exposure?

3  2  1

4. Have you learnt any modern tools through this activity/ training?

Yes  No  if yes name of tool \_\_\_\_\_

5. Does this activity /training useful to improve your professional ethics?

3  2  1





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6. Does this activity /training useful to apply for any modern research programs?

3  2  1

7. Have you got any ideas to improve our environmental & social needs?

3  2  1

8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?

3  2  1

9. Does this Activity / training useful to improve learning attitude with zeal?

3  2  1

10. Does this Activity /training useful for you to work in multi-disciplinary team?

3  2  1

11. Does this Activity /training improve your mind to face any changes in your life?

3  2  1

Any other Comments:

Signature *S. Raju*



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DEPARTMENT OF ECE

ACADEMIC YEAR: 2023-2024

## Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

Student Name : R. Anusuya

Date: 01.02.2023

Batch : 2020-2024

Year/Semester: V<sup>th</sup> V<sup>sem</sup>

Type of Activity: Value added  course / Industrial Visit / Implant Training / Guest Lecturer/ Seminar /

Conference / Workshop / Design Contest/ Project Contest / Sports / Games / Social Activities /

Certificate Program / Diploma Course /hackathon/ Ideathon / or any other \_\_\_\_\_

Organizing Institute: Excel Engineering college (Tessolve semiconductor)

Place: Komarapalayam

Provide your level of attainment for the following questions by  in the given

[3 / 2 / 1 Indicates Level of Attainment; 3 - Very Much, 2 - Moderate, 1 - Some Extent]

1. Does this Activity/ Course improve your Technical Skill?

3  2  1

2. Does this Activity /Course improve your Problem Solving Skill?

3  2  1

3. Does this training / Course improve your practical Exposure?

3  2  1

4. Have you learnt any modern tools through this activity/ training?

Yes  No  if yes name of tool \_\_\_\_\_

5. Does this activity /training useful to improve your professional ethics?

3  2  1



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6. Does this activity /training useful to apply for any modern research programs?

3

2

1

7. Have you got any ideas to improve our environmental & social needs?

3

2

1

8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?

3

2

1

9. Does this Activity / training useful to improve learning attitude with zeal?

3

2

1

10. Does this Activity /training useful for you to work in multi-disciplinary team?

3

2

1

11. Does this Activity /training improve your mind to face any changes in your life?

3

2

1

Any other Comments:

Signature

*R. Anusuya*



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DEPARTMENT OF BECECE

ACADEMIC YEAR: 2022-2023

Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

Student Name : S. Lakshmi Priya

Date: 01.02.2023

Batch : 2020-2024

Year/Semester: IV / VI

Type of Activity: Value added  course / Industrial Visit / Implant Training / Guest Lecturer/ Seminar /

Conference / Workshop / Design Contest/ Project Contest / Sports / Games / Social Activities /

Certificate Program / Diploma Course /hackathon/ Ideathon / or any other \_\_\_\_\_

Organizing Institute: Excel Engineering College

Place: Komarapalayam

Provide your level of attainment for the following questions by ✓ in the given

[ 3 / 2 / 1 Indicates Level of Attainment; 3 - Very Much, 2 - Moderate, 1 - Some Extent]

1. Does this Activity/ Course improve your Technical Skill?

3  2  1

2. Does this Activity /Course improve your Problem Solving Skill?

3  2  1

3. Does this training / Course improve your practical Exposure?

3  2  1

4. Have you learnt any modern tools through this activity/ training?

Yes  No  if yes name of tool \_\_\_\_\_

5. Does this activity /training useful to improve your professional ethics?

3  2  1



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6. Does this activity /training useful to apply for any modern research programs?

3  2  1

7. Have you got any ideas to improve our environmental & social needs?

3  2  1

8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?

3  2  1

9. Does this Activity / training useful to improve learning attitude with zeal?

3  2  1

10. Does this Activity /training useful for you to work in multi-disciplinary team?

3  2  1

11. Does this Activity /training improve your mind to face any changes in your life?

3  2  1

Any other Comments:

Signature 



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DEPARTMENT OF ECE

ACADEMIC YEAR: 2022-2023

## Indirect Assessment of Program Outcomes & Program Specific Outcomes through Curricular and Extracurricular Activities

Student Name : M. Anandharathin

Date: 09/01/2023

Batch : 2020-2024

Year/Semester: 2/5

Type of Activity: Value added course / Industrial Visit / Implant Training / Guest Lecturer/ Seminar /

Conference / Workshop / Design Contest/ Project Contest / Sports / Games / Social Activities /

Certificate Program / Diploma Course /hackathon/ Ideathon / or any other \_\_\_\_\_

Organizing Institute: Excel Engineering college

Place: Komarapalayam.

Provide your level of attainment for the following questions by ✓ in the given

[ 3 / 2 / 1 Indicates Level of Attainment; 3 – Very Much, 2 – Moderate, 1 – Some Extent]

1. Does this Activity/ Course improve your Technical Skill?

3  2  1

2. Does this Activity /Course improve your Problem Solving Skill?

3  2  1

3. Does this training / Course improve your practical Exposure?

3  2  1

4. Have you learnt any modern tools through this activity/ training?

Yes  No  if yes name of tool \_\_\_\_\_

5. Does this activity /training useful to improve your professional ethics?

3  2  1



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6. Does this activity /training useful to apply for any modern research programs?

3

2

1

7. Have you got any ideas to improve our environmental & social needs?

3

2

1

8. Have you ever felt that your communication skill & leadership skill has been improved through this activity?

3

2

1

9. Does this Activity / training useful to improve learning attitude with zeal?

3

2

1

10. Does this Activity /training useful for you to work in multi-disciplinary team?

3

2

1

11. Does this Activity /training improve your mind to face any changes in your life?

3

2

1

Any other Comments:

M.   
Signature