CMR ENGINEERING COLEGE

(Approved by AICTE, New Delhi & Affiliated JNTU, Hyderabad)

Kandlakoya (V), Medchal Road, RR.Dist – 501401

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

List of Hobby Projects

(2020-21)

S.No	Name of the Hobby Project
1.	WATER LEVEL INDICATOR USING TRANSISTOR BC 548
2.	LED BLINKING USING IC 555
3.	MOBILE DETECTOR USING IC LM358
4.	FIRE ALARM USING IC LM358
5.	POLAR PLOT OF Z USING MATLAB
6.	SMOKE DETECTOR USING MQ2 GAS SENSOR
7.	ANALOG CLOCK USING MATLAB
8.	FINDING DAYS IN MONTH USING MATLAB
9.	3D GRAPHICS USING MESH PLOT OF THE SINC FUNCTION USING MATLAB
10.	FULL ADDER USING IC 7486,IC 7408 AND IC 7432
11.	4-BIT CARRY SKIP ADDER USING IC 74LS83
12.	AUTOMATIC DOOR BELL USING ARDUINO BOARD
13.	RAIN DETECTOR USING IC 555
14.	CLAP SWITCH USING IC 555
15.	DANCING LIGHTS USING TRANSISTOR BC547
16.	LOGIC GATES USING TRANISISTOR BC 547
17.	PHOTO SWITCH USING IC 555
18.	AUTOMATIC STREET LIGHT USING ARDUINO
19.	SIMPLE AUDIO AMPLIFIER USING TRANSISTOR 2N6292
20.	LED CHASER USING IC 555, IC 7490 AND IC 74154

COORDINATOR **HOD**

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

List of Hobby Projects
II YEAR (2019-20)

1.	Simple Wireless Power transmission Circuit to Glow an LED
2.	3rd Eye for Blind
3.	Electricity From Flowing Air
4.	Sound Amplifier
5.	Infrared Burglar alarm
6.	Cell Phone Detector
7.	Touch Sensor
8.	Password Based Door Lock System Using 8051 Microcontroller
9.	Light Dependent Resistor(LDR) Dark Sensor Circuit
10.	Clap Switch Circuit
11.	Laser Security Alarm
12.	Object counters Using Light Dependent resistors(LDR)
13.	Luggage Security Alarm Using NAND Gates
14.	Realization of OR Logic Gate
15.	Checking of HT12E and HT12D IC Working(Wire and Wireless)
16.	Password Security System Using XOR and NOR Gates
17.	Digital Dice Using IC 4017
18.	Burglar Alarm Using Universal Gates
19.	Universal Gates Using Transistors

COORDINATOR **HOD**

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List of Hobby Projects

II YEAR(2019-20)

S.No	Name of the Hobby Project
1.	Image Conversion from 2D To 3D
2.	Recognition of Vehicle Number Plate Using MAT LAB
3.	Real Time Face recognition
4.	Fingerprint Recognition Using MAT LAB
5.	Fake Currency Detection Using MAT LAB
6.	Detection of Wall Crack and length Estimation using MAT Lab
7.	Automatic Vehicle Counting and classification
8.	JPEG Image Compression
9.	Image Staganography
10.	Drowsy Driver Identification in MAT Lab Using Video Processing
11.	Emergency Alert for Women's Safety
12.	Investigation of MAT Lab as Platform in Navigation and Control of an Automated guided Vehicle Utilizing an Omni vision Sensor
13.	Generating the Combine Contour Plot and Quiver Plot Using MAT Lab
14.	Image Processing: Edge detection of Image Using MAT Lab
15.	Digital Clock and Analog Clock USING MATLAB
16.	Correlation Between Two Real Audio Signals
17.	Simple Calculator Using GUI in MAT Lab
18.	Shadow Detection and Removal in Images Using MAT Lab
19.	Measuring the Diameter of Object Within an Image Using MAT Lab

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List of Hobby Projects
II YEAR (2019-20)

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List of Hobby Projects
III YEAR(2019-20)

S.No	Name of the Hobby Project
1.	Automatic Street Light Using Arduino
2.	Automatic Watering System for Plants Using Arduino
3.	PIR Sensor Module
4.	Smart Blind Stick
5.	Home Automation Using Arduino
6.	Automatic Water Dispenser
7.	Tilt Sensor Using Arduino
8.	Flame Detector using Arduino
9.	RADAR using Arduino
10.	Smart Dust Bin
11.	Keypad Security System Using Arduino
12.	LED Dice
13.	Laser Security System Using Arduino
14.	8*8 LED Matrix Using Arduino
15.	Dual Flasher using 555 Timer
16.	Delay Circuit
17.	Battery Voltage State Indicator using IC 555
18.	Metal Detector By Using UA741 IC
19.	A Variable Audio Frequency Oscillator Using OP-AMP
20.	PWM technique Using IC 555
21.	Temperature Controlled DC Fan Using OP-AMP
22.	Dark Sensor Using LDR
23.	LED Chaser using 4017 Counter and 555 Timer
24.	Mosquito Repellant Using IC 555
25.	Object Detector
26.	Touch Alarm
27.	Wailing Siren Using IC 555
28.	Touch less Door Bell
29.	Shadow Detector Alarm Circuit with Two LDRs

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

List of Hobby Projects
III YEAR (2019-20)

1.	Touch sensor Using IC 555 Timer
2.	Flame Detector
3.	Huffman Encoding and Decoding
4.	Orthogonal Frequency Division Multiplexing
5.	Continuity Tester Using 555 Timer IC
6.	Audio Amplifier using IC PAM 8403
7.	Rain Detector
8.	Musical Bell
9.	Light Detector Using IC7400
10.	Power Fault Detector
11.	Battery Level Indicator
12.	Delay Circuit Using IC CA3130
13.	Darkness Sensor Circuit
14.	Touch Switch Using IC 555
15.	Mobile Detector
16.	Water Level Indicator Using 555 Timer
17.	Electronic Dice
18.	Alcohol detection
19.	Dark Sensor Using LM358
20.	Rain Sensor
21.	Speed Control of DC Motor by using Potentiometer
22.	Metal Detector
23.	Wireless AC Power Detector
24.	Light Detector Using NAND Gate
25.	Power Failure Alarm
26.	16-PSK With Custom Mapping using MATLAB
27.	DC Motor Direction Control

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Department of Electronics and Communication Engineering

List of Hobby Projects

(2018-19)

S.No	Name of the Hobby Project
1.	Generation of 3D Image of Cone Using MAT Lab
2.	Face Detection Using MAT Lab
3.	Finding the Roots of a Quadratic Equation Using MAT Lab
4.	Mobile Phone Detector Using IC CA3130
5.	Generation of Stream Line Plots of Vectors Using MAT Lab
6.	Speech Recognition Using Correlation in MAT Lab
7.	Headphones Amplifier Using BC239C
8.	Generation of White Noise Using MAT Lab
9.	Frequency Divider Circuit Using IC555 and 4017
10.	Digital Thermometer Using IC 741
11.	Automatic Street Light Control Using IC 555
12.	Break Failure Indicator Using IC 555
13.	Password Lock Using 555 IC

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HOBBY PROJECTS
Under
Project Based Learning (PBL)
(2018-19)
(I &II Sem)

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CONTENTS

1. INTRODUCTION

Hobby project/activity is necessary for staff as well as the students to improve the individual skills, encourage collaboration to allow students to cooperate and share resources in partners or small groups to acquire information to design a working model in lab. These projects are interdisciplinary by combine knowledge and skills from multiple subject areas, Support Self Directed Learning.

The benefit of hobby projects is to improve the students' skills. Students are grouped together to work, which foster communication skills and encourages even students with diverse and possibly conflicting personalities to find a common ground, or at the very least a way to work together. Part of this teamwork building helps introduce students to the specialization and delegation that are extremely prominent in the real world. Some students will naturally be more adept at some problem-solving methods than others, so students will figure out how to allocate resources (themselves) optimally by having part of the group work on one subset of tasks while another part works on another subset.

These projects develop practical skills in students. In spite of all the theory you learn, the industry also needs to know your ability to complete projects using your own initiative. This Project consists of selecting the suitable innovation in existing theory or Practical with each lab and suggest for proposals within the scope of the organization. This gives the basic idea about the mini and major projects.

In view of this hobby project, reports with block or flow diagram stating the applications is made jointly either from students or both students and staff submit along with results.

2. LIST OF HOBBY PROJECTS FOR II YEAR-I SEM

BASIC SIMULATION LAB			
S. No	**ROLL NO. OF THE STUDENTS**	**NAME OF THE STUDENTS**	**NAME OF THE HOBBY PROJECTS**
1.	178R1A0413	DESHETTI SWATHI	GENERATION OF 3D IMAGE OF CONE USING MATLAB
	178R1A0414	D VAMSHI	
	178R1A0415	DONKENA ALISHA	
2.	178R1A0422	NANGUNURI SRIHITHA	3D GRAPHICS USING MESH PLOT OF THE SINC FUNCTION USING MATLAB
	178R1A0424	INDRAGANTI ARUN	
	178R1A0425	JAYATEERTH MOHARIR	
	178R1A0427	KOTHAPALLI POOJITHA	
3.	178R1A0431	K AAKANKSHA	COMBINING OF CONTOUR PLOT AND QUIVER PLOT USING MATLAB
	178R1A0432	K CHAND PRASAD	
	178R1A0433	CHELIMALA RACHANA	
4.	188R5A0401	ADEM VINAY	TEXTURE SEGMENTATION USING GABOR FILTERS IN MATLAB
	188R5A0405	G SHIVA TEJA	
	188R5A0407	JONNOJU BRAHMATEJA	
5.	178R1A0487	J PRASHANTH KUMAR	CONVERTING COLOUR IMAGE INTO BLACK AND WHITE IMAGE
6.	178R1A0494	KOLLI SAI KUMAR	GENERATION OF STREAM LINE PLOTS OF VECTORS USING MATLAB
7.	188R5A0418	P SACHIN TENDULKAR	FACE DETECTION USING MATLAB
8.	178R1A04E7	LALAM SANTHOSHI	OPTIC DISC LOCALIZATION IN RETINAL IMAGES USING HISTOGRAM MATCHING IN MATLAB
9.	178R1A04H0	RENDLA NIHARIKA	AUTOMATIC CAR PARKING USING MALAB
10.	178R1A04J3	G SRINIVASA RAO	FRUIT RECOGNITION USING MALAB
11.	178R1A04K0	KOLLA RAKESH NAIDU	INDIAN CURRENCY NOTE RECOGNITION USING MALAB
12.	178R1A04K5	L MANISH GOUD	CONTROLLING OF DEVICE THROUGH VOICE USING MALAB
13.	188R5A0432	RAMIDI SUSHMITHA	FINDING THE ROOTS OF A QUADRATIC EQUATION USING MATLAB

14.	188R5A0442	K.AKHILA	AUTOMATIC VEHICLE COUNTING USING MALAB
15.	178R1A04L7	P ROHITH KUMAR	FINGERPRINT RECOGNITION USING MALAB
16.	178R1A04L8	P SREEJA	AUTOMATIC DOOR ACCESS SYSTEM USING MATLAB
17.	178R1A04M0	RVARUN KUMAR	LICENSED PLATE RECOGNITION USING MATLAB
18.	178R1A04M7	Y VAISHNAVI DEVI	AUTOMATIC METER READING USING MALAB
19.	188R5A0456	V.PAVANI	GUI BASED CALCULATOR USING MALAB
20.	168R1A04J1	D.RAMYA GRACE	CYLINDRICAL SURFACE ANALYSIS WITH WHITE LIGHT INTERFEROMETRY USING MALAB
BASIC ELECTRICAL AND ELECTRONICS LAB			
21.	178R1A0404	BANDA RAKESH	DRILL PRESS MACHINE USING DC MOTOR
	178R1A0405	B CHARAN TEJA	
	178R1A0406	B RAMA LAKSHMI	
22.	178R1A0422	N SRIHITHA	MOBILE CHARGER USING DC MOTOR
	178R1A0424	INDRAGANTI ARUN	
	178R1A0425	J MOHARIR	
23.	178R1A0458	VYAMSANI SNEHA	SPEED CONTROL OF DC MOTOR BY USING POTENTIOMETER
	178R1A0459	YERROLLA REKHA	
	178R1A0460	YELDURTHI NEHA	
24.	178R1A0485	G PRIYANKA	BATTERY CHARGER USING SCR
	178R1A0487	J PRASHANTH KUMAR	
	178R1A0489	KOLA SAI KIRAN	
25.	178R1A04C9	CH PRANEETHA	BATTERY OPERATED HEATER USING TRANSISTORS(TIP 122)
	178R1A04D0	CH JAGADEESH	
	178R1A04D1	DADI NIKITH REDDY	
	178R1A04D2	D SAI KIRAN	
	178R1A04E1	K. SHIRISHA ACHARI	
26.	178R1A04H4	S SUSHMA	AUTOMATIC DOOR LOCK USING LM 567
	178R1A04H5	SUMAYYA KHANAM	
	178R1A04H6	T. MAHENDHAR REDDY	
	178R1A04H7	TONNE VAISHNAVI	
27.	188R5A0442	K.AKHILA	SPEED AND DIRECTION CONTROLLING OF DC MOTOR BY MOBILE PHONE
	188R5A0443	K.CHAITANYA VARMA	
	188R5A0444	K.AKHIL KUMAR	
	188R5A0445	L.SHIREESHA	
28.	188R5A0456	V.PAVANI	

	168R1A0407	B.KARTHIK	AUTOMATIC SPRINKLER USING STEPPER MOTOR
	168R1A04J1	D.RAMYA GRACE	
	168R1A04L5	VAISHNAV SAI	
	168R1A04O0	M.CHARAN	
ELECTRONIC DEVICES & CIRCUITS LAB			
29.	178R1A0407	METTU SANJAY REDDY	MUSICAL BELL USING IC UM66
	178R1A0408	NARASINGOJI SAI	
	178R1A0409	CHAKILAM PRIYANKA	
30.	178R1A0413	DESHETTI SWATHI	MOBILE JAMMER USING IC 555
	178R1A0414	DEVANABOINA VAMSHI	
	178R1A0415	DONKENA ALISHA	
31.	178R1A0437	NAYANI BHAVANA	SMOKE DETECTOR USING LM358 AND MQ-2 SENSOR
	178R1A0438	NEELAM YUKTESH	
	178R1A0439	PATTELA JYOSTNA SREE	
32.	178R1A0455	URIMELLA SAI	AUTOMATIC STRRET LIGHT USING LDR USING BC547
	178R1A0456	VADLA MANASA	
	178R1A0457	VILASAGARAM	
33.	188R5A0402	ANUMULA SUPRIYA	MOBILE PHONE DETECTOR USING IC CA3130
	188R5A0404	DANDU SRAVANI	
	188R5A0406	GARDASU APARNA	
	188R5A0408	PENDOTA SREEJA	
34.	178R1A04D3	DUMBALA SAMATHA	RAIN ALARM USING IC 555
	178R1A04D4	DEVA HARSHITHA	
	178R1A04D6	GADARLA SAI KUMAR	
35.	178R1A04F2	M SHRAVAN KUMAR	FIRE ALARM USING IC LM358
	178R1A04F3	M SHRAVAN KUMAR	
	178R1A04F4	MD NABEEL AQUIB	
36.	178R1A04G3	PADMAM SAI PRASANNA	METAL DETECTOR USING IC 555
	178R1A04G4	P VARSHITHA	
	178R1A04G5	PAMBIDI MADHUKAR	
37.	178R1A04G9	PISSAY TEJASWINI	OPEN DOOR ALARM USING TRANSISTOR(SL100)
	178R1A04H0	RENDLA NIHARIKA	
	178R1A04H1	P SAI MANISH	
38.	178R1A04I1	VARSHA SREE	SOLAR CELL USING ZENER DIODES
	178R1A04I2	B. ANUSHA	
	178R1A04I3	M.ANUSHA	

3. LIST OF HOBBY PROJECTS FOR II YEAR-II SEM

S. NO	ROLL NO. OF THE STUDENTS	NAME OF THE STUDENTS	NAME OF THE HOBBY PROJECTS
ANALOG COMMUNICATIONS LAB			
1.	178R1A0448	SAMA SAHITH REDDY	HEXAPOD SIMULATION IN MAT LAB
2.	178R1A04A2	MHETRE GAYATHRI	IMAGE ZOOMING WITH BILLINEAR INTERPOLATION IN MATLAB
3.	178R1A0428	KALIDINDI RAJA SREE	SPEECH RECOGNITION USING CORRELATION IN MATLAB
4.	178R1A04B7	T VIDYA SHREE	SUN TRACKING SOLAR PANEL
5.	178R1A04M5	THUMULURI SIRISHA	TEMPERATURE AND HUMIDITY CONTROL USING AURDINO
	178R1A04M6	U POORNACHANDER	
	178R1A04M7	Y VAISHNAVI DEVI	
	188R1A0436	BALLA GAYATHRI DEVI	
	188R1A0437	CH KIRAN	
6.	188R1A0438	E RAGHAVENDRA RAO	SPREDING TRANSMITTING SYMBOLS IN FORM ACROSS STC-MIMO FREQUENCY SELECTIVE REYLEIGH FADING USING MATAB
	188R1A0447	N SRAVAN KUMAR	
	188R1A0440	JELLA SAIRAM	
	188R1A0442	KONUKATI AKHILA	
ANALOG ELECTRONICS LAB			
7.	178R1A0485	G. PRIYANKA	HEAT SENSOR WITH FAN COOLING USING IC 741
	178R1A0487	J. PRASHANTH	
	178R1A0489	K.SAI KIRAN	
	178R1A0490	K.VEENA	
8.	178R1A0499	M.AMANI	ANTI-BURGLER ALARM USING UM3561 IC AND PIR SENSOR
	178R1A04A0	S. MAYURESH	
	178R1A04A8	P. RUCHITHA	
	178R1A04A9	P. AJAYKUMAR	
9.	178R1A0491	K. LAVANYA	MOBILE BUG USING IC 555
	178R1A0492	K. UDHYA KIRAN	
	178R1A0493	K. DIVYA TEJA	
	178R1A04B9	U. PAVAN KUMAR	
10.	178R1A0464	B.G. TEJESHWINI	ELECTRONIC DECISION MAKER USING IC 4046
	178R1A0465	B. GNANA PRASUNA	
	178R1A0466	B. NITHISH BHAVESH	

	178R1A0483	G. VEDHA VANDHANA	
11.	178R1A04B6	T V DIVEESH SRIKAR	POWER FAILURE ALARM USING IC 555
	178R1A04B8	PRUTHVI	
	178R1A04B4	KHALEEG	
	178R1A04C0	DHEERAJ	
12.	188R5A0431	RAMNI SRINATH	DIGITAL STOP WATCH USING IC 555 AND IC 4510
	188R5A0432	RAMIDI SUSHMITHA	
	188R5A0433	VANKA SAIRAM	
PULSE AND DIGITAL CIRCUITS LAB			
13.	178R1A0464	B.G TEJASHWINI	DIGITAL SECURITY ALARM USING IC 4511
	178R1A0465	B GNANA PRASUNA	
	178R1A0466	B NITIN BHAVESH	
	178R1A0469	BACHA SWETHA	
	178R1A0483	G VEDA VANDANA	
	188R5A0415	G.RAKESH	
14.	178R1A04C4	ASILA CHANDRA SHEKAR	7 SEGMENT DISPLAY COUNTER USING IC 74LS47
	178R1A04C5	T JEEVAN KUMAR	
	178R1A04C6	B SUKENDER REDDY	
15.	178R1A04H4	SOMAROTHU SUSHMA	VARIABLE POWER SUPPLY USING LM 7805
	178R1A04H5	SUMAYYA KHANAM	
	178R1A04H6	T MAHENDHAR REDDY	
16.	178R1A04J6	JAKKA RACHANA	AUTOMATIC NIGHT LIGHT USING BC 547
	178R1A04J7	JANNU ISHWARYA	
	178R1A04J8	JOTHULA UDAY KUMAR	
17.	178R1A04J9	KARIPE NIKITHA	TRANSISTOR INFRARED PROXIMITY USING BC 547 AND PHOTO DIODE
	178R1A04K0	KOLLA RAKESH NAIDU	
	178R1A04K1	KOLLI RENUKA	
	178R1A04K2	KONDA KALYANA	
18.	178R1A04L1	MYAKA RAMESH	MASQUITO REPPLER USING IC 555
	178R1A04L2	Y PAVAN KUMAR REDDY	
	178R1A04L3	NARIGA CHANDU	
19.	178R1A04L4	NOOKALA MAHESH	HEADPHONES AMPLIFIER CIRCUIT USING BC239C
	178R1A04L5	O BHAGYASREE	
	178R1A04L6	PASAPULA SAI RAM	
	178R1A04L7	P ROHITH KUMAR	
20.	188R5A0453	SALMA BEGUM	STATIC ELECTRICITY DETECTOR USING IC 555
	188R5A0454	SURNAR MOUNIKA	

4. LIST OF HOBBY PROJECTS FOR III YEAR-I SEM

S. NO	ROLL NO. OF THE STUDENT	NAME OF THE STUDENT	NAME OF THE HOBBY PROJECTS
DIGITAL COMMUNICATIONS LAB			
1.	168R1A0401	AVULA DEEPAK	MOTION DETECTOR USING BC337 AND PIR-SENSOR
	168R1A0402	AGEERU KEERTHI	
	168R1A0403	A RENADEVI	
2.	168R1A0417	SHAKDI AKHILA	MOBILE PHONE DETECTOR USING LM 358
	168R1A0418	BURANI REVATHI	
	168R1A0419	CHINTALA GANESH	
3.	168R1A0420	CH NAVEEN KUMAR	2KM FM TRANSMITTER USING TRANSISTOR 2N2369
	168R1A0421	CH NARASIMHA RAO	
	168R1A0422	CH TEJASWI	
4.	168R1A0448	P SUDHARSHAN REDDY	LASER SECURITY SYSTEM USING LM 358 AND IC 555
	168R1A0449	P DEEKSHA ANVITHA	
	168R1A0452	RAO RACHANA	
5.	168R1A0477	G NAVYA	MOBILE SIGNAL BOOSTER USING IC LM386
	168R1A0478	G MADHULIKA	
	168R1A0479	JAVVADI JATHIN	
6.	168R1A04C8	B ESWAR VARMA	GENERATION OF WHITE NOISE USING MATLAB
	168R1A04C9	B SAIKUMAR	
	168R1A04D0	E SWAPNA	
7.	178R5A0417	KALE SHIVANI BAI	FREQUENCY DIVIDER CIRCUIT USING IC 555 AND 4017
	178R5A0418	JEDA ANIL	
	178R5A0421	GOKIKAR VENKATESH	
	168R1A04C0	V PAVANKALYAN	
LINEAR IC APPLICATIONS LAB			
8.	168R1A0419	CHINTALA GANESH	SHADOW SENSOR USING LM 741
	168R1A0420	CH NAVEEN KUMAR	
	168R1A0421	CH NARASIMHA RAO	
9.	168R1A0458	V RADHAKRISHNA	LOW VOLTAGE INDICATOR USING BC 547
	168R1A0459	V MEGHANA	
	178R5A0401	DASARI SAI KRISHNA	
	158R1A0439	CH SHARATH	
10.	168R1A0466	B SRUHILA	OBSTACLE DETECTOR USING IR SENSOR USING LM 358
	168R1A0467	CH BHAVYA	
	168R1A0468	CH RAVALI	

11.	168R1A0485	K TEJASWINI	ELECTRONIC PIANO USING 555 TIMER
	168R1A0486	K HAASAN SARATH	
	168R1A0487	K NARESH	
12.	168R1A0488	K PRASHANTHI	TRAFFIC LIGHT CONTROLLER USING IC 555 AND 4017
	168R1A0489	K KEERTHI	
	168R1A0490	K SATHVIKA	
13.	168R1A04A1	MOHAMMAD ARIF	LIGHT SENSOR USING LM358
	168R1A04A2	M SAINATH	
	168R1A04A3	N PRALEK	
14.	168R1A04A6	P JYOTHIRMAI	DIGITAL THERMOMETER USING IC 741
	168R1A04B2	REVATHI REKAPALLI	
	168R1A04B7	V RAGINI	
15.	178R5A0411	GURRALA PRAVILIKA	FLASH LIGHT LED BY USING 555 TIMER
	178R5A0412	JANGITI POORNIMA	
	178R5A0413	JANGAPALLI JHAANSI	
16.	178R5A0414	DUGYALA SAI RAM	AUDIO AMPLIFIER USING LM 386 IC
	178R5A0415	G NAVYA	
	178R5A0416	KARRE RAJU	
17.	178R5A0423	G MANIDEEP	AUTOMATIC STREET LIGHT CONTROL SYSTEM USING IC 555
	178R5A0425	K SANDEEP	
	178R5A0426	V SRIVIDYA	
	158R1A04B8	K JAGDISH	
18.	168R1A04C1	A.CHANDRAKANTH	IR PROXIMATE SENSOR USING LM 358
	168R1A04C2	A. VAMSHI	
	168R1A04C3	A.PRANAY	
	168R1A04C5	B.THIRUMALESH	
19.	168R1A04D5	C.VAMSI KRISHNA	ELECTRONIC EYE USING TRANSISTOR BC 547
	168R1A04D6	D.SUMUKH	
	168R1A04D7	D.KALYAN	
	168R1A04D9	G MAHIDHAR	
20.	168R1A04G2	R.THAPASWI REDDY	CLAP SWITCH USING IC 555
	168R1A04G3	LAXMI PRIYTA	
	168R1A04G4	S RAGHU VAMSHI	
	168R1A04G5	S RAVALITHA	
21.	168R1A04J7	G SUMANTH	BRAKE FAILURE INDICATOR USING IC 555
	168R1A04J8	GOLI ANUPAMA	
	168R1A04J9	GORANTA RAVALIKA	
22.	168R1A04K0	I SAI TEJASWI	CELL PHONE DETECTOR CIRCUIT USING IC CA3130
	168R1A04K1	JANGAM SRAVAN	
	168R1A04K3	K PAVANI	
23.	168R1A04K7	K KARTHIK	DUAL LED FLASHER CIRCUIT

	168R1A04K8	K MOUNIKA	USING 555 TIMER IC
	168R1A04K9	K ANJIREDDY	
DIGITAL IC APPLICATIONS LAB			
24.	168R1A0417	SHAKDI AKHILA	TEXA INSTRUMENT COUNTER REGISTER USING IC 74LS165
	168R1A0418	BURANI REVATHI	
	168R1A0419	CH GANESH	
25.	168R1A0423	CH VENKATRAM REDDY	PASSWORD LOCK USING 555 IC
	168R1A0424	D ARUNKUMAR REDDY	
	168R1A0425	D KAVITHA	
26.	168R1A0432	GOPI MOGILI	FADING OF LED USING 555 IC
	168R1A0433	J SAI KALYAN	
	168R1A0434	J ROJA	
27.	168R1A0439	L UPAGNA	WAILING SIREN USING 555 IC
	168R1A0441	M SANDEEP CHARY	
	168R1A0442	N POOJA	
	168R1A0443	P DIVYA	
28.	168R1A0445	PAYASAM MEGHANATH	PASSWORD LOCK USING 555 IC
	168R1A0446	VIKAS P	
	168R1A0447	PALAKURTHY	
	168R1A0448	PATEL SUDHARSHAN	
	168R1A0449	P DEEKSHA ANVITHA	
29.	168R1A0452	RACHANA	BATTERY LEVEL INDICATER USING LM3914 IC
	168R1A0457	VIJAY	
	168R1A0458	RADHA KRISHNA	
	168R1A0459	V. MEGHANA	
30.	178R5A0402	BANGARU SOWMYA	VOLTAGE DOUBLER USING IC 555
	178R5A0406	ANNADI ANJALI DEVI	
	178R5A0407	D. SHIVANI	
	178R5A0409	BANDARU SAISREE	
31.	168R1A0468	CH. RAVALI	TOUCH ON&OFF LIGHT USING IC 555
	168R1A0477	G. NAVYA	
	168R1A0478	MADHULIKA	
	168R1A0479	JATHIN	
32.	168R1A04A8	P.SHIVAKUMAR	MOBILE DETECTOR USING LM 358
	168R1A04A9	R. SNEHA REDDY	
	168R1A04B5	S. SURYA	
33.	168R1A04B0	SHANTHAN	WATER LEVEL INDICATOR USING IC 7404IN
	168R1A04B1	HARISH	
	168R1A04B6	NIKHILA	
34.	168R1A04B7	V. RAGINI	ELECTRIC FIELD DETECTOR USING CA3140
	168R1A04A6	P. JYOTHIRMAI	

	168R1A04B2	R. REVATHI	
	168R1A0467	CH. BHAVYA	
35.	168R1A04A4	O. KEERTHI	LED CHASER CIRCUIT USING IC555,IC4017
	168R1A04B4	S. AKHILA	
	178R5A0419	K. VYSHNAVI	
36.	178R5A0411	G. PRAVALIKA	LIGHT DETECTOR USING NAND GATE
	178R5A0412	J. POORNIMA	
	178R5A0413	J. JHANSIRANI	
37.	178R5A0414	D. SAIRAM	TOUCH SWITCH USING IC 555
	178R5A0415	G. NAVYA	
	178R5A0416	K. RAJU	
38.	178R5A0417	G.SHIVANI	MUSIC RHYTHM LED FLASH LIGHT USING MICROPHONE
	178R5A0420	G.POOJA	
	178R5A0422	M.MAMATHA	
39.	178R5A0421	G. VENKATESH	AUDIO AMPLIFIER CIRCUIT USING IC 555
	178R5A0418	J. ANIL	
	168R1A04C0	V. PAWAN KALYAN	
40.	178R5A0423	G. MANIDEEP	ELECTRONIC DICE USING IC 555& IC 4017
	178R5A0425	K. SANDEEP	
	178R5A0426	V. SREEVIDYA	
	158R1A04B8	K.JAGADISH	
41.	168R1A04C1	AGRAM	PROGRAMMING LED IN 8051
	168R1A04C2	A SAI VAMSHI	
	168R1A04C3	A PRANAY	
	168R1A04C5	B THIRUMALESH	
42.	168R1A04D0	M LEELARAMYA	BASIC STOP WATCH USING MULTISIM
	168R1A04D1	M SURYA TEJA	
	168R1A04D3	M MANASA	
	168R1A04E5	J JYOTHI	
43.	168R1A04D5	CH VAMSI KRISHNA	DSIGN A 60 SECONDS TIMER BY USING 7490N & 7447N IC IN MULTISIM
	168R1A04D6	D SUMUKH	
	168R1A04D7	D KALYAN	
	168R1A04D9	G MAHIDHAR	
	168R1A04E9	M VENKATESH	

5. LIST OF HOBBY PROJECTS FOR III YEAR-II SEM

S. NO	ROLL NO. OF THE STUDENT	NAME OF THE STUDENT	NAME OF THE HOBBY PROJECTS
DIGITAL SIGNAL PROCESSING LAB			
1.	168R1A0402	AVULA DEEPAK	DETECTING CIRCLES IN AN IMAGE USING MATLAB
	168R1A0406	HARINATH B	
2.	168R1A0414	B VINOD GOUD	BLUR DETECTION USING GRAY SCALE USING MATLAB
	168R1A0415	BVAIBHAV	
	168R1A0416	B VINAY KUMAR	
	168R1A0458	V RADHAKRISHNA	
3.	168R1A0423	CH VENKAT RAM REDDY	CURRENCY RECOGNITION USING IMAGE PROCESSING
	168R1A0436	K RAVI NAYAK	
4.	168R1A0419	CH GANESH	IMAGE QUALITY ASSESSMENT FOR FAKE BIOMETRIC DETECTION USING MATLAB
	168R1A0420	CH NAVEEN KUMAR	
	168R1A0421	CH NARASIMHA RAO	
5.	168R1A0422	CH TEJASWI	AUTOMATED PARKING VALET USING MATLAB
	168R1A0443	P DIVYA--	
	168R1A0447	P HARICHANDANA	
6.	168R1A0438	K RAGHU VARDHAN REDDY	TARGET RECOGNITION USING MATLAB
	168R1A0444	P HEMANTH	
	168R1A0457	V RAMAKRISHNA VIJAY	
7.	168R1A0433	JANGILI SAI KALYAN	CURRENCY AUTHENTICATING IMAGE PROCESSING
	168R1A0439	L UPAGNA	
8.	168R1A0429	G RAGHAVA	COLOUR DETECTION USING MATLAB
	168R5A0446	VIKAS P	
	168R1A0454	SHAIK FAISAL	
	168R1A0456	U HARISH	
9.	168R1A0466	BOORNA SRUHILA	GAIN & NOISE CALCULATION OF CASCADED SYSTEM USING MATLAB
	168R1A0467	CH BHAVYA	
	168R1A0468	CH RAVALI	
10.	168R1A0496	M RISHAB	CONVERSION OF TEXT TO AUDIO SIGNAL USING MATLAB
	168R1A0498	M ASHWINI	
	168R1A04A1	MOHAMMAD ARIF	
11.	168R1A04A2	M SAINATH	SPEECH FRAMING USING
	168R1A04A3	N PRALEK	

	168R1A04A4	O KEERTHI	MATLAB
	168R1A04B4	SATKUR AKHILA	
12.	168R1A04B1	R HARISH REDDY	BIT PLANE SLICING USING MATLAB
	168R1A0489	K KEERTHI	
	168R1A04B6	U NIKHILA	
13.	168R1A04B7	V RAGINI	REMOVAL OF RGB PLANE IN AN IMAGE USING MATLAB
	168R1A04C0	V PAVANKALYAN	
14.	178R5A0414	DUGYALA SAI RAM	DECREASING THE BRIGHTNESS OF AN IMAGE USING MATLAB
	178R5A0415	GUJJULA NAVYA	
	178R5A0416	KARRE RAJU	
15.	178R5A0417	KALE SHIVANI BAI	SIGNATURE VERIFICATION USING MATLAB
	178R5A0418	JEDA ANIL	
	178R5A0419	KAVALI VAISHNAVI	
16.	168R1A04K4	K RAMANI PRIYA	IMAGE COLOUR CONVERSION AND HISTOGRAM USING MATLAB
	168R1A04K5	K SOUMYA	
	168R1A04M1	P ACHUTH VARMA	
17.	168R1A04K6	KONDA SRUJANA	DIAMETER OF AN OBJECT BY USING MATLAB
	168R1A04L3	MANDA VINAY	
	168R1A04M2	P PRAVEEN	
18.	168R1A04L1	M ABIRAM	AUTOMATED CAR PARKING VALET USING MATLAB
	168R1A04M9	S SUSWATHI	
	168R1A04N2	SIRIMALLE	
MICRO PROCESSOR AND MICRO CONTROLLER LAB			
19.	168R1A04C8	B ESWAR VARMA	SEQUENTIAL LED CONTROLLER USING ARDUINO
	168R1A04C9	B SAIKUMAR	
	168R1A04D0	B SWAPNA	
20.	168R1A04D6	D SUMUKH	AUTOMATIC STRET LIGHT USING MICROCONTROLLER
	168R1A04D7	D KALYAN	
	168R1A04D9	G MAHIDHAR	
21.	168R1A04E2	G ANIL REDDY	ARDUINO BASED COLLISION DETECTION WARNING SYSTEM
	168R1A04E5	J JYOTHI	
	168R1A04E8	M SHIVANI	
22.	168R1A04E9	M VENKATESH	WATER LEVEL CONTROLLER USING 8051
	168R1A04F1	M HARIKA	
	168R1A04F2	M CHENCHU NAGA SAI	
23.	168R1A04F6	NAVYA TEJA D	INTERFACING ARDUINO WITH PUSH BUTTON
	168R1A04F7	NETHI HARITHA	
	168R1A04G0	P VEDANATH	
24.	168R1A04G4	S RAGHU VAMSHI	INTERFACING LCD WITH PIC MICROCOTROLLER
	168R1A04G5	S RAVALITHA	

	168R1A04G6	SAGI SOWJANYA	
25.	168R1A04H0	SHREYA BHARTI	INTERFACING GRAPHICS LCD WITH 8051 MICROCONTROLLER
	168R1A04H1	T APURVA	
	168R1A04H3	T POONAM SINGH	
26.	178R5A0427	P NARESH	PRODUCING 0-9 COUNT FOR SEVEN SEGMENT DISPLAY USING KEIL SOFTWARE
	178R5A0428	P MOUNIKA	
	178R5A0429	M CHANDU	

HOBBY PROJECTS
Under
Project Based Learning (PBL)
(2019-20)
(I &II SEM)

CMR ENGINEERING COLEGE

(Approved by AICTE, New Delhi & Affiliated JNTU, Hyderabad)

Kandlakoya (V), Medchal Road, RR.Dist – 501401

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CONTENTS

1. INTRODUCTION

Hobby project/activity is necessary for staff as well as the students to improve the individual skills, encourage collaboration to allow students to cooperate and share resources in partners or small groups to acquire information to design a working model in lab. These projects are interdisciplinary by combine knowledge and skills from multiple subject areas, Support Self Directed Learning.

The benefit of hobby projects is to improve the students' skills. Students are grouped together to work, which foster communication skills and encourages even students with diverse and possibly conflicting personalities to find a common ground, or at the very least a way to work together. Part of this teamwork building helps introduce students to the specialization and delegation that are extremely prominent in the real world. Some students will naturally be more adept at some problem-solving methods than others, so students will figure out how to allocate resources (themselves) optimally by having part of the group work on one subset of tasks while another part works on another subset.

These projects develop practical skills in students. In spite of all the theory you learn, the industry also needs to know your ability to complete projects using your own initiative. This Project consists of selecting the suitable innovation in existing theory or Practical with each lab and suggest for proposals within the scope of the organization. This gives the basic idea about the mini and major projects.

In view of this hobby project, reports with block or flow diagram stating the applications is made jointly either from students or both students and staff submit along with results.

2. LIST OF HOBBY PROJECTS

II YEAR			
S. No	**ROLL NO.**	**NAME OF THE STUDENTS**	**NAME OF THE HOBBY PROJECTS**
BASIC SIMULATION LAB			
1.	188R1A0402	A.SANDEEP	INVESTIGATION OF MATLAB(R) AS PLATFORM IN NAVIGATION AND CONTROL OF AN AUTOMATED GUIDED VEHICLE UTILISING AN OMNIVISION SENSOR
	188R1A0405	A.VAISHNAVI	
	188R1A0430	K.THARUN	
2.	188R1A0478	G YASHWANTH	IMAGE PROCESSING:EDGE DETECTION OF IMAGE USING MAT LAB
	188R1A0486	K SAI RISHIKA	
	188R1A0487	K VISHAL	
3.	188R1A0488	K.AKHIL	GENERATING THE COMBINE CONTOUR PLOT AND QUIVER PLOT USING MAT LAB
	188R1A0489	K.VAIBHAV	
	188R1A0491	K.SRILATHA	
4.	188R1A04N	S.J.PHANI KUMAR	MEASURING THE DIAMETER OF AN OBJECT WITHIN AN IMAGE
	198R5A0405	B SAI NIKHIL	
	198R5A0409	G.NIKHITHA	
5.	188R1A0404	ANDRA SAI SATYA	IMAGE CONVERSION FROM 2D TO 3D
	188R1A0407	B SAI PRAVEEN	
	188R1A0415	D NAGA SAI KEERTHANA	
6.	188R1A0433	M JYOTHI	RECONGNITION OF VEHICLE NUMBER PLATE USING MATLAB
	188R1A0438	M SRINIVAS	
	188R1A0439	MOHIT RAMAWAT	
7.	188R1A0463	ALLI VENU	REAL TIME FACE RECOGNITION
	188R1A0469	B SHASHI VARDHAN	
	188R1A0470	B MADHU SRAVANI	
8.	188R1A0476	DAMA KUSUMA KUMARI	FINGER PRINT RECOGNISATION USING MATLAB
	188R1A0493	M BHARATH KUMAR	
	188R1A0495	MADURGI BHASKAR	
9.	188R1A04A	RASHMI	DETECTION OF WALL CRACK AND LENGTH ESTIMATION USING MATLAB SOFTWARE
	188R1A04A	R NARESH SAI ANEESH	
	188R1A04B0	TENETI SRESHNA	
10.	188R1A04H	RAVULA ANILKUMAR	AUTOMATIC VEHICLE COUNTING AND CLASSIFICATION
	188R1A04H	SAKSHI SINGH	
	188R1A04H	SARABU VINUTHNA	
11.	188R1A04H	SNEHITHA BACHU	JPEG IMAGE COMPRESION
	188R1A04H	T SAI TEJESHWAR	
	188R1A04J5	G SHYAMALA	
12.	188R1A04I4	B VAISHNAVI	FAKE CURRENCY DETECTION BY USING IMAGE PROCESSING
	188R1A04I7	B SAIRAM	
	188R1A04I8	B SANDEEP KUMAR	
13.	188R1A04J7	H DHARANI	IMAGE STAGANOGRAPHY
	188R1A04J8	IMMANENI SAI MANOJ	

	188R1A04K	K SAI NANDINI	
14.	188R1A04L7	N BHAVANI	DROWSY DRIVER IDENTIFICATION IN MATLAB USING VIDEO PROCESSING
	188R1A04M	P THUKARAM	
	188R1A04M2	P MOUNIKA	
15.	188R1A04M	FAROOK SHAIK	SHADOW DETECTION AND REMOVAL IN IMAGES USING
	188R1A04N	NIKITHA REDDY	
16.	198R5A0415	N SAI SUSHANTH	EMERGENCY ALERT FOR WOMEN'S SAFETY
	198R5A0416	N SHASHANK	
	198R5A0421	S SHIVAKUMAR	
	198R5A0423	V SAMTHA	
17.	188R1A04I0	Y RANJITH	DIGITAL CLOCK & ANALOG CLOCK USING MATLAB
	188R1A04I1	B SANDHYA	
	188R1A04I3	BESTHA RAKESH	
18.	188R1A04L9	N.GURU PRASAD	CORRELATION BETWEEN TWO REAL AUDIO SIGNALS
	188R1A04M3	N. YESHWANTH	
19.	188R1A04G6	P SHASHIDHAR	SIMPLE CALCULATOR USING GUI IN MATLAB
	188R1A04H3	KOUSHIK	
	188R1A04F7	PRASANNA	
ELECTRONIC DEVICES AND CIRCUITS LAB			
20.	188R1A0478	GANJI YASHWANTH	CLAP SWITCH CIRCUIT
	188R1A0486	K VISHAL	
	188R1A0487	K SAI RISHITHA	
21.	188R1A0488	KANNURI AKHIL	LASER SECURITY ALARM
	188R1A0489	K.VAIBHAV	
	188R1A0491	K.SRILATHA	
22.	188R1A04C0	ASHWINI	LIGHT DEPENDENT RESISTOR (LDR) DARK SENSOR CIRCUIT
	188R1A04C3	A.JEEVAN REDDY	
23.	188R1A04D3	CH CHANDANA	TOUCH SENSOR
	188R1A04D4	CH SOWMYA	
	188R1A04D5	D THANISHKA	
24.	188R1A04E1	D NAGA PRIYA	PASSWORD BASED DOOR LOCK SYSTEM USING 8051 MICROCONTROLLER
	188R1A04E9	K VIJAY KUMAR	
	188R1A04F1	KANDULA SOUMYA	
25.	188R1A04I0	Y RANJITH	ELECTRICITY FROM FLOWING AIR
	188R1A04I1	B SANDHYA	
	188R1A04I3	BESTHA RAKESH	
26.	188R1A04I4	BODA VAISHNAVI	CELL PHONE DETECTOR
	188R1A04I7	Y SAIRAM	
	188R1A04I8	B SANDEEP KUMAR	
27.	188R1A04J1	CH.PRASHANTH	SOUND AMPLFIER
	188R1A04J3	RAGHAVENDRA	
	188R1A04J6	TARUN	
28.	188R1A04M9	SHAIK FAROOK	INFRARED BURGLAR ALARM
	188R1A04N8	K NIKHITHA	
29.	198R5A0403	BAITHI BHAVANI	SIMPLE WIRELESS POWER

	198R5A0404	B.HARINI	TRANSMISSION CIRCUIT TO GLOW AN LED
	198R5A0408	GATTU SUNIL VARMA	
30.	198R5A0410	G. APEKSHA	3rd EYE FOR BLIND
	198R5A0413	M.CHANDRA SHEKAR	
	198R5A0419	R.CHANDRAKALA	
	188R1A0458	KARTHIK	
DIGITAL SYSTEM DESIGN LAB			
31.	188R1A0410	B SANJANA	OBJECT COUNTERS USING LIGHT DEPENDENT RESISTOR(LDR)
	188R1A0411	B SAIRAM LAXMAN	
	188R1A0414	D SUSHMA	
32.	188R1A0446	P KEERTHI PRIYA	LUGGAGE SECURITY ALARM USING NAND GATES
	188R1A0451	SAI CHARAN BHUPATHI	
	188R1A0453	T BHADUR BHANDARI	
33.	188R1A04A6	S RAKESH	REALIZATION OF OR LOGIC GATE
	188R1A04A7	S SAI MANOHAR	
	188R1A04B2	T SUNINEE	
	188R1A04B6	V JAYA SREE	
34.	188R1A04C6	ARYAN CHUTKE	CHECKING OF HT12E AND HT12D IC WORKING (WIRED AND WIRELESS)
	188R1A04C7	ASAPU NEELIMA	
	188R1A04C9	B VINAY REDDY	
	188R1A04E0	DUMNE VENU	
35.	188R1A04E4	G LASYA PRIYA	PASSWORD SECURITY SYSTEM USING XOR AND NOR GATES
	188R1A04E5	GURRALA HEMALATHA	
	188R1A04E6	JYOTHI BHATI	
36.	188R1A04F2	K NAGA KARTHIK	DIGITAL DICE USING CD4017 IC
	188R1A04F3	K SRIKANTH REDDY	
	188R1A04F8	M VENKATESH	
37.	188R1A04H8	U VENKATARJUN	BURGLAR ALARM USING UNIVERSAL GATES
	188R1A04H9	V JHANSI	
	188R1A04I6	BOINNE VAMSHI	
38.	198R5A0402	A CHAITANYA KUMAR	DESIGN OF UNIVERSAL GATES USING TRANSISTORS
	198R5A0414	N KALYAN GOUD	
	198R5A0417	P SWATHI	
III YEAR			
DIGITAL IC APPLICATIONS LAB			
39.	178R1A04C3	A. DIVYA	AUTOMATIC STREET LIGHT USING ARDUINO
	178R1A04F5	M LEELARAMYA	
	178R1A04G3	P. SAI PRASANNA	
	178R1A04G4	P. VARSHITHA	
40.	178R1A04I6	BALLANKI SURESH	AUTOMATIC WATERING SYSTEM FOR PLANTS USING ARDUINO
	178R1A04L0	M VINEETHA	
	178R1A04L7	P ROHITH KUMAR	
	178R1A04L9	PUSAPATI KAVYA	
41.	178R1A0457	V KIRANMAYEE	PIR SENSOR MODULE
	178R1A0463	ALWALA DIVYA	
	178R1A04E7	L SANTHOSHI	
	178R1A04E8	M DEEPSHIKA	
42.	188R5A0402	A. SUPRIYA	SMART BLIND STICK
	188R5A0404	DANDU SRAVANI	

	188R5A0408	PENDOTA SREEJA	
	188R5A0419	RENDLA PUJITHA	
43.	178R1A04K5	L. MANISH GOUD	HOME AUTOMATION USING ARDUINO
	178R1A04L4	N. MAHESH KUMAR	
	178R1A04M3	S SWAROOP SAI	
	178R1A04M4	T. SATHVHIK	
44.	178R1A0483	G. VEDA VANDANA	AUTOMATIC WATER DISPENSER
	178R1A0490	K.VEENA REDDY	
	178R1A0499	MANDA AMANI	
	188R5A0414	GATTU DIVYA	
	188R5A0417	KORUKANTI PALLAVI	
45.	178R1A04F9	M SLAGHANA PAVANI	TILT SENSOR USING ARDUINO
	178R1A04H1	P SAI MANISH	
46.	178R1A04I2	ANUSHA BINDIGA	FLAME DETECTOR USING ARDUINO
	178R1A04I3	ANUSHA MUTHYALU	
	178R1A04J6	JAKKA RACHANA	
	178R1A04J7	JANNU ISHWARYA	
	178R1A04K1	KOLLI RENUKA	
47.	178R1A0465	B GNANA PRASUNA	RADAR USING ARDUINO
	178R1A0485	GOWLIKAR PRIYANKA	
	178R1A0492	K. UDAYKIRAN	
	178R1A04A2	E GAYATHRI	
48.	178R1A0487	J PRASHANTH KUMAR	SMART DUST BIN
	178R1A0494	KOLLI SAI KUMAR	
	178R1A04B0	POTHURAJU NAVEEN	
	188R5A0420	THELLA VAMSHI	
49.	178R1A0446	P SAI PRASAD	KEYPAD SECURITY SYSTEM USING ARDUINO
	178R1A0451	SUNGALA RUKESH	
	178R1A04A9	P AJAY KUMAR	
	188R5A0413	B RAMYA REDDY	
50.	178R1A0473	CH SRAVANI	LED DICE
	178R1A0474	CHAVA NAVYA SRI	
	178R1A0481	GATLA POOJA	
	178R1A04A7	P NAVYA SREE	
51.	178R1A0479	GADE MOUNIKA	LASER SECURITY SYSTEM USING ARDUINO
	178R1A0482	G. SOWMYA	
	178R1A04A6	PADURU OMINI REDDY	
52.	178R1A04L8	PANYALA SREEJA	8*8 LED MATRIX USING ARDUINO
	178R1A04M2	SHADA BHAVANA	
	188R5A0454	SURNAR MOUNIKA	
	188R5A0456	V PAVANI	
LINEAR IC APPLICATIONS LAB			
53.	178R1A0454	U DHARANI PRIYA	DUAL FLASHER USING IC 555 TIMER
	178R1A0459	YERROLLA REKHA	
	178R1A0460	YELDURTHI NEHA	
54.	178R1A0432	K CHAND PRASAD	DELAY CIRCUIT
	178R1A0443	P AMAR SINGH	
	178R1A0445	P AKSHAY SHANKER	
	178R1A04C0	VENISETTI DHEERAJ	

	188R5A0405	G SHIVA TEJA	
55.	178R1A04K5	L MANISH GOUD	BATTERY VOLTAGE STATE INDICATOR USING IC555
	178R1A04L0	M VINEETHA	
	178R1A04L4	N MAHESH KUMAR	
	178R1A04L7	P ROHITH KUMAR	
56.	178R1A04C3	A DIVYA	METAL DETECTOR BY USING UA741 IC
	178R1A04F5	M LEELA RAMYA	
	178R1A04G3	P SAI PRASANNA	
	178R1A04G4	P VARSHITHA	
57.	178R1A04L8	PANYALA SREEJA	A VARIABLE AUDIO FREQUENCY OSCILLATOR USING OP-AMP
	178R1A04L9	P KAVYA	
	178R1A04M2	S BHAVANA	
	178R1A04M3	S SWAROOP SAI	
58.	178R1A0487	J PRASHANTH	PWM TECHNIQUE USING IC 555
	178R1A0494	K SAI KUMAR	
	178R1A04B0	P NAVEEN	
	188R5A0420	T VAMSHI	
59.	178R1A0485	G PRIYANKA	TEMPERATURE CONTROLLED DC FAN USING OP-AMP
60.	178R1A0418	G. RAGHUVEER YADAV	DARK SENSOR USING LDR
	178R1A0424	I. ARUN RAJA	
	178R1A0448	SAMA SAHITH REDDY	
	178R1A0450	SRIRAM BHASKAR	
61.	178R1A0417	DUVVA MANIDEEP	LED CHASER USING 4017 COUNTER AND 555 TIMER
	178R1A0421	GATTU VISHAL	
62.	178R1A04C7	BANDI LIKHITH	MOSQUITO REPELLANT USING 555 IC
	178R1A04C8	CH.CHANDANA SREE	
	178R1A04H0	RENDLA NIHARIKA	
	178R1A04H2	SAKET KUMAR SINGH	
	178R1A04H9	V. RAJA MOULI	
63.	178R1A04J1	DOKKA SANDYA	OBJECT DETECTOR
	178R1A04K9	Y VANDANA SRI SAI	
	188R5A0445	L. SHIREESHA	
	188R5A0449	P SOUMYA	
64.	178R1A04K6	M ANVITHA	TOUCH ALARM
	188R5A0441	K PRIYANKA	
	188R5A0442	K AKHILA	
	188R5A0448	P NAVYA SRI	
	188R5A0453	SALMA BEGUM	
65.	178R1A04I5	BAJINKI SRI SANJAY	WAILING SIREN USING 555 IC
	178R1A04I7	CHILUKA AJAY	
	178R1A04I9	D. VIVEK REDDY	
	178R1A04J3	G. SRINIVASARAO	
66.	178R1A0461	ADAVALLY AKHIL	TOUCHLESS DOOR BELL
	178R1A0468	B PAVANI	
	178R1A0469	BACHA SWETHA	
	178R1A04A8	PANJA RUCHITHA	
67.	178R1A0412	DARAPU DIVYA	SHADOW DETECTOR ALARM

	178R1A0429	KAMANT SRIRANG	CIRCUIT WITH 2 LDRs
	178R1A04I1	A.VARSHA SHREE	
	178R1A04J4	G. SAI PRIYA	
68.	178R1A0484	G. SHALINI LUDIA	TOUCH SENSOR USING IC 555 TIMER
	178R1A0489	KOLA SAI KIRAN	
	178R1A0491	KALERU LAVANYA	
	178R1A04M0	R.VARUN KUMAR	
69.	178R1A04F3	M SHRAVAN KUMAR	FLAME DETECTOR
	178R1A04G1	NAVGIRE RITESH	
	188R5A0430	P SANJAY	
	188R5A0431	RAMNI SRINATH	
DIGITAL COMMUNICATION LAB			
70.	178R1A0457	V KIRANMAYEE	HUFFMAN ENCODING AND DECODING USING MATLAB
	178R1A0463	ALWALA DIVYA	
	178R1A04E8	M DEEPSHIKA	
71.	178R1A0446	P SAI PRASAD	ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING
	178R1A0451	S RUKESH	
	178R1A0499	M AMANI	
	178R1A04A9	P AJAY KUMAR	
72.	178R1A04K3	K SANDHYA TEJASWI	CONTINUITY TESTER USING555 TIMER IC
	178R1A04K8	V PRANEETH ACHARYA	
	178R1A04L3	N CHANDU	
73.	178R1A0409	CH PRIYANKA	AUDIO AMPLIFIER USING IC PAM 8403
	178R1A0436	G MOUNIKA	
	178R1A0437	N BHAVANA	
74.	178R1A04I8	D GOPI KRISHNA	RAIN DETECTOR
	178R1A04J8	J UDAY KUMAR	
	178R1A04K0	K RAKESH NAIDU	
75.	178R1A0422	N SRIHITHA	MUSICAL BELL
	178R1A0449	S MADHAVI	
	178R1A0456	V MANASA	
76.	178R1A0405	B CHARAN TEJA	LIGHT DETECTOR USING IC7400
	178R1A0414	D VAMSHI	
	178R1A04B1	R RAM GOPAL	
77.	178R1A04B2	R VAISHNAVI	POWER FAULT DETECTOR
	178R1A04B3	R MANISHA	
	178R1A04B7	T VIDYA SHREE	
78.	178R1A0406	BASAVA RAMA	BATTERY LEVEL INDICATOR
	178R1A0415	DONKENA ALISHA	
	178R1A0428	K RAJA SREE	
79.	178R1A0427	K POOJITHA	DELAY CIRCUIT USING IC CA 3130
	178R1A0439	P JYOSTNA SREE	
	178R1A0444	P MAHESH	
80.	178R1A0402	A SHIVANI	DARKNESS SENSOR CIRCUIT
	178R1A0420	G USHA RANI	
	178R1A0431	K AAKANKSHA	
	178R1A0452	T SRIJA	
81.	188R5A0406	G APARNA	TOUCH SWITCH USING IC 555
	188R5A0410	A PAVAN KALYAN	

	188R5A0411	AASMA	
82.	178R1A0401	ABHISHEK SINGH	MOBILE DETECTOR
	178R1A0425	J MOHARIR	
	178R1A0466	B NITIN BAVESH	
83.	178R1A04D0	CH JAGADEESH	WATER LEVEL INDICATOR USING 555 TIMER
	178R1A04D6	G SAI KUMAR	
	178R1A04F6	M SURYA TEJA	
84.	178R1A04D3	D SAMATHA	ELECTRONIC DICE
	178R1A04D4	D HARSHITHA PATEL	
	178R1A04E5	K POOJA	
85.	178R1A0437	N BHAVANA	ALOCHOL DETECTION
	178R1A0451	S RUKESH	
	178R1A0452	T SRIJA	
86.	178R1A0426	K GANESH	DARK SENSOR
	178R1A0427	K POOJITHA	
	178R1A0429	K SRIRANG	
87.	178R1A04C2	A AVINASH	RAIN SENSOR
	178R1A04C9	CH PRANEETHA	
	178R1A04I0	Y SRI VAISHNAVI	
88.	178R1A0454	U DHARANI PRIYA	SPEED CONTROL OF DC MOTOR BY USING POTENTIOMETER AND IC 555 TIMER
	178R1A0459	Y REKHA	
	178R1A0460	Y NEHA	
89.	178R1A0438	N YUKTESH	METAL DETECTOR
	178R1A0442	P CHINMAYEE	
	178R1A0458	V SNEHA	
90.	188R5A0415	G RAKESH	WIRELESS AC POWER DETECTOR
	188R5A0416	K MAMATHA	
	188R5A0418	P SACHIN TENDULKAR	
91.	178R1A04J2	K ESHWAR ANUJ	LIGHT DETECTOR USING NAND GATE
	178R1A04J5	J HARSHITHA	
	168R1A04J1	D RAMYA GRACE	
92.	178R1A0470	B. MOHAN SAI ESHWAR	POWER FAILURE ALARM
	178R1A0471	CH.HAMASAIPHANIDRA	
	178R1A04B4	SK KHALEEQ AHMED	
93.	178R1A04C5	T. JEEVAN KUMAR	16-PSK WITH CUSTOM MAPPING USING MATLAB
94.	178R1A0413	D. SWATHI	DC MOTOR DIRECTION CONTROL
	178R1A0441	P. SAI LAHARI	
	178R1A0464	B.G TEJASHWINI	

COORDINATOR **HOD**

HOBBY PROJECTS
Under
Project Based Learning (PBL)
2020-21
I &II SEM

CMR ENGINEERING COLLEGE
UGC AUTONOMOUS
Approved by AICTE | Affiliated to JNTUH | Accredited by NAAC & NBA

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CONTENTS

1. INTRODUCTION

Hobby project/activity is necessary for staff as well as the students to improve the individual skills, encourage collaboration to allow students to cooperate and share resources in partners or small groups to acquire information to design a working model in lab. These projects are interdisciplinary by combine knowledge and skills from multiple subject areas, Support Self Directed Learning.

The benefit of hobby projects is to improve the students' skills. Students are grouped together to work, which foster communication skills and encourages even students with diverse and possibly conflicting personalities to find a common ground, or at the very least a way to work together. Part of this teamwork building helps introduce students to the specialization and delegation that are extremely prominent in the real world. Some students will naturally be more adept at some problem-solving methods than others, so students will figure out how to allocate resources (themselves) optimally by having part of the group work on one subset of tasks while another part works on another subset.

These projects develop practical skills in students. In spite of all the theory you learn, the industry also needs to know your ability to complete projects using your own initiative. This Project consists of selecting the suitable innovation in existing theory or Practical with each lab and suggest for proposals within the scope of the organization. This gives the basic idea about the mini and major projects.

In view of this hobby project, reports with block or flow diagram stating the applications is made jointly either from students or both students and staff submit along with results.

2. LIST OF HOBBY PROJECTS

S. No	ROLL NO. OF THE STUDENT	NAME OF THE STUDENTS	NAME OF THE HOBBY PROJECTS
II YEAR			
ELECTRONIC DEVICES & CIRCUITS LAB			
1.	198R1A0425	KATIKAREDDY	WATER LEVEL INDICATOR USING TRANSISTOR BC 548
	198R1A0426	KONA DAKSHA SREE	
	198R1A0427	KONDURU NIKHIL	
2.	198R1A0479	HASTHAPURAM	LED BLINKING USING IC 555
	198R1A0480	KADAGANCHI SATHVIK	
	198R1A0481	KANCHARLAPALLI	
3.	198R1A04J3	G SAI TAPASWINI	SMART EMERGENCY LIGHT USING IC 555
	198R1A04J4	G ABHILASH	
	198R1A04J5	G VISHWANATH	
4.	198R1A04M6	SHAIK RESHMA	MOBILE DETECTOR USING IC LM358
	198R1A04M7	SIRIKONDA DHARANI	
	198R1A04M8	SREERAMULA SANDEEP	
5.	208R5A0415	PENDA SHESHAGIRI	FIRE ALARM USING IC LM358
	208R5A0416	P MANOJ KUMAR	
	208R5A0417	R KAMAL	
6.	208R5A0407	B UDAY KUMAR	SOUND OPERATED TIMER USING IC LM324
	208R5A0408	D JAI SANTHOSHI	
	208R5A0409	G SUSHMITHA	
BASIC SIMULATION LAB			
7.	198R1A0463	ANNARAPU SRUJAN	FINGER PRINT RECOGNISATION USING MATLAB
8.	198R1A0468	BUSHI REDDY	POLAR PLOT OF Z USING MATLAB
9.	198R1A04C8	BUDIPATI SRUJANA	CYLINDRICAL SURFACE ANALYSIS WITH WHITE LIGHT INTERFEROMETRY USING MATLAB
10.	198R1A04D0	CHALLA SOMESHWAR	SMOKE DETECTOR USING MQ2 GAS SENSOR
	198R1A04D1	CHEDURUPALLY SRI	
	198R1A04D2	CHILUMULA DEVIKA	
11.	198R1A04F2	KUNAPAREDDY PREETHI	ANALOG CLOCK USING MATLAB
12.	198R1A04F9	PAPPULA ASREEJA	LOSSLESS COMPRESSION OF IMAGE USING MATLAB
13.	198R1A04J3	G SAI TAPASWINI	FINDING DAYS IN MONTH USING MATLAB

14.	198R1A04G1	POLAMPALLI RAKESH	3D GRAPHICS USING MESH PLOT OF THE SINC FUNCTION USING MATLAB
DIGITAL SYSTEM DESIGN LAB			
15.	198R1A0440	NYATHA PRANEETH	FULL ADDER USING IC 7486,IC 7408 AND IC 7432
	198R1A0441	P PRAVALIKA	
	198R1A0442	PATNAM RAGHU KUMAR	
16.	198R1A0449	S HAVISH	4-BIT CARRY SKIP ADDER USING IC 74LS83
	198R1A0450	S SRAVANI	
	198R1A0451	SAVARAM PAVANKUMAR	
17.	198R1A0461	AGALDUTTY VINEETH	AUTOMATIC DOOR BELL USING ARDUINO BOARD
	198R1A0462	AKULA SRIKANTH	
	198R1A0463	ANNARAPU SRUJAN	
18.	198R1A04A6	PULLARI PRASANNA	RAIN DETECTOR USING IC 555
	198R1A04A7	R VASAVI MOUNIKA	
	198R1A04A8	REKALA GAYATRI	
19.	198R1A04H6	VADDEM HARI CHANDAN	CARRY LOOK AHEAD ADDER USING IC 74182
	198R1A04H7	V SOWMYA	
	198R1A04H8	V BHAVAGNA	
20.	198R1A04I7	CHETKURI SAI	CLAP SWITCH USING IC 555
	198R1A04I8	CHEVITI MANOJ	
	198R1A04I9	CHITTA VENKATA SAI	
21.	198R1A04K8	MALDODDI SINDHU	DANCING LIGHTS USING TRANSISTOR BC547
	198R1A04K9	MALKAPURAM	
	198R1A04L0	MAREDDY ADARSH	
22.	208R5A0402	AKULA THARUN KUMAR	LOGIC GATES USING TRANISISTOR BC 547
	208R5A0403	ALLE SRINIVAS	
	208R5A0404	AYILLA DIVYA	
	208R5A0405	BANOTH SANTHOSH	
IC APPLICATIONS LAB			
23.	198R1A0401	PEETHANI NAGASREE	ELECTRONIC EYE CONTROL SECURITY SYSTEM USING LDR
	198R1A0402	AMBALA NARESH	
	198R1A0403	ANAND TERATI	
24.	198R1A0407	ARMALLI JAGATH SAI	SEVEN SEGMENT DISPLAY USING IC 4026
	198R1A0408	B PRASHANTH KUMAR	
	198R1A0409	BABHALSARE DEEPAK	
25.	198R1A0413	CHAMALA HARSHITA	PHOTO SWITCH USING IC 555
	198R1A0414	CJ AISHWARYA	
	198R1A0415	DEVERSHETTY RITHIKA	
26.	198R1A04B2	SRI HARSHITHA REDDY	IR PROXIMITY SENSOR USING IC LM358
	198R1A04B3	SYED HAMZA	
	198R1A04B4	T ANUSHA	
27.	198R1A04D6	D RAVALIKA	TOUCH SENSOR USING 555 TIMER IC
	198R1A04D7	E NIKITHA	
	198R1A04D8	G LAVANYA	
28.	198R1A04G7	RADAM SHIVA	ZERO CROSS DETECTOR USING IC 741
	198R1A04G8	RAMANNAGARI SUSHMA	

	198R1A04G9	RYALA VINEETH REDDY	
29.	198R1A04M3	P PRAVEEN	BEEPER CIRCUIT USING CD4011
	198R1A04M4	SALMAN KHAN	
	198R1A04M5	SHAIK AMEER	
ELECTRONIC CIRCUIT ANALYSIS LAB			
30.	198R1A0467	BOJJA BHANU GOUD	AUTOMATIC STREET LIGHT USING ARDUINO
	198R1A0468	B CHANDANA	
	198R1A0469	CHEVULA PRIYANKA	
31.	198R1A0482	KATIPALLY SHREYA	ELECTRONIC DICE USING IC 4017
	198R1A0483	KEMIDI SATHISH	
	198R1A0484	KOLICHALAM	
32.	198R1A04C1	AKKIPEDDI VAISHNAVI	SIMPLE AUDIO AMPLIFIER USING TRANSISTOR 2N6292
	198R1A04C2	AKULA NIKHIL GOUD	
	198R1A04C3	BARADI SOUMYA REDDY	
33.	198R1A04A3	POLOJU AJAY KUMAR	MUSICAL SIREN USING UM66T
	198R1A04A4	POREDDY MEGHANA	
	198R1A04A5	POTHARLA ARUN	
34.	198R1A04I4	B SIRICHANDANA	MUSIC RYTHMN DANCING LED USING IC CD4017
	198R1A04I5	B SHILPA YADAV	
	198R1A04I6	B BHANU	
35.	208R5A0420	S PRAKASH	METAL DETECTOR CIRCUIT USING IC 555
	208R5A0421	T VANAMALA	
	208R5A0422	T SHIVA MAHESH	
ANALOG AND DIGITAL COMMUNICATIONS LAB			
36.	198R1A0458	Y KOUSHIK REDDY	LED CHASER USING IC 555, IC 7490, AND IC 74154
	198R1A0459	YANGAM VAMSHI RAJ	
	198R1A0460	YESUPOGU SUMANTH	
37.	198R1A0473	G AMULYA	RADIO FREQUENCY DETECTOR USING IC CA3130
	198R1A0474	G AVANASH REDDY	
	198R1A0475	GODISHALA GOPI	
38.	198R1A0488	KONDAPARTHI HARSHA	ELECTRONIC LETTER BOX USING IC CD4001
	198R1A0489	KONTHAM DIVYA	
	198R1A0490	KOTLA PRANAY KUMAR	
39.	198R1A04E9	K RAKESH	OBSTACLE DETECTOR USING IC LM 358
	198R1A04F0	K MAHAVEERA SHARMA	
	198R1A04F1	K VENKATA SAI	
40.	198R1A04F8	NIMMALA SAI	VOLTAGE DOUBLER USING IC 555
	198R1A04F9	PAPPULA ASREEJA	
	198R1A04G0	PENUMARTHI VINAY SAI	
41.	198R1A04J9	K PREMCHAND	RAIN ALRAM USING IC 555
	198R1A04K0	K VISHAL	
	198R1A04K1	K SRIJA	

COORDINATOR **HOD**