



## ADDITIONAL DOCUMENT

### Criteria 2.3.1

  
Director  
Ajay Kumar Garg Engg. College  
Ghaziabad

# AJAY KUMAR GARG ENGINEERING COLLEGE



(Affiliated to Dr. APJ Abdul Kalam Technical University, Lucknow, UP, College Code - 027)

## 2.3.1 Student centric methods, such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences

- Various Laboratories for enhancing learning experiences
- Pictures of technical events

### Software Development/ Excellence Cell

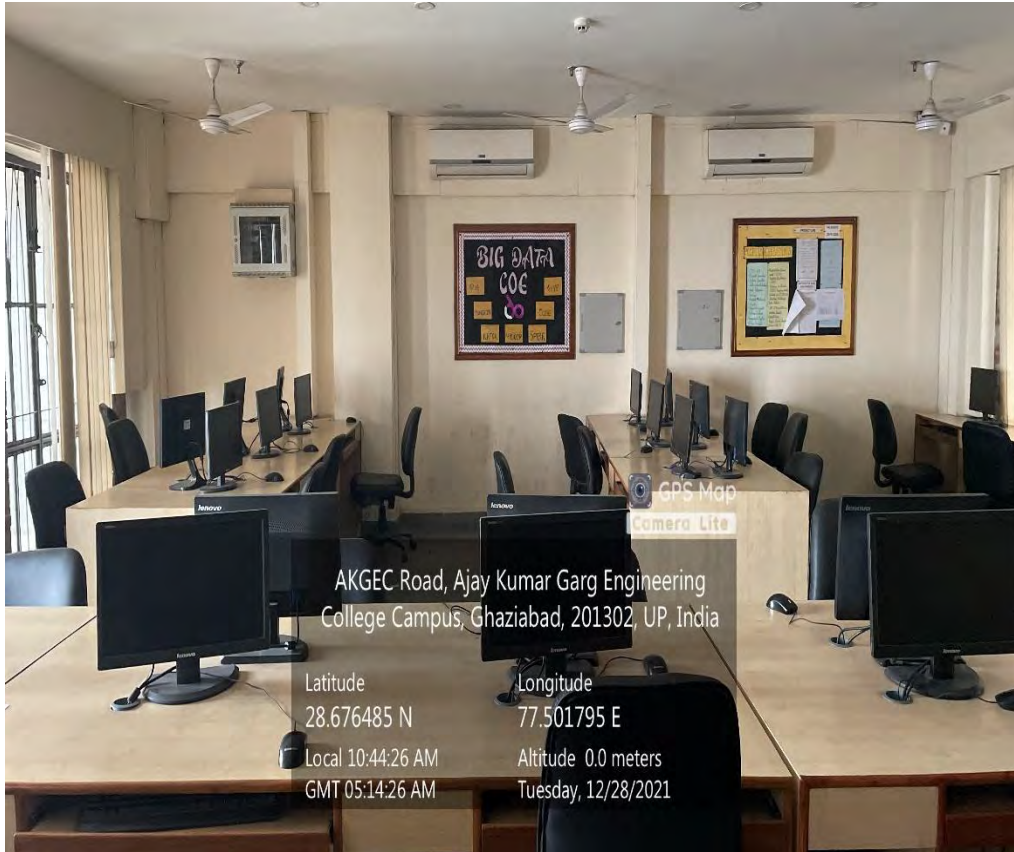


  
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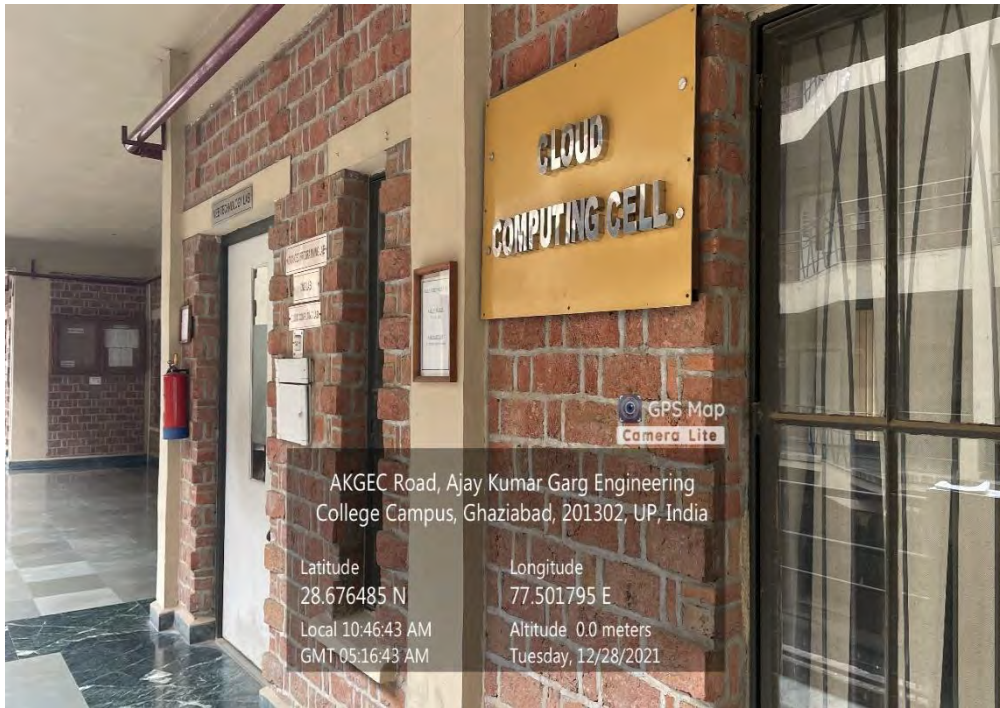
**CSIT BLOCK, THIRD FLOOR, SOFTWARE DEVELOPMENT CENTER**





**CSIT BLOCK, THIRD FLOOR, BIG DATA CENTER OF EXCELLENCE LAB**

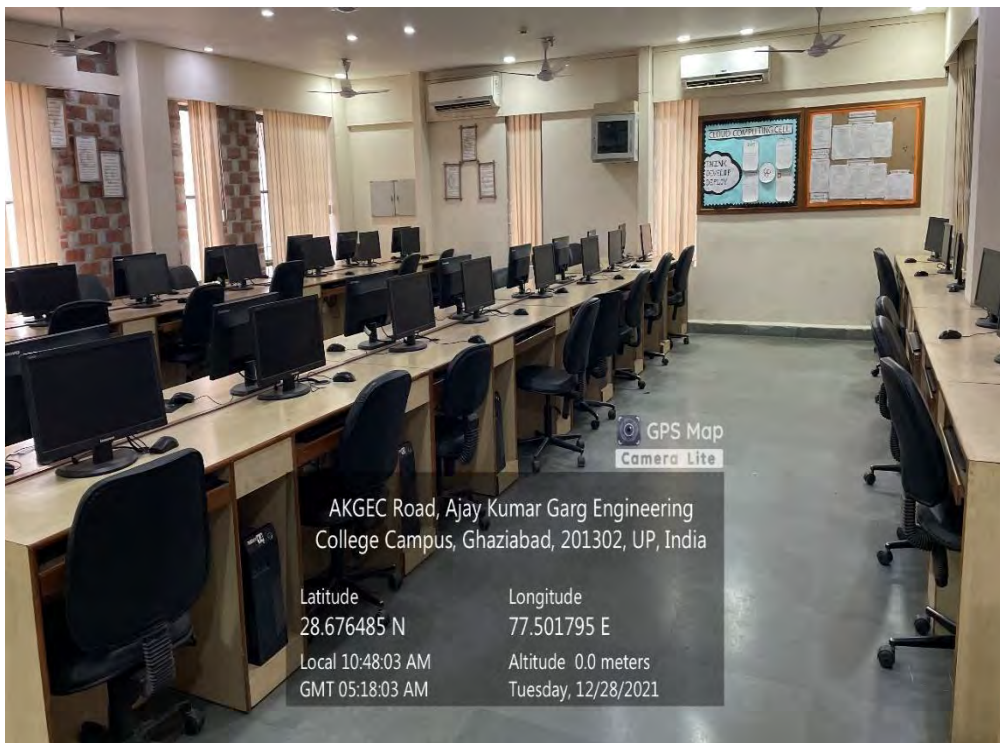
  
Director  
Ajay Kumar Garg Engg. College  
Ghaziabad



AKGEC Road, Ajay Kumar Garg Engineering  
College Campus, Ghaziabad, 201302, UP, India

Latitude  
28.676485 N  
Local 10:46:43 AM  
GMT 05:16:43 AM

Longitude  
77.501795 E  
Altitude 0.0 meters  
Tuesday, 12/28/2021



AKGEC Road, Ajay Kumar Garg Engineering  
College Campus, Ghaziabad, 201302, UP, India

Latitude  
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Local 10:48:03 AM  
GMT 05:18:03 AM

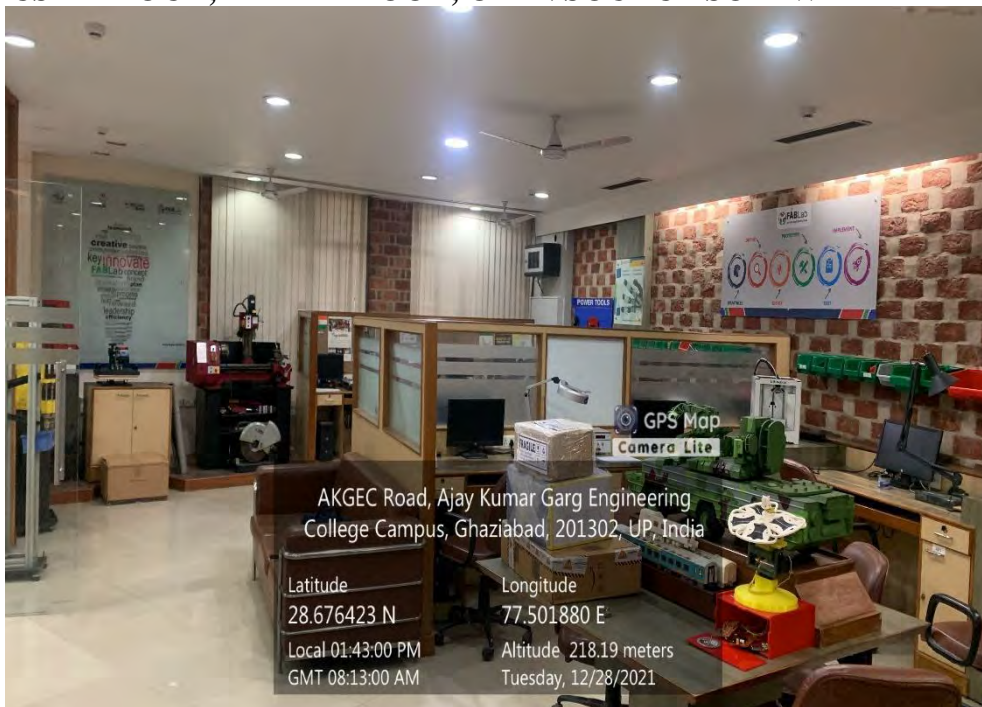
Longitude  
77.501795 E  
Altitude 0.0 meters  
Tuesday, 12/28/2021

### CLOUD COMPUTING CELL

  
Director  
Ajay Kumar Garg Engg. College  
Ghaziabad



**CSIT BLOCK, THIRD FLOOR, OPEN SOURCE SOFTWARE LAB**



**MECHANICAL BLOCK, GROUND FLOOR, CENTER OF EXCELLENCE (FAB LAB)**

*AJG*  
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Ajay Kumar Garg Engg. College  
Ghaziabad



**AJAY KUMAR GARG ENGINEERING COLLEGE**

(Affiliated to Dr. APJ Abdul Kalam Technical University, Lucknow, UP, College Code - 027)

## **LINKS FOR EXTRA CURRICULAR SOCIETIES**

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/euphony/>

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/footprints/>

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/horizon/>

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/goonj/>

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/renaissance-2/>

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/taal/>

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/verve/>

  
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Ghaziabad

**AJAY KUMAR GARG ENGINEERING COLLEGE, GHAZIABAD**  
**DEPARTMENT OF CIVIL ENGINEERING**

S.NO	YR	Semester	LAB CODE	LAB NAME	Faculty Name	NUMBER OF PRACTICAL AS PER CURRICULUM	NUMBER OF PRACTICAL BEYOND CURRICULU	TITAL OF EXPERIMENT (S) BEYOND SYLLABUS
1	3rd	VI	KCE-651	Transportation Engineering Lab	Mr. Prashant Agarwal, AP	13	2	Marshal mix design Specific gravity of coarse aggregate
2	3rd	VI	KCE-652	Environmental Engineering Lab	Mr. Animesh Rai , AP	8	2	Determination of BOD. Determination of fluoride.
3	3rd	VI	KCE-653	Structural detailing lab	Mr. Priyank Srivastava , AP	8	2	instead of study of full set of structural drawing should be told to make good for constructon stage drawing of residential bulding, commercial bulding educational bulding. Detailing of structuaral elements as per new earthquake Resistant design code and detailing codes for seismic zones.
4	2nd	IV	KCE-452	Solid Mechanics Lab	Mr. Atri Tyagi, AP	10	2	To find deflections in Beam having unsymmetrical bending. To find horizontal thrust in a three-hinged arch and to draw influence line diagrams for horizontal Thrust end Bending moment.
	2nd	IV	KCE-451	Material Testing Lab	Mr. Prashant Agarwal, AP	17	2	impact test for coarse aggregate crushing strength test for coarse aggregate
6	3rd	V	KCE-552	Geotechnical Engineering Lab	Mr. Priyank Srivastava , AP	8	2	Retrieving soil samples and conducting SPT tests by advancing boreholes through hand-held auger. Determination of shear strength of soil by Direct shear test.
7	2nd	III	KCE-352	Surveying & Geomatics Lab	Ms. Anubha Gupta, AP	11	2	To prepare conventional symbol chart based on the study of different types of topographical maps To perform fly leveling with Auto/tilting level.
8	2nd	III	KCE-353	FM LAB	Ms. Nikita Jaiswal, AP	14	2	determination of boundary layer thickness find velocity profile over a plate
9	2nd	III	KCE-553	QEM Lab.	Ms. Kshama Shukla, AP	5		quantities for footing quantities for Staircase

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Ghaziabad  
Director

  
**Director**  
**Ajay Kumar Garg Engg. College**  
**Ghaziabad**



# AJAY KUMAR GARG ENGINEERING COLLEGE GHAZIABAD

## CSE DEPARTMENT

### LIST OF EXPERIMENTS OFFERED TO STUDENTS BEYOND SYLLABUS

S. No.	Year	Semester	Lab Name	Lab Code	Faculty Name	List of Experiments offered beyond syllabus (Minimum two experiments)
1	2nd Year	III	DATA STRUCTURE USING C	KCS - 351	Dr. Sachin Kumar	1. Write a program in C to implement Tower of Hanoi.
2						2. Write a program in C to implement Insertion and Deletion in Linked list.
3						3. To implement sorting using arrays.
4						4. To implement Graph Traversal.
5			Computer Organization Lab	KCS - 352	Mr. Akhilesh verma	1. Design of N-bit Carry Look ahead Adder
6						2. Design N-bit Counter
7			Discrete Structure & Logic Lab	KCS - 353	Ms. Hamit saini	1. Baseball best-of-5 series: Experimental probabilities
8						2. Baseball: Binomial Probability
9						3. Expected Value Problems
10						4. Basketball: One and One
11						5. Binary Relations: Influence
12			Python Programming Lab	KCS - 452	Ms. Hamit saini	1. To Write a Python program for Designing a calculator.
13						2. Design and understand the working of pycharm IDE platform.
14	3rd Year	V	DATABASE MANAGEMENT SYSTEM LAB	KCS - 551	Mr. sandeep Yadav	1. PL/SQL programming Write a PL/SQL block code to print the squares of numbers upto 99. Write a PL/SQL block code to insert data into table CUSTOMER
15						COMPILER DESIGN LAB
16			2. Write program to impliment SLR parser.			
17			DESIGN AND ANALYSIS OF ALGORITHM LAB	KCS - 553	Dr. Rajesh Prashad	1. Write a program to implement N Queen Problem using Backtracking
18						2. Write a program to perform Travelling Salesman Problem
19			Software Engineering Lan	KCS - 651	Dr. Sonam Gupta	1. Draw the Object Diagram of the problem.
20						2. Prepare test cases for testing the system using White box/Black Box Approach.
21						Web Technology Lab
22			Artificial Intelligence Lab	KCS - 751	Dr. Pratima Singh	
23						2. Implimentation of linear regression using Python Programming Language.
24	4th Year	VII	Artificial Intelligence Lab	KCS - 751	Dr. Pratima Singh	1. Statical Analysis using Numpy in Python Programming Language.
25						2. Implimentation of linear regression using Python Programming Language.

Dr. Sunita Yadav  
Prof. CSE

  
 Director  
 Ajay Kumar Garg Engg. College  
 Ghaziabad

# AJAY KUMAR GARG ENGINEERING COLLEGE GHAZIABAD

## CSE DEPARTMENT

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2						2. Write a program in C to implement Insertion and Deletion in Linked list.
3						3. To implement sorting using arrays.
4			Computer Organization Lab	KCS - 352	Mr. Akhilesh verma	4. To implement Graph Traversal.
5						1. Design of N-bit Carry Look ahead Adder
6						2. Design N-bit Counter
7		Discrete Structure & Logic Lab	KCS - 353	Ms. Hamit saini	1. Baseball best-of-5 series: Experimental probabilities	
8					2. Baseball: Binomial Probability	
9					3. Expected Value Problems	
10					4. Basketball: One and One	
11					5. Binary Relations: Influence	
12		Python Programming Lab	KCS - 452	Ms. Hamit saini	1. To Write a Python program for Designing a calculator.	
13					2. Design and understand the working of pycharm IDE platform.	
14	3rd Year	V	DATABASE MANAGEMENT SYSTEM LAB	KCS - 551	Mr. sandeep Yadav	1. PL/SQL programming Write a PL/SQL block code to print the squares of numbers upto 99. Write a PL/SQL block code to insert data into table CUSTOMER
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18					2. Write a program to perform Travelling Salesman Problem	
19		VI	Software Engineering Lan	KCS - 651	Dr. Sonam Gupta	1. Draw the Object Diagram of the problem.
20						2. Prepare test cases for testing the system using White box/Black Box Approach.
21			Web Technology Lab	KCS - 652	Dr. Shahank Sahu	1. Write program in java to allot rooms in the hostel using inheritance. Incorporate method overloading and method overriding concept in the program.
22		VII				Artificial Intelligence Lab
23			2. Implimentation of linear regression using Python Programming Language.			
24	4th Year					
25						

Dr. Sunita Yadav  
Prof. CSE

  
 Director  
 Ajay Kumar Garg Engg. College  
 Ghaziabad

**AJAY KUMAR GARG ENGINEERING COLLEGE GHAZIABAD**

**ECE DEPARTMENT**

**LIST OF EXPERIMENTS OFFERED TO STUDENTS BEYOND SYLLABUS**

S. No.	Year	Semester	Lab Name	Lab Code	Faculty Name	List of Experiments offered beyond syllabus (Minimum two experiments)
1	1st Year	I / II	Electronics Engineering Lab	KEC151P / KEC251P	Dr. Seema Garg	1. Study of series and parallel clipper circuit.
2						2. Study Opamp as an inverting and non-inverting amplifier.
3	2nd Year	III	Electronics Devices Lab	KEC351	Mr. Alok Kumar	1. Application of transistor as a switch.
4			2. To study the characteristics of regulated DC power supply.			
5		Digital System Design Lab	KEC352	Dr. Jitender Chhabra	1. Design and Implement Half Adder and Full Adder using Logic gates.	
6					2. Design and Implement Half Subtractor and Full Subtractor using Logic gates.	
7		IV	Communication Engineering Lab	KEC451	Ms. Anu Goel	1. Design and Implement Half Adder and Full Adder using Logic gates.
8			2. Design and Implement Half Subtractor and Full Subtractor using Logic gates.			
9	3. Implement a given boolean expression using Decoder/Multiplexer.					
10	4. Design a decade counter.					
11	Analog Circuits Lab	KEC452	Dr. Aruna Tyagi	1. Simulation of different Line Coding Schemes using MATLAB.		
12				2. To generate Pre-Emphasis & De-Emphasis waves using MATLAB.		
13	Signal System Lab	KEC453	Mr. Dushyant Singh Chauhan	1. To study Opamp as an inverting and non-inverting amplifier		
14				2. To determine gain and bandwidth of CE amplifier from its frequency response		
15	3rd Year	V	Integrated Circuits Lab	KEC-551	Mr. Om Krishna Gupta	1. Verification of sampling theorem using MATLAB
16			2. Implementation of decimation and Interpolation processes using MATLAB			
17		Microprocessor & Microcontroller Lab	KEC-552	Ms. Sakshi Mittal	1. To study and design adder/subtractor circuit using op-amp.	
18					2. To study and design Integrator and differentiator using op-amp.	
19		Digital Signal Processing Lab	KEC-553	Dr. Amit Garg	1. To study 8085 processor and various commands for its operation.	
20					2. To Interface 8255 programmable peripheral interface and verify its operation.	
21	VI	Digital Communication Lab	KEC651	Dr. Abhishek Joshi	1. With the help of Fourier series make a square wave from sine wave and cosine wave.	
22		2. Generate an Amplitude Modulation having side lobe frequencies 1200 Hz and 800 Hz. Observe and verify the theoretical FFT characteristics with the observed ones.				
23		Control System Lab	KEC-652	Mr. Neeraj Sharma	1. To generate the constellation diagram and plot symbol error probability for the 4-PAM	
24	4th Year	VII	Microwave & Radar Engineering Lab	KEC751D	Ms. Richa Sharma	2. To study the PCM and plot Message signal, sampled signal, quantized signal, and digital signal
25						1. Determine the block diagram reduction of a transfer function using simulink
			CAD for Electronics Lab	KEC-653 B	Mr. Anup Kumar	2. Plot the polar plot of a given transfer function.
						1. AC analysis of CMOS inverter with variable capacitive load.
						2. Design the Layout of CMOS inverter.
						1. VSWR measurement with open and short circuit
						2. Study of MIC components

**Dr. P. K. Chopra**  
Prof. ECE

  
**Director**  
**Ajay Kumar Garg Engg. College**  
**Ghaziabad**

### LIST OF EXPERIMENTS OFFERED TO STUDENTS BEYOND SYLLABUS

S. No.	Year	Lab Name	Lab Code	Faculty Name	List of Experiments offered beyond syllabus (Minimum two experiments)
1	2nd Year	Computer Organization Lab	KCS 352	Mr. Pankaj Singh	Implementation and Verify logic gates AND, OR, NOT, XOR.
2					Implementation and Verify Universal gates NAND and NOR
5		Discrete Structures & Theory of	KCS 353	Ms. Nandita Goyal	Apply Kruskal and Prim's algorithm in a graph
					Write a program to solve recurrence relation
					Write a program to apply Pigeonhole principle
		Data Structures using c lab	KCS 351	Mr. Puneel Kumar Goyal	Sparse Matrix: Perform operations such as add, multiply or transpose of the matrices in their sparse form
					AVL Tree: Implementation of Create, Insert, Rotate, Traverse operations.
		Operating System Lab	KCS 451	Mr. Pancham	1. Write a program to implement Optimal Page replacement algorithms
					2. Write a program to Semaphore synchronization problems
9					3. Write a program to implement Second Chance algorithms
		Python Lab	KNC 453	Mr. Lucknesh	1. Write a program to create radio button (male, female and transgender) and a label. Default selection should be on female the label must display the current selection made by user
					2. Write a program to create a window that disappear automatically after 5 second
					3. Write a program to create an arithmetic calculator using tkinter
		Web Designing lab	KIT 451	Mr. Santosh	1. To design a registration form of IRCTC railway ticket booking.
				2. To design a calculator using java script.	
	Micro Processor Lab	KCS452	Ms. Sulekha	To perform Addition and Subtraction using 8086.	
12				To sort an array using 8086.	
13				To perform Multiplication using 8086.	
				To calculate square root of 8 bit number using 8086.	
	Database management lab	kcs 551	Mr. Lucknesh	Creating Entity-Relationship Diagram using case tools.	
14				Write a PL/SQL block code to print the squares of numbers upto 99	
				Write a PL/SQL block code to insert data into table CUSTOMER	
	Design And Analysis of algorithm lab	kcs 553	Mr. Birendra	Program for Linear Search, Binary Search	
				Program for BFS and DFS on a graph represented using Adjacency list	
	Web Technology lab	KIT 551	Mr. Anmol Jain	Write an XML program providing the book details and display the document in Internet Explorer	
				Write an XML program for creation of DTD, which specifies set of rules.	
	Computer Network Lab	KCS 653	Ms. Tahira Mazumder	Wireless configuration using packet tracer along with server configuration for DHCP, HTTP, DNS, FTP	
				Router configuration to communicate between different zones of LAN	
				Implementation of Cryptographic algorithms (RSA, DES)	
	Data Analytics Lab	KIT 651	Ansha Shukla Gaurav Cha	PYTORCH_Neural_Network_MNIST_HandWrittenDigits_with_validation-GauravChaudhary	
				KERAS_CNN_MNIST_HandWrittenDigits_with_validation-Gaurav Chaudhary	
20				To perform dimensionality reduction operation using PCA for Houses Data Set.	
	Software Engineering Lab	KCS 651	Dr. Shivani Aggrwal	Write a program of Halstead Analysis of Software	
				Write a program for function point analysis of cost	
24	Cryptography and network secur	KIT 751	Ms. Shilpi Gupta	Write a program to implement Message L	
				Write a program to implement feistel cipher structure	
	Project Lab	KIT 753	Dr. Ruchi Gupta	development of AI based Projects	
				development of Blockchain based Projects	
				development of IoT Based Pprojects	
				Python Programming	
	Project II	KIT 751	Dr. Ruchi Gupta	development of AI based Projects	
				development of Blockchain based Projects	

  
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**AJAY KUMAR GARG ENGINEERING COLLEGE GHAZIABAD**  
**EN DEPARTMENT**  
**LIST OF EXPERIMENTS OFFERED TO STUDENTS BEYOND SYLLABUS**

S. No.	Year	Semester	Lab Name	Lab Code	Faculty Name	List of Experiments offered beyond syllabus (Minimum two experiments)			
1	1st Year	I / II	Basic Electrical Engineering Lab	KEE151P / KEE251P	Ms. Navjyoti Sharma	1. Determine the time current characteristics of given MCB (6 Amp).			
2						2. Calibration of Single Phase Energy meter.			
3	2nd Year	III	Electrical Measurement & Measurement Lab	KEE-352	Ms. Nidhi Singh	1. Signal conditioning of analog signal using Lab VIEW/ MATLAB.			
4						2. Measurement of power using CT and PT.			
5			Electrical Workshop Lab	KEE-353	Dr. J. G. Yadav	1. Measurement of form factor of a rectified sine wave.			
6						2. To study of different kinds of power Insulators.			
7		IV	Network Ananlysis and Synthesis Lab	KEC-353	Mr. Parveen Dhull	1. To perform the transient response of RL circuit.			
8						2. Verification of parameters properties in interconnection of 2, two port networks in cascade interconnection			
9			Circuit Simulation Lab	KEE-451	Mr. Arun Kumar Maurya	1. Determination of frequency response of a Twin – T-notch filter.			
10						2. To determine attenuation characteristics of a low pass / high pass active filters.			
11						Electrical Machines - I Lab	KEE-452	Mr. Ritesh Sharma Dr. Sarika Kalra	1. To study the construction and working of four-point DC machine starter.
12									2. To study the torque-speed characteristic of Brushless DC motor.
13	3rd Year	V	Power System - I Lab	KEE-551	Mr. Arun Kumar Maurya	1. Calculation of ground clearance of transmission line.			
14						2. Calculate the parameters for underground cable			
15			Control System Lab	KEE-552	Ms. Nupur Mittal	1. To Study PC Based Flow Control using variable speed pump.			
16		2. To Study PC Based level Control using variable speed pump.							
16		Electrical Machines - II Lab	KEE-553	Mr. Ritesh Sharma Dr. Sarika Kalra	1. To Study the speed Control of BLDC motor using PWM method.				
17					2. To study IGBT controlled AC motor VVVF Drive.				
18		VI	Power System - II Lab	KEE-651	Dr. Dibya Bharti	1. Determine the time current characteristics of the given MCB (6 Amp).			
19						2. Perform load flow analysis on a 3- Bus System using G-S ( Gauss Seidel) method using MATLAB			
20			Microprocessor & Microcontroller Lab	KEE-652	Mr. Neeraj Gupta	1. To generate a square wave of a given frequency using 8253/54 IC.			
21	2. To perform microprocessor based stepper motor operation through 8085 / 8086 kit.								
	3. To obtain interfacing of DMA controller with 8085 / 8086 microprocessor.								

  
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22			Power Electronics Lab	KEE-653	Dr. Vani Bhargava	1. Four quadrant operation of DC motor using single phase dual converter trainer.
23						2. Speed control of three phase induction motor using three phase AC voltage controller.
24	4th Year	VII	Industrial Automation & PLC Lab	KEN-751	Mr. Arun Kumar Maurya	1. Logic implementation for traffic control Application.
25						2. Logic implementation for Bottle filling Application.


**Dr. Hemant Ahuja**  
HoD (EN)

  
Director  
Ajay Kumar Garg Engg. College

**CE- List of Experiments beyond syllabus**


S.NO	YR	Sem	LAB CODE	LAB NAME	Faculty Name	NUMBER OF PRACTICAL AS PER CURRICULUM	NUMBER OF PRACTICAL BEYOND CURRICULUM	TITIAL OF EXPERIMENT (S) BEYOND SYLLABUS
1	3rd	VI	KCE-651	Transportation Engineering Lab	Mr. Prashant Agarwal, AP	13	2	Marshal mix design Specific gravity of coarse aggregate
2	3rd	VI	KCE-652	Environmental Engineering Lab	Mr. Animesh Rai, AP	8	2	Determination of BOD. Determination of fluoride.
3	3rd	VI	KCE-653	Structural detailing lab	Mr. Priyank Srivastava, AP	8	2	instead of study of full set of structural drawing should be told to make good for constructon stage drawing of residential bulding, commercial bulding educational bulding, Detailing of structuaral elements as per new earthquake Resistant design code and detailing codes for seismic zones.
4	2nd	IV	KCE-452	Solid Mechanics Lab	Mr. Atri Tyagi, AP	10	2	To find deflections in Beam having unsymmetrical bending. To find horizontal thrust in a three-binged arch and to draw influence line diagrams for horizontal Thrust end Bending moment.
5	2nd	IV	KCE-451	Material Testing Lab	Mr. Prashant Agarwal, AP	17		impact test for coarse aggregate crushing strength test for coarse aggregate

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6	3rd	V	KCE-552	Geotechnical Engineering Lab	Mr. Priyank Srivastava , AP	8	2	Retrieving soil samples and conducting SPT tests by advancing boreholes through hand-held auger. Determination of shear strength of soil by Direct shear test.
7	2nd	III	KCE-352	Surveying & Geomatics Lab	Ms. Anubha Gupta, AP	11	2	To prepare conventional symbol chart based on the study of different types of topographical maps To perform fly leveling with Auto/tilting level.
8	2nd	III	KCE-353	FM LAB	Ms. Nikita Jaiswal, AP	14	2	determination of boundary layer thickness find velocity profile over a plate
9	2nd	III	KCE-553	QEM Lab.	Ms. Kshama Shukla, AP	5	2	Estimation of Quantities for footing Estimation of Quantities for Staircase

  
**Dr. Rakesh Srivastava**  
**HOD, CE**

  
 Director



# Ajay Kumar Garg Engineering College, Ghaziabad

## Department of ECE 1 Year (2022-23)

### Summary Report of the course

#### 1. Advanced Analog and Digital Circuits Implementation

**Course Objectives:** This program was based on advanced topics in analog and digital electronic circuits implementation. These circuits were implemented and simulated on the tool provided by National Instruments (Multisim). Based on this course, students will be able to make their own circuits.

**Course Outcomes:**

Total 87 students have enrolled training program.

#### 2. Embedded System

**Course Objectives:** This program was based on embedded systems which is a combination of software and hardware. The overall educational objective of this internship program was to allow students to discover how the computer interacts with its environment. After completing this course student will be able to understand 8085, 8086 Microprocessors, 8051 Microcontroller, small projects based on Arduino Uno development board and IoT.

**Course Outcomes:**

Total 85 students have enrolled training program.

## Department of ECE II Year (2022-23)

### Summary Report of the course

#### 1. Signal Processing using MATLAB Tool

**Course Objective:** This program was based on advanced topics in Signal Processing using MATLAB Tool. MATLAB Tool is useful in signal processing field. After completing this course student will be able to signal processing tool box for images, signal generation and transformations etc. and simulink also.

**Course Outcomes:**

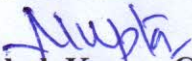
Total 76 students have enrolled training program.

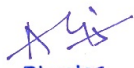
#### 2. Semiconductor device modeling using TCAD Simulation Tool

**Course Objective:** This program was focused on the usage of TCAD the purpose of Semiconductor Device Operation and Modelling. Giving theoretical knowledge of physics of modern devices, a basic training on TCAD software followed by execution of short project.

**Course Outcomes:**

Total 113 students have enrolled training program.

  
Dr. Neelesh Kumar Gupta  
Prof. & HoD, ECE

  
Director  
Ajay Kumar Garg Engg. College  
Ghaziabad

**Ajay Kumar Garg Engineering College, Ghaziabad**  
**Department of Electronics & Communication Engineering**

Date: 10 August 2022

**Summer Internship Training Programs**

All students of I & II Year are hereby informed that as per AKTU syllabus, that after first and second year B. Tech students have to mandatorily undergo Internship programs. As per AKTU scheme, this internship has following weightages:

- (a) After First Year: 50 Marks, Credit-1
- (b) After Second Year: 50 Marks, Credit-1

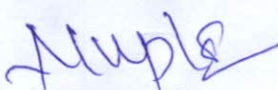
ECE Department is planning to offer summer internship programs for ECE students (02 Hrs/week).

The program details are as follows:

S. No	FM In-charge	Sem/Course Title	Summer Internship Program	Faculty Coordinators/ Co-coordinators
1	Dr. Seema Garg	II/ Mini Project or Internship Assessment	Advanced Analog and Digital Circuits Implementation	<b>Dr. Jitender Chhabra</b> Mr. Dushyant S. Chauhan Mr. Om Krishna Gupta
2	Dr. Seema Garg	II/ Mini Project or Internship Assessment	Embedded System	<b>Ms. Amita Asthana</b> Ms. Sulekha Saxena Ms. Tukur Gupta
3	Dr. Neelesh Kumar Gupta	IV/Mini Project or Internship Assessment	Signal Processing using MATLAB Tool	<b>Dr. Amit Garg</b> Ms. Renu Sharma Mr. Naveen Saini
4	Dr. Neelesh Kumar Gupta	IV/Mini Project or Internship Assessment	Semiconductor device modeling using TCAD Simulation Tool	<b>Dr. Koushik Midya</b> Ms. Uma Sharma Ms. Priyanka Sharma

**Important Information:**

- Training will be of free of cost.
- Registration Link: <https://forms.gle/jcLase9BNZ6Qgqis7>
- All students of after I & II Year are required to register in above-mentioned training program on or before 22August 2022 compulsorily. The assessment of all students will be done during the upcoming semester along with training classes.
- This Training will be conducted from commencement of next s offline Mode along with academic classes of III & V semesters.

  
**Dr. Neelesh Kumar Gupta**  
Prof. & HoD, ECE

  
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Note: After successful completion of 160 credits, a student shall be eligible to get Under Graduate degree in Engineering. A student will be eligible to get Under Graduate degree with Honours only, if he/she completes additional university recommended courses only (Equivalent to 20 credits; NPTEL Courses of 4 Weeks, 8 Weeks and 12 Weeks shall be of 2, 3 and 4 Credits respectively) through MOOCs. For registration to MOOCs Courses, the students shall follow NPTEL Site <http://nptel.ac.in/> as per the NPTEL policy and norms. The students can register for these courses through NPTEL directly as per the course offering in Odd/Even Semesters at NPTEL. These NPTEL courses (recommended by the University) may be cleared during the B. Tech degree program (not necessary one course in each semester). After successful completion of these Moocs courses the students, shall, provide their successful completion NPTEL status/certificates to the University (COE) through their college of study only. The student shall be awarded Hons. Degree (on successful completion of MOOCS based 20 credit) only if he/she secures 7.50 or above CGPA and passed each subject of that Degree Programme in single attempt without any grace marks.

The proposed MOOC courses are common to all B.Tech. Branches as follows:

**NPTEL Course (MOOCS Courses Hons. Degree)**

1. Algorithms for Big Data
2. C Programming and Assembly Language
3. Concepts of Thermodynamics
4. Data Analytics with Python
5. Data Science for Engineers
6. Design Analysis and Algorithm
7. Design of Reinforced Concrete Structures
8. Developing Soft Skills and Personality
9. Emotional Intelligence
10. Enhancing Soft Skills and Personality
11. Fundamental of Welding Science and Technology
12. Fundamentals of Conduction And Radiation
13. Google Cloud Computing Foundation Course
14. Introduction To Block chain Technology And Applications
15. Introduction To Industry 4.0 And Industrial Internet Of Things
16. Introduction To Internet Of Things
17. Introduction To Robotics
18. Introduction To Embedded System Design
19. Manufacturing Process Technology I & II
20. Matlab Programming For Numerical Computation
21. Mechanics of Materials
22. Patent Law for Engineers and Scientist
23. Speaking Effectively
24. Structural Analysis I

  
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## **AICTE Model Curriculum Session 2018-19 onwards Honours Degree MOOC'S (NPTEL) Courses**

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The proposed MOOC courses are common to all B.Tech. Branches as follows for 2020-21

### **Updated NPTEL Course (MOOCS Courses Hons. Degree) 2020-21**

1. Algorithms for Big Data
2. C Programming and Assembly Language
3. Concepts of Thermodynamics
4. Data Analytics with Python
5. Data Science for Engineers
6. Design Analysis and Algorithm
7. Design of Reinforced Concrete Structures
8. Developing Soft Skills and Personality
9. Emotional Intelligence
10. Enhancing Soft Skills and Personality
11. Fundamental of Welding Science and Technology
12. Fundamentals of Conduction And Radiation
13. Google Cloud Computing Foundation Course
14. Introduction To Block chain Technology And Applications
15. Introduction To Industry 4.0 And Industrial Internet Of Things
16. Introduction To Internet Of Things
17. Introduction To Robotics
18. Introduction To Embedded System Design
19. Manufacturing Process Technology I & II
20. Matlab Programming For Numerical Computation
21. Mechanics of Materials
22. Patent Law for Engineers and Scientist
23. Speaking Effectively
24. Structural Analysis

  
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# **SAMPLE : MOOC COURSE (ECE)**

## **Criteria 2.3.1**

**2022-23**

  
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S.No.	Name	Roll Number	Year	Section	Aggregate % till date	Name of MOOCs course registered and completed in 2022-23 (Even)
1	Akanksh Chaudhary	2100270310020	2ND	EC1	64%	Developing Soft Skills and Personality
2	Abhinav singh	2100270310007	2ND	EC1	71.20%	C Programming and Assembly Language
3	Saurav Pandey	2100270310129	2ND	EC3	72.722 %	Speaking Effectively
4	Shivansh Raj Srivastava	1900270310169	4TH	EC3	74.51	Speaking Effectively
5	Satwik Dutta	1900270310154	4TH	EC3	81.3	Patent Law for Engineers and Scientist
6	Shivanshu Singhal	1900270310170	4TH	EC3	75.98	Emotional Intelligence
7	Shamit Mittal	1900270310158	4TH	EC3	82.3	Data Analytics with Python, Patent Law for Engineers and Scientist
8	Aniruddh Vaish	2000270310022	3RD	EC1	83	Emotional Intelligence, Speaking Effectively
9	Kamakshi Vashista	2000270310081	3RD	EC2	71.58%	Emotional Intelligence, Speaking Effectively
10	Yashaswi Sharma	2000270310192	3RD	EC3	77.85%	Emotional Intelligence
11	Taarush Agarwal	2100270310151	2ND	EC3	73.5	Speaking Effectively
12	Prakhar Maurya	2100270310101	2ND	EC2	67.67%	Emotional Intelligence, Introduction To Industry 4.0 And Industrial Internet Of Things, Patent Law for Engineers and Scientist
13	Monoo	2000270310099	3RD	EC2	60	Introduction To Embedded System Design

  
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14	Vandit Mishra	2100270310162	2ND	EC3	82.05	Developing Soft Skills and Personality, Enhancing Soft Skills and Personality, Introduction To Industry 4.0 And Industrial Internet Of Things
15	Samarth Goel	2100270310117	2ND	EC3	64.4	Enhancing Soft Skills and Personality
16	Nitesh chaubey	1900270310110	4TH	EC2	68	Enhancing Soft Skills and Personality, Introduction To Internet Of Things, Speaking Effectively
17	Yash Rajput	2000270310189	3RD	EC3	69.69	Developing Soft Skills and Personality, None
18	Mohasin Masood	1900270310095	4TH	EC2	81.48	Introduction To Industry 4.0 And Industrial Internet Of Things
19	Pratham Yadav	2100270310104	2ND	EC2	62%	Developing Soft Skills and Personality
20	Pranav	1900270310121	4TH	EC2	76.52	Emotional Intelligence
21	Aman Kumar Yadav	2100270310030	2ND	EC1	72.28%	Introduction To Internet Of Things
22	Taru Pathak	2100270310153	2ND	EC3	71.25	Enhancing Soft Skills and Personality
23	Priya Kumari Srivastava	2000270310119	3RD	EC2	75	Enhancing Soft Skills and Personality
24	Adarsh Kumar Rai	2000270310007	3RD	EC1	76.3	Enhancing Soft Skills and Personality
25	Pragya Agarwal	1900270310116	4TH	EC2	78.60%	Introduction To Industry 4.0 And Industrial Internet Of Things

  
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26	Sarthak Gupta	2100270310124	2ND	EC3	60	Data Science for Engineers, Developing Soft Skills and Personality, Enhancing Soft Skills and Personality, Introduction To Robotics, Introduction To Embedded System Design
27	Akshita Verma	2100270310029	2ND	EC1	7.8	Enhancing Soft Skills and Personality
28	Nandani Pandey	21002770310089	2ND	EC2	89.3	Design Analysis and Algorithm
29	Tarun Bansal	1900270320020	4TH	EC3	73.35	Developing Soft Skills and Personality
30	Aditi Shukla	1900270310009	4TH	EC1	81.26	Design Analysis and Algorithm, Developing Soft Skills and Personality, Speaking Effectively
31	Saumya Mishra	1900270320014	4TH	EI	80.42	Patent Law for Engineers and Scientist
32	Jaidev Sharma	1900270310073	4TH	EC2	83.14	Speaking Effectively
33	Aditi Rastogi	1900270310011	4TH	EC1	87.01	Design Analysis and Algorithm, Developing Soft Skills and Personality, Enhancing Soft Skills and Personality, Introduction To Industry 4.0 And Industrial Internet Of Things, Speaking Effectively
34	Yuvraj Singh Bhadauria	2000270310196	3RD	EC3	71.3	C Programming and Assembly Language

  
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35	Aman	1900270310023	4TH	EC1	74.9	Data Analytics with Python, Developing Soft Skills and Personality, Enhancing Soft Skills and Personality, Introduction To Industry 4.0 And Industrial Internet Of Things, Introduction To Internet Of Things, Patent Law for Engineers and Scientist
36	Aditya Gupta	2100270310012	2ND	EC1	65.5	Enhancing Soft Skills and Personality
37	Girijesh Kumar	1900270310063	4TH	EC1	66.14	Developing Soft Skills and Personality, Enhancing Soft Skills and Personality
38	Arindom Mukherjee	1900270310036	4TH	EC1	67%	Developing Soft Skills and Personality, Enhancing Soft Skills and Personality
39	David Saini	1900270310052	4TH	EC1	78.3	Data Analytics with Python, Developing Soft Skills and Personality, Introduction To Industry 4.0 And Industrial Internet Of Things, Speaking Effectively
40	Harshit Soni	1900270310065	4TH	EC1	69	Introduction To Industry 4.0 And Industrial Internet Of Things
41	Shreya Agrahari	2000270310154	3RD	EC3	75.2	Emotional Intelligence, Speaking Effectively
42	Manya rastogi	1900270310092	4TH	EC2	76.8	Developing Soft Skills and Personality, Enhancing Soft Skills and Personality

  
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43	Nilesh Pal	1900270310107	4TH	EC2	81.4	Enhancing Soft Skills and Personality, Introduction To Industry 4.0 And Industrial Internet Of Things, Introduction To Internet Of Things
44	Shiwani Gupta	1900270320016	4TH	EI	76	Developing Soft Skills and Personality, Enhancing Soft Skills and Personality
45	Yatindra Kumar Dwivedi	2000270310194	3RD	EC3	74%	Emotional Intelligence, Enhancing Soft Skills and Personality, Introduction To Industry 4.0 And Industrial Internet Of Things, Patent Law for Engineers and Scientist
46	Swati Saxena	2000270310169	3RD	EC3	75%	Enhancing Soft Skills and Personality
47	Shrey sharma	2000270310153	3RD	EC3	65	Developing Soft Skills and Personality
48	Shagun Kumar	2000270310144	3RD	EC3	7.2	Enhancing Soft Skills and Personality
49	Priti Kumari	2100270310106	2ND	EC2	73%	Enhancing Soft Skills and Personality
50	Roopak Baranwal	1900270310141	4TH	EC3	63.4	Data Analytics with Python, Enhancing Soft Skills and Personality
51	Rashi Jaiswal	2100270310110	2ND	EC2	62	Developing Soft Skills and Personality
52	Shivendra Pratap Singh	1900270310172	4TH	EC3	77.44	Developing Soft Skills and Personality, Enhancing Soft Skills and Personality, Introduction To

  
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