



### 3. Design and Development of Curriculum for Add on/ certificate / Diploma Courses

S.No	Name of the Teacher	Description
<b>2020-2021</b>		
1	Mr. Rakesh.R.B	3D Infrastructural Modelling
2	Mr. Mohan S.R	Fusion 360 Assembly Modelling
3	Mr. Jabin.J	Introduction of Multi- Body Dynamics
4	MS. R.Abirami	Lab View
5	V.Rajathi	PC Hardware Networking & Troubleshooting
<b>2019-2020</b>		
1	Mr. K.Vairaperumal	Robotic Process Automation (RPA)
2	S.Bharath	Training on CATIA- SOLID Model
3	S.Deepak Kumar	Creo-Harness Design, GD&T- Industrial Standard
4	K.Gayathri	Staad Pro
5	S.Naveen Kumar	IOT and its Applications
6	V.Rajathi	PC Hardware and Networking
<b>2018-2019</b>		
1	V.G.Sathish	CATIA
2	S.Bharath	CREO
3	Sharmila Ponammal	Sketchup
4	J.Nirmala	Datascience
5	K.Sudhakaran	Technology Skill Development in PCB design
6	K.Suresh	PC Hardwre and Networking Issues

**PRINCIPAL**



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

2017-2018		
1	S.Bharath	CAD Modeling using CATIA V5
2	S.Vennkataraman	CNC Programming
3	B.Rizha Ur Rahman	Revit Architecture
4	A.Syed Ismail	Python Fullstack
5	K.A.Mohamed Shahin Gani	Introduction to PLC and SCADA
6	V.Subapriya	PC Hardware & Networking Troubleshooting Problems
2016-2017		
1	V.G.Sathish	Analysis of Solid components using ANSYS
2	Syed Ismail	Photoshop
3	Sharmila Ponnammal	MS Project
4	D.Justin Xavier	Introduction to Network –CISCO Networking Academy
5	K.Thamaraiselvi	PC Hardware & Peripherals

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**Design and Development of Curriculum for Add on /  
certificate / Diploma Courses**

**Academic Year 2020-2021**



**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
3a, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

From ,

Mr.M.B.Shanmuharajan  
Head Of The Department  
Department of Civil Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Civil Engineering department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV/VIII - Civil	3D Infrastructural Modeling	8/2/2021 to 12/2/2021

Thanking you

Place : Chennai

Date: 3/2/21

Your's faithfully

M.B. Shanmuharajan  
M.B. SHANMUHARAJAN

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

From,

Mr.M.B.Shanmuharajan  
Head Of The Department  
Department of Civil Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2020-2021 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2020-2021 Dated 8/2/2021 to 12/2/2021.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
3D Infrastructural Modeling	Mr.R.B.Rakesh AP/CIVIL

Thanking you

Place : Chennai

Date: 3/2/21

Your's faithfully  
  
M.B. SHANMUHARAJAN  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

Date: 3/2/2021

MSAJCE/CIVIL/COE/01/2020-2021

**CIRCULAR**

It is hereby informed to Final Year students of CIVIL department 3D Infrastructural Modelling is arranged from 8/2/2021 to 12/2/2021 at BIM lab. All are advised to attend positively.

M. B. [Signature] 03/02/2021  
Head of Department

[Signature]  
**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

**COURSE MODULE**  
**B.E CIVIL ENGINEERING ( REGULATIONS 2017 )**

**VALUE ADDED COURSE**

**3D INFRASTRUCTURAL MODELLING**

**L T P C**  
**1 0 2 2**

**OBJECTIVES:**

- The objective of this course is to impart necessary and practical knowledge of Building Information Modeling (BIM) and Communicate a design idea, structural detailing, concept graphically, visually in 3D Infrastructural Modeling.

**Unit I : Introduction**

**9**

Introduction to 3D Infrastructural Modeling and Revit – Process- Creating a project - co-ordinate systems- reference planes. Commands: Initial settings- Drawing aids- Drawing basic entities- Modify commands- Layers - Text and Dimensioning- Blocks -Drawing presentation norms and standards.

**Unit II :Creating of Floor Plan**

**9**

Creating walls- Level - Girds - Creating Terrain. Adding exterior walls-Adding a roof-Adding floor - Adding interior walls.

**Unit III : Placing of Components**

**9**

Adding door- Adding windows- Adding components - Structural members - Using Model Builder in Infracworks- Creating a proposed street style - Creating a sketch road - Converting a sketch road to a design road - Creating a new design proposal and design road - Opening an Infracworks model in REVIT Civil 3D- Adding survey field data to the model.

**Unit IV : Creating Documenting**

**9**

Documenting the Project –Sheets- Print – Schedules- Rooms - Areas and Legend.

**Unit V :Creating Walkthrough**

**9**

Adding a curtain wall-Attaching walls to the roof-Solar study-Walkthrough –Lights-Creating elevation - Modifying the entry deck -Adding a sloped floor- Adding stairs and railings-Modifying the roof.

**TOTAL: 45 HOURS**

  
**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
**34, Rajiv Gandhi Road (OMR), Siruseri, IT Park**  
**Chennai-603 103.**



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

**OUTCOMES:**

Upon completion of the course,

1. Understand basic concepts of Infrastructure construction planning and able to create new project
2. To get exposure to 2D & 3D drawings and infrastructure design towards to our country development program .
3. Predict and assess the impact of Infrastructure projects and planning of various industrial components
4. Know the requirements of various industries
5. To develop graphical skills for communicating concepts, innovative design, structural detailing and products graphically/ visually as well as understand another person's designs.

**TEXT BOOKS:**

1. Malik R.S., Meo, G.S. (2009) Civil Engineering Drawing, Computech Publication Ltd New Asian.
2. Sikka, V.B. (2013), A Course in Civil Engineering Drawing, S.K.Kataria & Sons,

**REFERENCES:**

1. Autodesk Revit 2017 MEP Fundamentals - SDC Publications.
2. Mastering Autodesk Revit MEP 2016. Autodesk Official Press, Simon Whitbread

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.G.Ramesh,  
Associate Professor,  
Department of Mechanical Engineering,  
Mohamed SathakA.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed SathakA.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/V-Mechanical	Fusion 360 Assembly Modelling	01.02.2021 to 12.02.2021

Place : Chennai

Date: 20.01.2021

**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
No.34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

*[Handwritten Signature]*

**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
No.34, Rajiv Gandhi Road (OMR), SIPCOT - IT Park  
Siruseri, Chennai - 603 103.

Your's faithfully

*[Handwritten Signature]*

Principal





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.G.Ramesh,  
Associate Professor,  
Department of Mechanical Engineering,  
Mohamed SathakA.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2020-2021-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2020-2021 Dated:01.02.2021 to 12.02.2021.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Fusion 360 Assembly Modelling	Mr.Mohan S R AP/MECH



  
**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
No.34.Rajiv Gandhi Salai (OMR), SIPCOT - IT Park  
Siruseri, Chennai - 603 103.

Principal

  
**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34 Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF MECHANICAL ENGINEERING

### COURSE MODULE

#### Course Objectives:

- The Students will acquire to
- To present the basic theoretical knowledge of the Fusion 360
  - To gain practical experience in handling 3D modelling software systems.
  - To know the drawing of various engineering part and assembly
  - To gain the knowledge of cloud storage for mechanical software platform
  - To know the easy way of part modelling to 3D printing module

#### MODULE

1. Modelling concept and workflow
2. Sketching with Dimension and Construction Control
3. Working With solids i) Extrusion ii) Revolution iii) Fillet & Chamber iv) Sweep and Loft.
4. Editing your model
5. Assemblies and Constraints
6. Materials and Images
7. Technical Drawing -Practice
8. Technical Drawing -Practice
9. Technical Drawing -Practice



  
**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF MECHANICAL ENGINEERING

### Course Outcomes:

The students will be able to

- CO1. Create and drive a mechanical gear assembly.
- CO2. Create and modify a form-based design.
- CO3. Use design tools for molded parts.
- CO4. Demonstrate proficiency in the setup and creation of a design.



  
**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



Off: 22357077 / 73  
22357074  
Fax / Dir : 22352277

**CENTRE FOR ACADEMIC COURSES**  
ANNA UNIVERSITY  
CHENNAI - 600 025



Dr. S. HOSIMIN THILAGAR  
DIRECTOR  
Letter No.387/AUVA/CAC/2021

22.03.2021

To  
The Controller of Examinations  
Anna University  
Chennai - 25.

Sir/Madam,

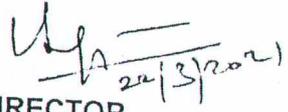
Sub: A.U. - CAC - Affiliated Institutions - Value Added Course - Reg.  
Ref: Letter No.MSAJCE/PO/021/2020-21, dated 09.02.2021.  
\*\*\*\*\*

With reference to the letter cited, the following Value Added Course offered by Mohammed Sathak A.J. College of Engineering, Chennai, Affiliated Institutions is allotted the Course Code as detailed below.

SL. No.	Code Allotted	Title	Credits			
			L	T	P	C
1.	MVA022	Introduction to Multi Body Dynamics	2	0	0	2

This is for your kind information and necessary action at your end.

Yours faithfully,

  
22/3/2021  
DIRECTOR

Copy to:

1. The Chairperson, Faculty of Mechanical Engineering, A.U., Ch -25.
2. The Principal, Mohamed Sathak A.J. College of Engineering, No:34, Rajiv Gandhi Road(OMR), IT Highway, Inside SIPCOT IT Park, Siruseri, Chennai - 603 103.
3. The Stock File - CAC.

Dr. Manjula - Head IC  
  
250321

  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
EGATTUR-603 103.  
KANCHIPUBAM DT.

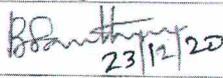
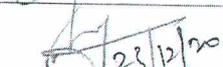
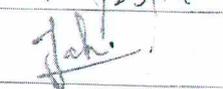
DEPARTMENT OF MECHANICAL ENGINEERING(R 2017)

VALUE ADDED COURSE

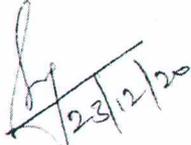
DEPARTMENT CONSULTATIVE COMMITTEE – MINUTES OF THE MEETING

Date: 23/12/20

As per the Regulations 2017, a department consultative committee is constituted to offer value added course for the 6<sup>th</sup> & 8<sup>th</sup> semester, B.E Mechanical Engineering students pursuing their studies at Mohamed Sathak A J College of Engineering (MSAJCE), Siruseri, Chennai. The following members were present for the meeting held on 21/12/2020 at Department of Mechanical Engineering, MSAJCE.

S.No.	Name & Designation	Member of Bodies	Signature
1.	Dr. B. Janarthanan, Professor, Mechanical Engineering, MSAJCE	Monitor the progress of the course	 23/12/20
2.	Mr.G. Ramesh, Associate Professor/ Mechanical Engineering, MSAJCE	Senior Faculty Member	 23/12/20
3.	Mr.Mohan S R, Assistant Professor/ Mechanical Engineering, MSAJCE	Coordinator	 23/12/20
4.	Mr.J. Jabin, Assistant Professor/ Mechanical Engineering, MSAJCE	Faculty handling the course	 23/12/20

The consultative committee has decided to offer Introduction to Multi-Body Dynamics for the students since it is essential for them to acquire knowledge and work in Mechanical Industry. The committee recommends Mr.J Jabin belongs to academicians to handle the course and train the students in Multi-Body Dynamics platform. The curriculum & syllabus, internal assessment pattern and awarding of grades are discussed and passed on the meeting for approval. The consultative committee constituted for value added course has recommended to conduct the course as lab integrated theory and approved the same.

  
23/12/20  
Coordinator



PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
EGATTUR - 603 103.  
KANCHIPURAM DT.



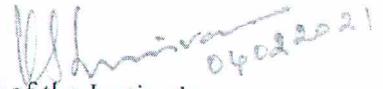
  
23/12/20  
Committee Chairperson  
(Senior Faculty Member)

  
23/12/20  
HoD/Mechanical Engineering  
Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

## APPLICATION FOR CONDUCTING VALUE ADDED COURSES

1. Name of the Department : Mechanical Engineering
2. UG programme : B.E
- 3. Details of the Value Added Courses:**
- a. Name of the Value Added Courses: Introduction to Multi-Body Dynamics
- b. Type of Value Added Courses : (Lab integrated theory)
- c. Short Description : Enclosure 1 enclosed - YES / NO
- d. Syllabus including Reference : Enclosure 2 enclosed - YES / NO
- 4. Target audience:**
- Semester (indicate if more than one) : VI<sup>th</sup> & VIII<sup>th</sup> Semester only
- Others :
- 5. Details of Faculty handling the course:**
- a. Name of the Faculty handling the Value Added Course : Mr. J Jabin
- b. Details including designation and expertise : Enclosure 3 enclosed - YES / NO
- c. Contact details
- Email ID : jabin4065@gmail.com
- Phone No : 7338815766
6. Tentative Time Table including dates of internal assessments : Enclosure 4 enclosed - YES / NO
7. Number of students opting for the course : 70
8. Department Consultative Committee - Minutes : Enclosure 5 enclosed - YES / NO
9. Name and Designation of the Coordinator : Mr. Mohan.S.R, Assistant Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A J College of Engg.

  
23/12/20  
Head of the Department  
(with date & seal)  
Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J. College of Engineering  
Egattur, Chennai - 603 103.

  
04/02/2021  
Head of the Institution  
(with date & seal)  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
No. 34, Reg. Gandhi Road, TOIARI DIPLOT - II Pal  
Sivur, Chennai - 603 103.

  
PRINCIPAL  
Director, Academic Courses MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
EGATTUR - 603 103.  
KANCHIPURAM DT  
Additional Controller of Examinations

B.EMECHANICAL ENGINEERING (REGULATIONS 2017)

VALUE ADDED COURSE

**INTRODUCTION TO MULTI BODYDYNAMICS**

L T P C  
1 0 2 2

**OBJECTIVES:**

- The objective of this course is to present the basic theoretical knowledge of the Multi-body Dynamics with applications to machine and structural dynamics.

**Unit I : Introduction**

3

The method of constraints for planar kinematic analysis. Revolute, prismatic, gear and cam pairs are considered together with other 2 degrees-of-freedom- types of constraints.

**Unit II : Basic principles for analysis of multi-body systems**

5

The automatic assembly of the systems of equations for position, velocity and acceleration analysis. Iterative solution of systems of nonlinear equations. Geometry of masses. The principle of virtual work and Lagrange's equations..

**Unit III : Dynamics of Planar Systems**

10

Dynamics of planar systems. Systematic computation and assembly of mass matrix. Computation of planar generalized forces for external forces and for actuator-spring-damper element. Simple applications of inverse and forward dynamic analysis. Numerical integration of first-order initialvalue problems. The method of Baumgarte for the solution of mixed differential-algebraic equations of motion. The use of coordinates partitioning, QR and SVD decomposition for the orthogonalization of constraints.

**Unit IV : Kinematics of rigid bodies in space**

8

Reference frames for the location of a body in space. Euler angles and Euler parameters. The formula of Rodrigues. Screw motion in space. Velocity, acceleration and angular velocity. Relationship between the angular velocity vector and the time derivatives of Euler parameters.

**Unit V : Kinematic analysis of spatial systems**

4

Basic kinematic constraints. Joint definition frames. The constraints required for the description in space of common kinematic pairs (revolute, prismatic, cylindrical, spherical). Equations of motion of constrained spatial systems.

**TOTAL: 30 HOURS**



**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
**EGATTUR-603 103.**  
**KANCHIPURAM DT.**



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF EEE & ECE**

From ,

Mr.C.Venkatesh

Mr.M.Kamarajan

Assistant Professor

Department of EEE & ECE

Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,

Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of EEE department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/V-EEE & ECE	LABVIEW	05/10/20 to 10/10/20

Thanking you

Place : Chennai

Date: 01-10-2020



Your's faithfully

Principal



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF EEE & ECE**

From,

Mr.C.Venkatesh

Mr.M.Kamarajan

Assistant Professor

Department of EEE & ECE

Mohamed Sathak A.J.College of Engineering,

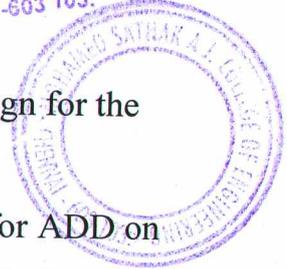
Chennai- 603103.

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2020-2021 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2020-2021 Dated: 05/10/2020 - 10/10/2020.



The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Lab View	Mrs.R.Abirami AP/EEE

Principal



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF EEE & ECE

### COURSE MODULE

#### Course Objectives:

- 1.To familiarize the student in introducing and exploring LabVIEW software
- 2.To enable the student on how to approach for solving Engineering problems using simulation tools.
- 3.To prepare the students to use Lab VIEW in their project works.
- 4.To provide a foundation in use of this software for real time applications.

#### MODULE-1

##### 1.Introduction LabVIEW

What Exactly is LabVIEW-What can LabVIEW do for you- How does LabVIEW work-Evolution of LabVIEW- What is DAQ- Communication using SerialPort- LabVIEW addon toolkits- LabVIEW Real Time, FPGA, PDA, and Embedded.

#### MODULE-2

##### 2: LabVIEW Environment

Front panel, control and indicator- Block Diagram, Nodes, Wires, Data Flow Programming- LabVIEW Projects, Project Explorer window, project Explorer Toolbars- Building Application- Installers- Floating Pallets-

#### MODULE-3

##### 3: LabVIEW Foundation

Creating VI- Basic Controls- Indicators- Booleans- String- Paths- Decorations- Custom Controls and Indicators- Automatic wire routing- Automatic Wiring – Wiring Complicated Objects- Bad Wires – Wiring Tips- adding Constants- Controls and indicators – Keyboard Shortcuts- Cloning and object.

#### MODULE-4

##### 4. Programming Execution with Structures

For Loop - The While Loop - Placing Objects inside Objects - Counting the Loops Shift Registers – Case registers – Dialogs – The Sequence Structures – Timing – Timed Structures – Formula Node – Expression Node.

#### MODULE-5

##### 5.Embedded combining with LabVIEW

VISA concept - Baud rate Calculation - Measurement and Automation Explorer -Serial Communication with Microcontrollers, Acquiring the real time digital data to the LabVIEW User interface, controlling the LED operations, Acquiring of real time analog sensor values, controlling the Motors

PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF EEE & ECE

### Course Outcomes:

The students will be able to

- CO1. Express programming & simulation for engineering problems.
- CO2. Find importance of this software for Lab Experimentation.
- CO3. Articulate importance of soft wares in research by simulation work.
- CO4. Have in-depth knowledge of providing virtual instruments on LabVIEW Environment.
- CO5. Write basic mathematical, electrical, electronic problems in LabVIEW, Simulate and Connect programming files with GUI Simulink.

**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

From,

Dr. A. Bala Krishnan  
Associate Professor  
Department of S&H  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of I Year from S&H department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
I Year/II Sem	PC Hardware Networking and Troubleshooting	08/03/2021 to 12/03/2021.

Thanking you

Place: Chennai

Date: 20/02/2021

  
Your's faithfully



**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,

Dr. P. Subramanian

Associate Professor

Department of Computer Science and Engineering

Mohamed Sathak A.J.College of Engineering,

Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2020-2021reg.

Ref: Letter of Requisition for the appointment of faculty for ADD ON course curriculum design for the academic year 2020-2021 Dated: 08/03/2021 to 12/03/2021.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD ON course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking into consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
PC Hardware Networking & Troubleshooting	Mrs. V. Rajathi AP/CSE

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

Ref:01/MSAJCE/S&H/EVEN/2020-2021

Date: 20/02/2021

**CIRCULAR**

It is hereby informed to all the 1<sup>st</sup> Year students that the value-added course “**PC Hardware Networking & Troubleshooting**” during 08/03/2021 to 12/03/2021. All are advised to attend the training course without fail.

The session schedule is as follows

**Timing: 9.00 AM to 3.30 PM**

**Resource Person: Mrs. V. Rajathi**

<b>Mode : Online Mode – GCR</b>				
<b>Faculties</b>	Mrs. V. Rajathi	Mrs. M. Ramya	Mrs. S. Aruna	Mr. M. Eswara Narayanan

  
**HoD**

COPY TO: S&H

Dept. of S&H

I Year

  
**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



---

## DEPARTMENT OF SCIENCE & HUMANITIES

### COURSE MODULE

#### Course Objectives:

- 1.To characterize a problem.
- 2.To develop a programing skill to solve the problem.
- 3.To acquire basic knowledge in computer hardware and peripherals.
- 4.To acquire knowledge about PC assembling.
5. To generate basic knowledge of Internet and Intranet.

#### **MODULE-1: Basic computer**

Organization of computer – software and hardware – Input / Output devices

#### **MODULE-2: Basic networking concepts**

Network technologies – LAN, WAN, MAN, PAN, CAN – Networking model – OSI model – TCP/ IP model – Networking adapters.

#### **MODULE-3: Inside the PC**

Identification of PC – Study of different blocks – Assembling and disassembling

#### **MODULE-4: Networking devices**

Routers – switches – modems – Hubs etc.. – Wired and Wireless technology

#### **MODULE -5: Network basic and configuration**

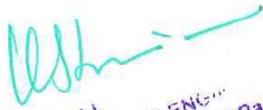
Setting IP Addresses – sharing files and folders – network troubleshooting

---

#### Course Outcomes:

The students will be able to

- CO1. Student should able to know Basics of computer assembling.
- CO2. Students will have in-depth knowledge of networking models.
- CO3. The student will able to know the basic of troubleshooting.
- CO4. Students will have brief knowledge of networking devices.
- CO5. The student will able to know the basic of networks and configuration.

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**Design and Development of Curriculum for Add on /  
certificate / Diploma Courses**

**Academic Year 2019-2020**



**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
3a, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF EEE & ECE**

From ,

Dr.Murugan

Dr.Dharavidaselvi

Department of EEE & ECE

Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,

Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of EEE& ECE department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

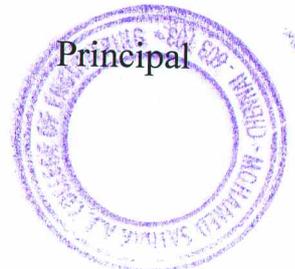
Year/Sem	Title	Dates
III/V- EEE & ECE	Robotic Process Automation (RPA)	22/07/2019 – 28/07/2019

Thanking you

Place : Chennai

Date:

Your's faithfully





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF EEE & ECE**

From,

Dr.R.Murugan

Department of EEE & ECE

Mohamed Sathak A.J.College of Engineering,

Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2019-2020 reg.

  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
Siruseri IT Park  
Gandhi Road (OMR), Chennai-603 103.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2019-2020 Dated:22/07/19 to 28/07/19.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Robotic Process Automation (RPA)	Mr.K.Vairaperumal AP/EEE

Principal





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## **DEPARTMENT OF EEE & ECE**

### **COURSE MODULE**

#### **Course Objectives:**

- 1) To provide an overview of the automation anywhere enterprise platform architecture and components and explain in detail about the various features and functionalities of the AA working domain.
- 2) To provide in depth knowledge about the various components of AA software including development, runtime client and control room.
- 3) To Create bots using different types of recorders, Editor and Basics commands using automation anywhere platforms.
- 4) To apply bot creation methodologies for developing bots to solve any real world problem in IT Education and Banking Sectors.

#### **MODULE-1**

##### **Introduction to Robotic Process Automation & Bot Creation**

Introduction to RPA and use cases- Automation Anywhere Enterprises Platform-Advanced features and capabilities- Way to create bots-Conclusion.

#### **MODULE-2**

##### **Web Control Room and Client**

Introduction- Features Panel-Dashboard(Home,Bots,Devices, Audit, Workload,Insights)-Features Panel-Activity(View tasks in Progress and Scheduled Tasks)-Bots(View Bots uploaded and Credentials)-Devices(View Development and runtime clients and Device Pools)-Workload (Queues and SLA Calculator)-Auditlog(View activities logged which are associated with web CR)-Administration(configure settings, users, roles, license and migration)-Demo of Exposed API's-Conclusion-Client introduction and conclusion.

#### **MODULE-3**

##### **Bot Creator**

Introduction-Recorders-Smart Recorders-Web recorders-Screen Recorders-Task Editor variables-command Library-Loop Command-Excel command-Database command-string operation command-XML command-Terminal Emulator command-PDF integration command-FTP command-PGP command- object cloning command-Error handling command-Manage windows control command-Workflow designer-Report designer-Best practices-Summary.

#### **MODULE-4**

##### **Meta Bot and Bot Insight**

Introduction-Metabot Designer-Megabot with AI sense-Bot Insight-transactional Analytics-Operational Analytics-Course key point.

  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, Chennai  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF EEE &ECE

### MODULE-5

#### Practice and Assessment session

Bot creation using recorders(Smart, Web and Screen), Bot creation to invoke database automation, FTP and PGB command execution by bots. Bot development using object cloning command.

#### Course Outcomes:

The students will be able to

- CO1: Automate any sort of manual or repetitive human tasks by using the Automation anywhere tool.
- CO2: Develop and deploy software bots which can perform automation task 24x7 without interruption.
- CO3: Build an analytics bot that can be used in finance, stock market and banking sector.

PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
36, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Dr.R.Senthil Kumar,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/V-Mechanical	Training on CATIA Solid Models	06.07.2020 to 14.07.2020

Thanking you

Place : Chennai

Date: 01.07.2020

Your's faithfully

  
**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Principal



**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
No.34.Rajiv Gandhi Salai (OMR), SIPCOT - IT Park  
Siruseri, Chennai - 603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**

Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Dr.R.Senthil Kumar,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2019-2020-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2019-2020 Dated: 06.07.2020 to 14.07.2020.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Training on CATIA Solid Models	Mr.S.Bharath AP/MECH

**PRINCIPAL**

MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
No.34 Rajiv Gandhi Salai (OMR), SIPCOT - IT Park  
Siruseri, Chennai - 603 103,

Principal

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

Date:01.07.2020

Ref:MSAJCE/VAC02MECH/2020-2021

**CIRCULAR**

Our department is organizing a “ADD ON ” on **Training on CATIA Solid Models** during 06.07.2020 to 14.07.2020. The following III Year Mechanical Students register with Mr.S.Bharath AP/MECH on or before 04.07.2020.

The session schedule is as follows

**Timing: 9.00 AM to 1.00 PM**

**HoD**

Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103

Copy To:

Dept. of Mechanical

III Year Mechanical

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





## MOHAMED SATHAK A J COLLEGE OF ENGINEERING

Sponsored by Mohamed Sathak Trust  
 (Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
 Siruseri IT Park, Egattur, Chennai 603 103

### DEPARTMENT OF MECHANICAL ENGINEERING

#### COURSE MODULE

#### Course Objectives:

The Students will acquire to

- Understand basis of graphical representation in the general context of Industrial Engineering.
- Apply expression and communication for the design, creation, definition and development of an industrial installation and/or product making practical use of the current technologies
- Create design shapes with 3D modeling, assembly, sheet metal design and visualization features
- Learn the implementation of solid modeling and get hands-on experience with the real world projects

#### MODULE

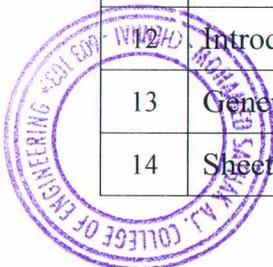
1	Surface Modeling & Assembly - An Overview
2	Wireframe & Surface design
3	Surfaces – Sweep - Multi section - surfaces - Trim operations - Generative shape design
4	Introduction to Assembly - Bottom up approach
5	Top down approach
6	Inserting of components
7	Assembly constrains
8	Introduction to Drafting
9	Visual Realism
10	Digital mockup Kinematics
11	Simple Mechanism Analysis
12	Introductio to Sheet Metal Design
13	Generative sheet metal design
14	Sheet metal design

*Handwritten signature in blue ink.*

**PRINCIPAL**

**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**

34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
 Chennai-603 103.



15	Sketching
16	Lofted bend
17	Jog feature
18	Forming tools
19	Swept flange
20	Pattern and Drafting



**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF MECHANICAL ENGINEERING

### Course Outcome

Students will be able to

- Interpret and/or convey the technical information in an industrial drawing
- Apply graphical representation techniques using traditional metric geometry and Know, identify, interpret and apply the current standards
- do assembly designing, sheet metal designing, and template based designing
- perform visual analysis and validation which will give them high quality performance insights for product decisions

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Dr.R.Senthil Kumar,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

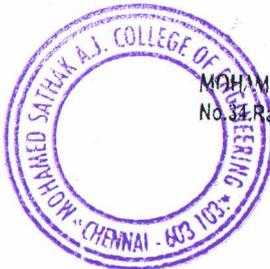
Year/Sem	Title	Dates
IV/VIII-Mechanical	Creo-Harness Design, GD&T Industrial Standard	07.12.2019 to 07.03.2020

Thanking you

Place : Chennai

Your's faithfully

Date: 21.11.2019



  
**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
No.34,Rajiv Gandhi Salai (OMR), SIPCOT - IT Park  
Siruseri, Chennai - 603 103.

Principal

  
**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park,  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Dr.R.Senthil Kumar,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2019-2020-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2019-2020 Dated:07.12.2019 to 07.03.2020.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Crreo-Harness Design, GD&T-Industrial Standard	Mr.S.Deepak Kumar AP/MECH



Principal

**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
No.34.Rajiv Gandhi Salai (OMR), SIPCOT - IT Park  
Siruseri, Chennai - 603 103.

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

Ref:0MSAJCE/VAC01MECH/2020-2021

Date:22.11.2019

**CIRCULAR**

Our department is organizing a "ADD ON " on Creo-Harness Design, GD&T-Industrial Standard during 07.12.2019 to 07.03.2020. The following IV Year Mechanical Students register with Mr.S.Deepak Kumar AP/MECH on or before 25.11.2019.

The session schedule is as follows

**Timing: 9.00 AM to 3.30 PM**

**Venue: GF 103 ALTAIR LAB**

**HoD**  
Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103

Copy To:

Dept. of Mechanical  
IV Year Mechanical



**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



## MOHAMED SATHAK A J COLLEGE OF ENGINEERING

Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

### DEPARTMENT OF MECHANICAL ENGINEERING

#### COURSE MODULE

#### Course Objectives:

#### The Students will acquire to

- Recognize proper application of GD&T
- Calculate geometric tolerances and boundaries
- learn basic skills of 2D sketching and drafting of field dimensions
- Develop a solution through group work.
- Communicate and present ideas and solutions to design problems

#### MODULE

1	Introduction to Geometric Dimension
2	GD&T standards
3	Criteria for selecting Datum features
4	Feature control frame representation
5	Interpretation of drawings & dimensions
6	Introduction to Geometric Tolerance
7	Types of Tolerances
8	Form- Profile- Orientation- Location- Run out
9	Maximum Material Condition (MMC)
10	Least Material Condition (LMC)
11	Regardless of Feature size (RFS)
12	Introduction to AutoCAD
13	Exercise on Position tolerance, Profile tolerance, fixed fastener
14	Sketch commands



PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

15	Sketch entities
16	Sketch Tools
17	Sketch Settings
18	Advance Tools
19	ISO TR5460 for Gtol measurement
20	Introduction to Harness Design



A handwritten signature in green ink, consisting of stylized cursive letters.

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



## MOHAMED SATHAK A J COLLEGE OF ENGINEERING

Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

### DEPARTMENT OF MECHANICAL ENGINEERING

#### Course Outcome

#### Students will able to

- Interpret GD&T and Engineering standardization on drawings using Creo
- Understand the fundamental concepts of GD&T
- Apply basic knowledge of sketching techniques and modify the dimensions with BIS standards.
- Illustrate to familiarize in two-dimensional drawings with AutoCAD.
- Manipulate drawings through editing and plotting techniques



  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

From ,

Mr.M.B.Shanmuharajan  
Head Of The Department  
Department of Civil Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Civil Engineering department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/VII - Civil	STAAD Pro	9/12/2019 to 14/12/2019

Thanking you

Place : Chennai

Date: 5/12/2019

Your's faithfully

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

From,

Mr.M.B.Shanmuharajan  
Head Of The Department  
Department of Civil Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2020-2021 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2019-2020 Dated 9/12/2019 to 14/12/2019.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
STAAD Pro	Ms.K.Gayathri AP/CIVIL

Thanking you

Place : Chennai

Date: 5/12/2019

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF EN  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Your's faithfully





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

Date: 5/12/2019

MSAJCE/CIVIL/COE/01/2019-202 0

**CIRCULAR**

It is hereby informed to Third Year students of CIVIL department STAAD Pro Class is arranged from 9/12/2019 to 14/12/2019 at BIM lab. All are advised to attend positively.

Head of Department

M.B. [Signature] 5/12/2019

[Signature]

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAKA J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

**COURSE MODULE**  
**B.E CIVIL ENGINEERING ( REGULATIONS 2017 )**  
**VALUE ADDED COURSE**

**STAAD Pro**

**L T P C**  
**1 0 2 2**

**OBJECTIVES:**

- STAAD is the abbreviation for Structural Analysis and Design. STAAD.Pro is one of the popular software that is used for analysing & designing structures like – buildings, towers, bridges, industrial, transportation and utility structures.

**Module I**

**9**

Introduction about beams, column and load specifications, Analyze and Design using Bently STAAD Pro - Breifing on job creating, Explaining about tools to be used for project - Analyze and Design of beams & colume using Bently STAAD Pro.

**Module II**

**9**

introduction about building elements - Analyze and Design of building using Bently STAAD Pro - Detailing on IS codes and Load specifications - Analyze and Design of building using Bently STAAD Pro.

**Module III**

**9**

Detailing on IS codes and Load specifications, Analyze and Design of building using Bently STAAD Pro. Introduction to Bridge components - Analyze and design of bridge using STAAD.Pro - Load specification to bridge design - Analyze and design of bridge using STAAD.Pro

**Module IV**

**9**

Introduction to circular water tank- Analyze and design of circular water using Bently STAAD Pro- Lecture on tool to be used for the design - Analyze and design of circular water using Bently STAAD Pro- Load specification about circular water tank - Analyze and design of circular water using Bently STAAD Pro.

**Module V**

**9**

Introduction, Load specification & IS codes about Steel Truss - Analyze & design of Steel Truss using STAAD.Pro - Introduction to IS codes & tools used about Steel Truss - Analyze & design of Steel Truss using STAAD.Pro

**TOTAL: 45 HOURS**

PRINCIPAL

MOHAMED SATHAK A.J. COLLEGE OF  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

**OUTCOMES:**

Upon completion of the course,

- Individuals can work as Structure Designers, Project Managers, Building Analysts, Quality Analysts, Bridge, Designers etc. To get exposure to 2D & 3D drawings and infrastructure design towards to our country development program .

**TEXT BOOKS:**

1. Sham Tickoo (2015) Learning Bentley Staad.Pro V8I for Structural Analysis.
2. Prof. Sham Tickoo/TIET, Exploring Bentley'S Staad.Pro Connect Edition. by Prof. Sham Tickoo/TIET, BPB Publications

**REFERENCES:**

1. T. S. Sarma, Staad Pro V8i for Beginners:With Indian Examples.

PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF EN.  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

From ,

Dr.E.Dhiravidachelvi

Associate Professor

Department of Electronics and communication Engineering,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

To

The Principal,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of ECE department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV ECE	IOT and Its Applications	16/12/2019 – 28/02/2020

Thanking you

Place : Chennai

Date 25/11/2019.

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
Jy. Rajiv Gandhi Road (OMR), Siruseri, IT  
Chennai-603 103.  
Your's faithfully



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF ECE**

From,

Dr.E.Dhiravidachelvi

Associate Professor

Department of Electronics and communication Engineering,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2019-2020 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2019-2020 Dated:16/12/2019 – 28/02/2020

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject.

I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

**PRINCIPAL**

**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Title	Name of the Faculty
IOT and Its Applications	Mr.S.Naveen kumar AP/ECE



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF ECE

Date:18/11/2019

Ref:01/MSAJCE/ECE/EVEN/2019-2020

### CIRCULAR

Our department is organizing a “ADD ON Course” on IOT and Its Applications during 16/12/2019 to 28.02.2020. The IV Year ECE Students. Register with Mr.S.Naveen kumar AP/ECE on or before 27/11/2019.

The session schedule is as follows

**Timing: 9.00 AM to 3.30 PM**

**Venue: IOT LAB**

HoD/ECE

**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



## IOT AND ITS APPLICATION

### SYLLABUS

**Unit (i): Introduction to Internet of Things – applications/devices, protocols, communication model** 9

Introduction – Overview of Internet of Things(IoT), the characteristics of devices and applications in IoT ecosystem, building blocks of IoT, Various technologies making up IoT ecosystem, IoT levels, IoT design methodology, The Physical Design/Logical Design of IoT, Functional blocks of IoT and Communication Models.

**Unit (ii): Things and Connections** 9

Working of Controlled Systems, Real-time systems with feedback loop e.g. thermostat in refrigerator, AC, etc. Connectivity models – TCP/IP versus OSI model, different type of modes using wired and wireless methodology, The process flow of an IoT application.

**Unit (iii): Sensors, Actuators and Microcontrollers** 9

Sensor – Measuring physical quantities in digital world e.g. light sensor, moisture sensor, temperature sensor, etc. Actuator – moving or controlling system e.g. DC motor, different type of actuators Controller – Role of microcontroller as gateway to interfacing sensors and actuators, microcontroller vs microprocessor, different type of microcontrollers in embedded ecosystem.

**Unit: (iv) Building IoT applications** 9

Introduction to Arduino IDE – writing code in sketch, compiling-debugging, uploading the file to Arduino board, role of serial monitor. Embedded 'C' Language basics – Variables and Identifiers, Built-in Data Types, Arithmetic operators and Expressions, Constants and Literals, assignment. Conditional Statements and Loops – Decision making using Relational Operators, Logical Connectives – conditions, if-else statement, Loops: while loop, do while, for loop, Nested loops, Infinite loops, Switch statement. Arrays – Declaring and manipulating single dimension arrays Functions – Standard Library of C functions in Arduino IDE, Prototype of a function: Formal parameter list, Return Type, Function call. Interfacing sensors

**Unit: (v) Security and Future of IoT ecosystem** 9

Need of security in IoT – Why Security? Privacy for IoT enabled devices- IoT security for consumer devices- Security levels, protecting IoT devices Future IoT eco system – Need of power full core for building secure algorithms, Examples for new trends – AI, ML penetration to IoT

Total Noof Hours: 45

  
Course coordinator

  
HOD/EECE.



**MOHAMEDSATHAKAJCOLLEGEENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park, Egattur, Chennai 603103

**DEPARTMENT OF SCIENCE & HUMANITIES**

From,

Dr. A. Bala Krishnan

Associate Professor

Department of S&H

Mohamed Sathak A.J. College of Engineering,  
Chennai-603103.

To

The Principal,

Mohamed Sathak A.J. College of Engineering,

Chennai-603103.

Respected Madam/Sir,

Sub: Permission for conducting ADDON course-reg.

With reference to the subject mentioned below, we have proposed to conduct ADDON courses for all the I Year students. The selected courses will be useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
I Year/II Sem	PC Hardware & Networking	17/02/2020 to 22/02/2020

Thanking you

Place: Chennai.

Date: 02/02/2020

  
Your's faithfully



PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,

Dr. B. Muthukumar

Associate Professor

Department of Computer Science and Engineering

Mohamed Sathak A.J.College of Engineering,

Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2019-2020 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD ON course curriculum design for the academic year 2019-2020 Dated: 17/02/2020 to 22/02/2020

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD ON course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking into consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
PC Hardware & Networking	<b>Mrs. V. Rajathi</b> AP/CSE

*(Signature)*  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

Ref:01/MSAJCE/S&H/EVEN/2019 -2020

Date: 02/02/2020

**CIRCULAR**

It is hereby informed to all the 1<sup>st</sup> Year students that the value-added course "PC Hardware & Networking" during 17/02/2020 to 22/02/2020. All are advised to attend the training course without fail.

The session schedule is as follows

**Timing: 9.00 AM to 3.30 PM**

**Resource Person: Mrs.V. Rajathi**

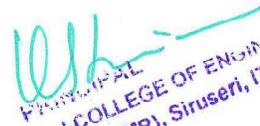
<b>Venue</b>	4 <sup>th</sup> Floor Auditorium	TF- 403	TF- 409	TF- 411
<b>Faculties</b>	Mrs.V. Rajathi	Ms. J. Nirmala	Mrs.R S. Lysa Packiam	Mrs.S.Babitha Rani

  
HoD

COPY TO: S&H

Dept. of S&H

I Year

  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



---

**DEPARTMENT OF SCIENCE & HUMANITIES**

**COURSE MODULE**

**Course Objectives:**

- 1.To develop programming skill to solve a problem
- 2.To gain knowledge about peripheral devices.
- 3.To acquire basic knowledge about computer hardware.
- 4.To acquire knowledge about Installation and troubleshooting.
5. To know basic about TCP /IP, internet and Intranet.

**MODULE-1: Basic networking concepts**

Network topologies – Networking model – Network adapters – Cabling and troubleshooting

**MODULE-2: IP Address**

Static and DHCP IP Address – types of IP Address – Subnet Mask and Subnetting

**MODULE-3: Inside the PC**

Identification of PC – different blocks – Assembling the parts – Add on card identification

**MODULE-4: Networking devices**

Routers – Switches – Hubs – modems – wired and wireless technology

---

**MODULE-5: WAN and Wireless LAN**

Metro Ethernet – MPLS – WLAN security concepts.

**Course Outcomes:**

The students will be able to

- CO1. Student will have in depth knowledge about basic of computer assembling.
- CO2. Students have in depth knowledge about IP address
- CO3. The student will able to know the basic of PC hardware
- CO4. Students will have brief knowledge about computer networking and troubleshooting.
- CO5. The student will able to know the networking devices.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**Design and Development of Curriculum for Add on /  
certificate / Diploma Courses**

**Academic Year 2018-2019**



**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
3a, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Maridurai,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV/V-Mechanical	CATIA	07.01.2019 to 12.01.2019



Thanking you

Your's faithfully

*T. Maridurai*

Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

*[Signature]*  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Maridurai,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2018-2019-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2018-2019 Dated: 07.01.2019 to 12.01.2019.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
CATIA	Mr.V.G.Sathish AP/MECH



**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

Ref:MSAJCE/VAC02MECH/2018-2019

Date: 20.12.2018

**CIRCULAR**

Our department is organizing a "ADD ON " on CATIA during 07.01.2019 to 12.01.2019. The following IV Year Mechanical Students register with Mr.V.G.Sathish AP/MECH on or before 02.01.2019.

The session schedule is as follows

**Timing: 9.00 AM to 1.00 PM**

**Location : CAD Laboratory**

*T. Maniduri*

**HoD**

Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

Copy To:

Dept. of Mechanical

III Year Mechanical

*V.G. Sathish*

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

**COURSE MODULE**

**Course Objectives:**

The Students will acquire to

- Understand basis of graphical representation in the general context of Industrial Engineering.
- Apply expression and communication for the design, creation, definition and development of an industrial installation and/or product making practical use of the current technologies
- Create design shapes with 3D modeling, assembly, sheet metal design and visualization features
- Learn the implementation of solid modeling and get hands-on experience with the real world projects

**MODULE**

1	Surface Modeling & Assembly - An Overview
2	Wireframe & Surface design
3	Surfaces – Sweep - Multi section - surfaces - Trim operations - Generative shape design
4	Introduction to Assembly - Bottom up approach
5	Top down approach
6	Inserting of components
7	Assembly constrains
8	Introduction to Drafting
9	Visual Realism
10	Digital mockup Kinematics
11	Simple Mechanism Analysis
12	Introduction to Sheet Metal Design
13	Generative sheet metal design
14	Sheet metal design
15	Sketching

  
**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
**34, Rajiv Gandhi Road (OMR), Siruseri, IT Park**  
**Chennai-603 103.**



16	Lofted bend
17	Jog feature
18	Forming tools
19	Swept flange
20	Pattern and Drafting



**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR). Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF MECHANICAL ENGINEERING

### Course Outcome

Students will able to

- Interpret and/or convey the technical information in an industrial drawing
- Apply graphical representation techniques using traditional metric geometry and Know, identify, interpret and apply the current standards
- do assembly designing, sheet metal designing, and template based designing
- perform visual analysis and validation which will give them high quality performance insights for product decisions

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Maridurai,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/V-Mechanical	CREO	24.12.2018 to 29.12.2018

Thanking you

Place : Chennai

Date : 15.12.2018

Your's faithfully

*T. Maridurai*

**Head of the Department**  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

*[Handwritten signature]*

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Maridurai,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2018-2019-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2018-2019 Dated: 24.12.2018 to 29.12.2018.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
CREO	Mr.S.Bharath AP/MECH

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

Ref:MSAJCE/VAC01MECH/2018-2019

Date: 20.12.2018

**CIRCULAR**

Our department is organizing a "ADD ON" on **CREO** during 24.12.2018 to 29.12.2018. The following III Year Mechanical Students register with Mr.S.Bharath AP/MECH on or before 20.12.2018.

The session schedule is as follows

**Timing: 9.00 AM to 1.00 PM**

**Location : CAD Laboratory**

*T. Mani chris*

**HoD**

Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

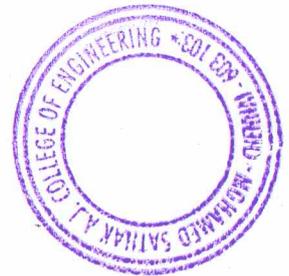
Copy To:

Dept. of Mechanical  
III Year Mechanical

*[Handwritten signature in green ink]*

**PRINCIPAL**

**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

**COURSE MODULE**

**Course Objectives:**

The Students will acquire to

1. To gain practical experience in handling 2D drafting and 3D modelling software systems.
2. To know the drawing of various engineering part and assembly
3. To convert the creo part modelling into suitable additive manufacturing method for part development

**MODULE**

1	Introduction to Industrial design requirements and Drawing study
2	Creating datum features , Axis, Creating sweeps and blends
3	Creating holes and shells, rounds, chamfers and Drafts
4	Creating punch and die for emboss feature
5	Variable section sweeps, Helical sweeps and Swept blends Creating patterns –polar and rectangular
6	Group, copy, and mirror tools Measuring and inspecting models like Volume, mass, CoG
7	Assembling with constraints
8	Exploding assemblies Using advanced assembly constraints
9	Creating and using component interfaces Using assembly features and shrinkwrap
10	Replacing and Repeat components in an assembly Understanding simplified reps
11	Creating cross-sections, display styles, and combined views Substituting components by rep, envelope, and model
12	Creating and using assembly structure and skeletons Introduction to sheet metal design
13	Primary walls, Secondary and unattached walls Unbend, bend back and cuts , Notches and punches
14	Practice I
15	Practice II

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





## MOHAMED SATHAK A J COLLEGE OF ENGINEERING

Sponsored by Mohamed Sathak Trust

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

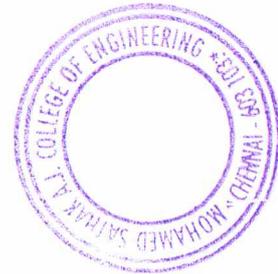
### DEPARTMENT OF MECHANICAL ENGINEERING

#### Course Outcome

Upon the completion of this course the students will be able to

1. Draw 3D and Assembly drawing using CAD software
2. Convert the Creo modelling into STL format for 3D Printing Part Development

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

From ,

Mr.P.Dharmaraj  
Head Of The Department  
Department of Civil Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Civil Engineering department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
II/III - Civil	Sketchup	10/12/2018 to 14/12/2018

Thanking you

Place : Chennai

Date: 5/12/2018

Your's faithfully

5/12/2018  
[P. DHARMARAJ]

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

From,

Mr.P.Dharmaraj  
Head Of The Department  
Department of Civil Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2018-2019 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2018-2019 Dated 10/12/2018 to 14/12/2018.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Sketchup	Ms.Sharmila Ponnammal AP/CIVIL

Thanking you

  
**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGIN  
34, Rajiv Gandhi Road (OMR), Siruseri, IT  
Chennai-603 103.

Your's faithfully





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

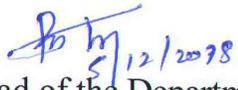
**DEPARTMENT OF CIVIL ENGINEERING**

Date: 5/12/2018

MSAJCE/CIVIL/COE/01/2018-2019

**CIRCULAR**

It is hereby informed to Second Year students of CIVIL department Sketchup software class is arranged from 10/12/2018 to 14/12/2018 at BIM lab. All are advised to attend positively.

  
Head of the Department

  
**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri. IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

**COURSE MODULE**  
**B.E CIVIL ENGINEERING ( REGULATIONS 2017 )**  
**VALUE ADDED COURSE**  
**SKETCHUP**

	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>OBJECTIVES:</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>
The objective of this course is to learn how to represent an Interior Design concept in a 3-dimensional visual computer environment. The student will learn about the basic drawing tools used in SketchUp, and then use those tools to draft and build a 3D conceptual model.				
<b>Module I:</b>			<b>8</b>	
Introduction to Sketchup software – Basic tools- Modeling practice- Openings- Creating materials. Edit materials- Warehouse- Project 1: Interior Space – Bedroom				
<b>Module II:</b>			<b>8</b>	
Object placement- Section plane - Layouts - Basic renders. Structures phase				
<b>Module III:</b>			<b>8</b>	
Detailing phase- Lighting phase- Test renders- Render phase- Presentation phase.				
<b>Module IV:</b>			<b>8</b>	
Set up layout– Image hierarchy- scale – Creating a proposed street style.				
<b>Module V:</b>			<b>8</b>	
Inserting renderings- Dimensions and labels- Title block.				

**TOTAL: 40 HOURS**

**OUTCOMES:**

Upon completion of the course,

- Generate clear, visual RFI graphics. Create dimensionally accurate, highly-detailed 3D models. Able to develop various approaches in developing the Building models.

**TEXT BOOKS:**

1. Marcus Ritland(May 21, 2014). 3D Printing with SketchUp, Packt Publishing, Illustrated edition
2. Alex Schreye(October 26, 2015)r, Architectural Design with SketchUp: 3D Modeling, Extensions, BIM, Rendering, Making, and Scripting (2nd Edition), Wiley, 2nd edition

**REFERENCES:**

1. Paul Lee(January 15, 2020), Construction Documents using SketchUp Pro and LayOutViewision Virtual Environments Ltd.
2. AdrianaGranadosSeptember 1, 2012, Designing Kitchens with SketchUp.

  
**PRINCIPAL**  
**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,  
The Head of Department,  
Department of CSE & IT,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To,  
The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD ON course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of CSE & IT department. The selected courses are useful to the students for learning the emerging technical fields.

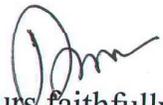
Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV/VIII	DATA SCIENCE	05/02/2019 – 13/02/2019

Thanking you

Place: Chennai

Date: 01/02/2019

  
yours faithfully

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,  
The Head of Department,  
Department of Computer Science and Engineering & IT,  
Mohamed Sathak A.J.College of Engineering,  
Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2018-2019 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2018-2019 Dated: 05/02/2019 to 13/02/2019. The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
DATA SCIENCE	Mrs.J.Nirmala AP/CSE

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
#4, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF CSE & IT**

Ref:01/MSAJCE/COMMON CIRCULAR/EVEN/2018-2019

Date: 04/02/2019

**CIRCULAR**

Our department is organizing a "VAC" on DATA SCIENCE during 05/02/2019 to 13/02/2019. The IV Year Computer Science and Engineering and Information Technology Students register with Mrs.J.Nirmala AP/CSE on or before 04/02/2019.

The session schedule is as follows

**Timing: 1.30 PM to 3.30 PM**

**Resource Person: Mrs.J.Nirmala AP/CSE**

**Venue: Computer Lab - II**

  
HOD

**COPY TO:**

Dept. of CSE & IT

IV Year CSE & IT Students

  
**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



## COURSE MODULE

### **Course Objectives:**

- 1) To learn the fundamentals of data science.
- 2) To develop design thinking capability to build big-data
- 3) To understand the machine learning algorithms and develop models for big data problems.
- 4) To practice the important data science modules NumPy, SciPy and Matplotlib.
- 5) To handle the input/output files in Python and apply the statistical processing of data using Pandas.

### **MODULE-1**

#### **INTRODUCTION**

5

Introduction Big Data and Data Science - Big Data Analytics, Business intelligence vs. Big data- Data Science Process Overview – Defining goals – Retrieving data – Data preparation – Data exploration – Data modelling – Presentation -Big data frameworks.

### **MODULE-2**

#### **DATA PROCESSING**

5

Big Data: General techniques for handling large data -Data Pre-processing and Feature Selection:Data cleaning -Data integration -Data Reduction -Data Transformation and Data Discretization, Feature Generation and Feature Selection.

### **MODULE-3**

#### **MACHINE LEARNING ALGORIHMS**

5

Machine Learning: Machine learning – Modelling Process – Training model – Validating model – Predicting new observations –Classifiers - Decision tree - Naive Bayes - k-Nearest Neighbours (k-NN), k-means – SVM Association Rule mining – Ensemble methods.

### **MODULE-4**

#### **DATA VISUALIZATION**

5

Data Visualization: Introduction to data visualization-NumPy arrays – 1-d, multidimensional arrays and matrices; SciPy – Scientific Computing library of Python – Introduction, Basic functions, Special functions, scipy.integrate, scipy.optimize, scipy.interpolate.

  
**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



## MODULE-5

### PLOTTING WITH PYPLOT

5

Python Plotting: PyPlot – Basic Plotting; Logarithmic Plots; Plots with multiple axes; Matplotlib – interactive functions 3d plotting; Pandas – Introduction, Data Frame, Reading and writing CSV, XLS files, Working with missing data, categorical data, data visualization with pandas-Development problems related to Data Science

#### Course Outcomes:

The students will be able to

CO1: Apply the data analysis techniques for applications handling large data

CO2: Demonstrate the various machine learning algorithms used in data science process.

CO3: Develop hands-on skills using the tools, languages, and libraries used by data scientists

CO4: Read and write data from/to files in Python programs, apply data pre-processing techniques and develop algorithmic solutions to data science related problems.

PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
Dr. Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**

Sponsored by Mohamed Sathak Trust

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Siruseri IT Park, Egattur, Chennai 603 103

**Department of ECE**

From

Dr.E.Dhiravidachelvi

Head/ECE,

Mohamed SathakA J College of Engineering,  
Chennai.

To

The Principal,

Mohamed SathakA J College of Engineering,  
Chennai.

Respected Sir,

Sub: Seeking Permission for conducting CertificationProgram Regarding.

We are planning to conduct a Certification Program on the topic “Technology Skill Development in PCB Design”from 23.07.2018 to 27.07.2018 by Mr.K.Sudhakaran, Proprietor, EMB Ware Technologies and Components” So I kindly request you to give permission for conducting this certificate program.

Thanking You,

Yours faithfully

Place: Chennai

Date: 09.07.2018



PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**

Sponsored by Mohamed Sathak Trust

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Siruseri IT Park, Egattur, Chennai 603 103

DEPARTMENT OF ECE

Date: 10/07/2018

Ref:01/MSAJCE/ECE/EVEN/2018-2019

**CIRCULAR**

Our department is organizing a “Certification program” on “Technology Skill Development in PCB Design” from 23.07.2018 to 27.07.2018 by Mr.K.Sudhakaran, Proprietor, EMB Ware Technologies and Components” The II Year Electronics and Communication Engineering Students Register with Mr.J.Raja AP/ECE On or Before 12.07.2018.

The session schedule is as follows

Timing :08.30 PM to 3.30 PM

Resource Person: **Mr.K.Sudhakaran**, Proprietor, EMB Ware Technologies and Components

Venue:Digital Signal Processing Lab

HOD/ ECE

COPY TO:

Dept. of ECE

II Year ECE



**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR) Chennai - 603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

## ENROLLED STUDENT'S NAME LIST

**Department of ECE**

**Technology Skill Development in PCB Design**

S.No	Reg.No	Name of the Students
1	311817106002	Hameed Ziyath
2	311817106003	Karan J
3	311817106004	M Mohamed Abdul Rahman
4	311817106005	Mohamed Shafiqshariff
5	311817106006	Muhammed Swalih.K
6	311817106008	Rajkumar C
7	311817106010	Subash G
8	311817106301	Sandhya Roselin Mary

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



## Technology Skill Development in PCB Design

### Syllabus

#### Objective of the Course:

This is a basic course for designing of PCB using software. PCB (Printed Circuit Board) designing is an integral part of each electronics products and this program is designed to make students capable to design their own projects PCB up to industrial grade.

Duration : 30 Hrs.

#### Topics Covered:

1. Introduction to PCB designing concepts
2. Component introduction and their categories
3. Introduction to Development Tools
4. Detailed description and practical of PCB designing
5. Lab practice and designing concepts

#### Detailed Syllabus of the Course

##### **Section 1:** Introduction to PCB designing concepts

###### Introduction & Brief History

- What is PCB
- Difference between PWB and PCB
- Types of PCBs: Single Sided (Single Layer), Multi-Layer (Double Layer)
- PCB Materials

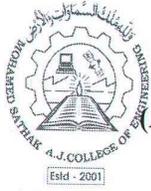
###### Introduction to Electronic design Automation (EDA)

- Brief History of EDA
- Latest Trends in Market
- How it helps and Why it requires
- Different EDA tools
- Introduction to SPICE and PSpice Environment
- Introduction and Working of PROTEUS

##### **Section 2:** Component introduction and their categories

###### Types of Components

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**Value Added Course Summary 2018-2019**

**Course code and Name** : Technology Skill Development in PCB Design

**Course Duration** : 30 hours

**Years offered** : II Year Students of ECE

**Course Instructors** : Mr. K. Sudhakaran, Proprietor, EMBWARE Technologies and components

**Course Outcome's** : Students can explore different aspect of Printed Circuit Board Design and fabrication, learn various types of PCBs. Schematic Design. entry Rules for Schematic Entry, Component Layout methods Placement Rules, Routing Techniques for Single Sided Board. After completing this course student can design and fabricate their own PCB for their Project and can also work in PCB Designing and Fabrication area.

**Course Type** : Add on course Organized by Msajce, EMBWARE Technologies and components

**Assessment Mode** :

Attendance : 30 Hours

Number of Participants : 8

Scheme of Exam : Offline Assesment Examination

Date of Exam - : 27.07.2018

**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Course Coordinator

HOD/ECE



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

From ,

Dr. A.Bala Krishnan  
Associate Professor  
Department of S&H  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD ON course – reg.

With reference to the subject mentioned below, we have proposed to conduct ADD ON courses for all the I Year students. The selected courses will be useful to the students for learning the emerging technical fields.

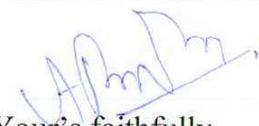
Kindly provide permission for the same.

Year / Sem	Title	Dates
I Year / II Sem	PC Hardware & Networking Issues	04/03/2019 to 10/03/2019

Thanking you

Place : Chennai

Date: 21/02/2019

  
Your's faithfully

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,

Mr. R. Sampath

Associate Professor

Department of Computer Science and Engineering

Mohamed Sathak A.J.College of Engineering,

Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2018-2019 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD ON course curriculum design for the academic year 2018-2019 Dated: 04/03/2019 to 10/03/2019

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD ON course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking into consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
PC Hardware & Networking Issues	Mr. K. Suresh AP/CSE

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (CMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

Ref:01/MSAJCE/S&H/EVEN/2018- 2019

Date: 21/02/2019

**CIRCULAR**

It is hereby informed to all the 1<sup>st</sup> Year students that the value-added course “**PC Hardware & Networking Issues**” during 04/03/2019 to 10/03/2019. All are advised to attend the training course without fail.

The session schedule is as follows

**Timing: 9.00 AM to 3.30 PM**

**Resource Person: Mr. K. Suresh**

<b>Venue</b>	4 <sup>th</sup> Floor Auditorium	TF- 403	TF- 409	TF- 411
<b>Faculties</b>	Mr. K. Suresh	Ms. B. Yuvasri	Mr. D. Vinoth	Mrs. S. Vennila

  
HoD

COPY TO: S&H

Dept. of S&H

I Year

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



---

## DEPARTMENT OF SCIENCE & HUMANITIES

### COURSE MODULE

#### Course Objectives:

- 1.To define a problem.
- 2.To gain knowledge about peripheral devices.
- 3.To create executable code.
- 4.To acquire knowledge about Installation and preventive maintenance.
5. To know about troubleshooting.

#### **MODULE-1: Introduction**

Organization of computer –Number systems and codes – Memory – ALU – Personal computer concepts – Virtual memory

#### **MODULE-2: Peripheral devices**

Keyboard – CRT display monitor – Printer- Modem – Fax – Scanner – Digital camera

#### **MODULE-3: Overview of PC Hardware**

Hardware BIOS DOS Interaction – Inside the system box – mother board logic- Peripheral interfaces and controller – Keyboard interface

#### **MODULE-4: Installation and Preventive Maintenance**

System configuration – Installation Practice – PC assembling and Integration – BIOS setup – Preventive maintenance – DOS – Virus

#### **MODULE-5: Troubleshooting**

Nature of faults- types of faults – Faults elimination process – fault diagnosis – Troubleshooting levels.

#### Course Outcomes:

The students will be able to

- CO1. Student will adequate skills in programming.
- CO2. Students will be able to know about peripheral devices.
- CO3. The student will able to know the basic of PC hardware
- CO4. Students will have brief knowledge about Installation
- CO5. The student will able to know the faults and fault rectification.

PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**Design and Development of Curriculum for Add on /  
certificate / Diploma Courses**

**Academic Year 2017-2018**



**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
3a, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Ganesamoorthy,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV/VII-Mechanical	CAD Modeling using CATIA V5	19.06.2017 to 28.06.2017

Thanking you

Place : Chennai

Date : 01.07.2017

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Your's faithfully

**Head of the Department**  
**Department of Mechanical Engineering**  
**Mohamed Sathak A.J.College of Engineering**  
Egattur, Chennai - 603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Ganesamoorthy,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2017-2018-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2017-2018 Dated: 19.06.2017 to 28.06.2017.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
CAD Modeling using CATIA V5	Mr.S.Bharath AP/MECH

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

Ref:MSAJCE/VAC01MECH/2017-2018

Date: 10.07.2017

**CIRCULAR**

Our department is organizing a "ADD ON " on CAD Modeling using CATIA V5 during 19.06.2017 to 28.06.2017.. The following IV Year Mechanical Students register with Mr.S.Bharath AP/MECH on or before 15.06.2017.

The session schedule is as follows

**Timing: 9.00 AM to 1.00 PM**

**Location : CAD Laboratory**

**HoD**

Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

Copy To:

Dept. of Mechanical

IV Year Mechanical



**PRINCIPAL**

**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

## DEPARTMENT OF MECHANICAL ENGINEERING

### COURSE MODULE

#### Course Objectives:

The Students will acquire to

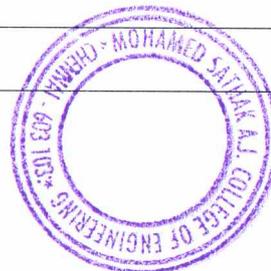
- Understand basis of graphical representation in the general context of Industrial Engineering.
- Apply expression and communication for the design, creation, definition and development of an industrial installation and/or product making practical use of the current technologies
- Create design shapes with 3D modeling, assembly, sheet metal design and visualization features
- Learn the implementation of solid modeling and get hands-on experience with the real world projects

#### MODULE

1	Surface Modeling & Assembly - An Overview
2	Wireframe & Surface design
3	Surfaces – Sweep - Multi section - surfaces - Trim operations - Generative shape design
4	Introduction to Assembly - Bottom up approach
5	Top down approach
6	Inserting of components
7	Assembly constrains
8	Introduction to Drafting
9	Visual Realism
10	Digital mockup Kinematics
11	Simple Mechanism Analysis
12	Introductio to Sheet Metal Design
13	Generative sheet metal design
14	Sheet metal design
15	Sketching
16	Lofted bend
17	Jog feature

PRINCIPAL

MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



18	Forming tools
19	Swept flange
20	Pattern and Drafting



**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
**34, Rajiv Gandhi Road (OMR), Siruseri, IT Park**  
**Chennai-603 103.**





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF MECHANICAL ENGINEERING

### Course Outcome

Students will able to

- Interpret and/or convey the technical information in an industrial drawing
- Apply graphical representation techniques using traditional metric geometry and Know, identify, interpret and apply the current standards
- do assembly designing, sheet metal designing, and template based designing
- perform visual analysis and validation which will give them high quality performance insights for product decisions

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Ganesamoorthy,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/V-Mechanical	CNC Programming	19.06.2017 to 27.06.2017

Thanking you

Place : Chennai

Date : 01.07.2017

Your's faithfully

Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Ganesamoorthy,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2017-2018-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2017-2018 Dated: 19.06.2017 to 27.06.2017.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
CNC Programming	Mr.Venkat Raman AP/MECH

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENIGINEERING**

Ref:MSAJCE/VAC02MECH/2017-2018

Date: 10.07.2017

**CIRCULAR**

Our department is organizing a "ADD ON " on CNC Programming during 19.06.2017 to 27.06.2017.. The following III Year Mechanical Students register with Mr.Venkat Raman AP/MECH on or before 15.06.2017.

The session schedule is as follows

**Timing: 9.00 AM to 1.00 PM**

**Location : ANSYS Laboratory**

**HoD**

Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

Copy To:

Dept. of Mechanical

IV Year Mechanical



**PRINCIPAL**

**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34 Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

## DEPARTMENT OF MECHANICAL ENGINEERING

### COURSE MODULE

#### Course Objectives:

The Students will acquire to

- Understand fundamental principles of CAM and CNC Process
- Expertise in geometric modeling techniques, data structure design and algorithms for solid modeling
- Understand knowledge of machining theory, automated CNC machining, and process control.
- Apply the concept to product design and manufacturing
- Exposure to CNC Coding and CAM Simulation softwares

### MODULE

1	Introduction & CNC Process Overview
2	Introduction to CNC lathe - Coordinate system of CNC lathe
3	Preparatory functions (G codes)
4	Miscellanies functions (M codes)
5	Manual part programming (linear and circular)
6	Tool nose radius compensation
7	Rough cutting cycle and finishing cycle
8	Pattern repeating cycle - Drilling cycle - Grooving cycle
9	Tread cutting cycle - Tapping cycle - Boring cycle
10	Computer Aided Part programming
11	Introduction to CNC machining Centre
12	Coordinate system - Preparatory functions (G codes) – Miscellanies functions (M codes)
13	Manual part programming (linear and circular)

**PRINCIPAL**

**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



14	Cutter radius compensation
15	Tool length compensation
16	Canned cycle (drilling and boring) operations
17	Computer Aided Part programming
18	Selection of tools for CNC turning
19	Exercise - I
20	Exercise - II



**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF MECHANICAL ENGINEERING

### Course Outcome

Students will able to

- Concepts and underlying theory of modeling and the usage of models in different engineering applications
- Create accurate and precise geometry of complex engineering systems and use the geometric models in different engineering applications
- Compare the different types of modeling techniques and explain the central role solid models play in the successful completion of CAD/CAM-based product development
- Understand the basic concepts of CNC programming and machining



**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

From ,

Dr. Gajalakshmi  
Head of the Department  
Department of Civil Engineering  
Mohamed Sathak A.J. College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J. College of Engineering,  
Chennai – 603103.

Respected Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Civil Engineering department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/VI - Civil	Revit Architecture	11/12/2017 to 15/12/2017

Thanking you

Place : Chennai

Date: 4/12/2017

Your's faithfully

*C. Ciyal*  
4/12/2017

*[Signature]*

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

From,

Dr. Gajalakshmi  
Head Of The Department  
Department of Civil Engineering  
Mohamed Sathak A.J. College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J. College of Engineering,  
Chennai – 603103.

Respected Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2017-2018 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2017-2018 Dated 11/12/2017 to 15/12/2017.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Revit Architecture	Mr. B. Rizha Ur Rahman AP/CIVIL

Thanking you

Place : Chennai

Date: 4/12/2017

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Your's faithfully

*C. Ciyar*  
4/12/2017



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

Date: 04/12/2017

MSAJCE/CIVIL/COE/01/2017-2018

**CIRCULAR**

It is hereby informed to Third Year students of CIVIL department Revit Architecture is arranged from 11/12/2017 to 15/12/2017 at BIM lab. All are advised to attend positively.

*C. Ciyas*  
4/12/2017  
Head of Department

*Wsh*  
**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Siruseri IT Park,  
Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

**COURSE MODULE**  
**B.E CIVIL ENGINEERING ( REGULATIONS 2013 )**

**ADD ON COURSE**  
**REVIT ARCHITECTURE**

**L T P C**  
**1 0 2 2**

**OBJECTIVES:**

- The objective of this course is to impart necessary and practical knowledge of Building Information Modeling (BIM) and Communicate a design idea, structural detailing , concept graphically, visually in 3D Infrastructural Modeling.

**Unit I : Create one floor plan as per Auto cad**

9

- Introduction to Revit Architecture – History, Versions
- Exploring GUI , Work spaces, Starting a new project

**Unit II :Drawing Tools**

9

- Wall – (Location line , Materials)
- Line, Circle, Arc, Polygon, Rectangle

**Unit III : Create one 2D Floor plan with Doors and Windows with export and Documentation**

9

- Components : Door 2D, Window 2D, Furniture 2D, Modify Tools : Import from Auto CAD export as PDF file
- Railings – Add railings, Add railings by sketching, Modify railing, Modify continuous rail.

**Unit IV : Double storey Elevation**

9

- Curtain wall (Adding curtain Grids, Mullions)
- Elevation, section, 3D View, Background, Cropping View
- Visibility or Graphic View Templates, Duplicate Views, Visual style filter

**Unit V :Elevation Tools**

9

- Lights – Lighting fixtures
- Sun Settings
- Specifying sun Settings

**TOTAL: 45 HOURS**

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**

Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,  
The Head of Department,  
Department of CSE & IT,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To,  
The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of CSE & IT department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
II/IV	Python Full Stack	05/02/2018 – 12/02/2018

Thanking you

Place: Chennai

Date: 02.02.2018

  
yours faithfully



**PRINCIPAL**  
**SATHAK A.J.COLLEGE OF ENGINEERING**  
Siruseri IT Park, Egattur, Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**

Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,  
The Head of Department,  
Department of CSE & IT,  
Mohamed Sathak A.J.College of Engineering,  
Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2017-2018 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2017-2018 Dated: 05/02/2018 – 12/02/2018.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

Title	Name of the Faculty
Python Full Stack	Mr. A. Syed Ismail AP/CSE

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
No. 44, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

Date:02/02/2018

Ref:01/MSAJCE/COMMON CIRCULAR/EVEN/2017-2018

**CIRCULAR**

Our department is organizing a “ADD ON” on Python Full Stack during 05/02/2018 to 12/02/2018. The II Year Students from Computer Science and Engineering and Information Technology, register with Mr.A.Syed Ismail AP/CSE on or before 05/02/2018.

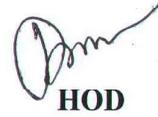
The session schedule is as follows,

**Timing: 1.30 PM to 3.30 PM**

**Resource Person: Mr.A.Syed Ismail**

**AP/CSE**

**Venue: Computer Lab II**

  
**HOD**

**COPY TO:**

Dept. of CSE & IT

II Year CSE & IT



**PRINCIPAL**

**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
30, NEW SANDHI Road (OMR), Siruseri, IT Park  
Chennai-603 103.



## MOHAMED SATHAK A J COLLEGE OF ENGINEERING

Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

### COURSE MODULE

#### Course Objective

1. To learn the python fundamentals
2. To read and write simple python programs
3. To develop Python programs with conditionals and loops.
4. To learn how to use functions, arrays and strings in python programs
5. To learn how to develop python programs using list, tuple and dictionary.

Sl. No.	Topic	Periods Required
1	Introduction to Algorithms, Building Blocks of Algorithms, Pseudo code and Flowcharts	2
2	Programming Language	1
3	Arithmetic Problem Solving	1
4	Indexing-Array Manipulation	1
5	Simple Strategies for Developing Algorithms	1
6	Python Language Features-Comments-Identifiers-Keywords-Variables and Assignment	1
7	Expressions and Statements, Indentation, Data types – Numbers	2
8	Strings, Lists, Sets, Tuples, Dictionaries, Data Type Conversions-Input and Output Statements	2
9	Basics of Python Programming-Arithmetic Operators, Comparison Operators, Assignment Operators	1
10	Bitwise Operators, Logical Operators, Membership Operators, Identity Operators	1
11	Operators Precedence-Basics of Functions, Parameters and Arguments.	1
12	If statement, If-else Statement, if-elif-else Statement, While loop, For loop, Break Statement, Continue Statement	1
13	Pass Statement-Keyword Arguments, Default Arguments, Variable Length Arguments, Anonymous Functions	1
14	Fruitful Functions, Global and Local Variables, Function Composition, Recursion Introduction to Numbers	2

PRINCIPAL

MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



## MOHAMED SATHAK A J COLLEGE OF ENGINEERING

Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

15	Number Type Conversion, Mathematical Functions, Random Number Functions, Trigonometric Functions	2
16	Mathematical Constants. Introduction to Strings, String Operations, Built-in String Methods.	2
17	Introduction to Lists, Basic List Operations, Built-in List Functions, List Methods-Introduction to Tuples, Basic Tuples Operations	2
18	Built-in Tuple Functions-Introduction to Dictionaries, Basic Dictionary Operations	2
19	Built-in Dictionary Functions, Built-in Dictionary Methods-Introduction to Sets, Basic Set Operations	3
20	Built-in Set Functions and Methods-List Comprehensions, Set Comprehensions, Dictionary Comprehensions	2
21	Creation of modules, Import Statement, From Import Statement, Using Python Packages, Namespace Introduction to PIP	2
22	Installing Packages via PIP-File Handling – File Path, Operations on Files-Classes, Self Variable	2
23	Constructors, Methods, Inheritance, Overriding Methods, Data Hiding-Errors and Exceptions, Error Handling	3
24	Handling on Exception, Try-finally Clause, Raising an Exception, User-Defined Exceptions-Standard Library	2
25	Why Testing is require?, Basic Concepts of Testing, Unit testing.	2

### Course Outcome

- CO1. Illustrate basic concepts of python programming
- CO2. Apply the knowledge of Python Programming elements to solve and debug logical Problems
- CO3. Demonstrate Programs using with conditionals and loops
- CO4 .Demonstrate Programs using functions, arrays and strings
- CO5. Analyze Various techniques used for sorting and to store and retrieve data in files

PRINCIPAL

M. SATHAK A.J. COLLEGE OF ENGINEERING  
39, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF EEE**

From

Dr. R. Murugan,  
Associate Professor,  
Department of Electrical and Electronics Engineering,  
Mohamed Sathak A J College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A J College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
EGATTUR 603 103.  
KANCHIPURAM DT

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of EEE department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
III/V-EEE	Introduction to Programming Logic Circuit (PLC) & Supervisory Control and Data Acquisition (SCADA)	21/08/2017 to 26/08/2017
IV/VII-EEE		

Thanking you

Place: Chennai

Date:



  
Your's faithfully

Principal



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF EEE**

From

Dr.R.Murugan  
Associate Professor,  
Department of Electrical and Electronics Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai- 603103.

*M.M.*  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
EGATTUR 603 103.  
KANCHIPURAM DT.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2017-2018 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2017-2018 Dated: 21/08/2017 to 26/08/2017. The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Introduction to Programming Logic	Mr.K.A.Mohamed
Circuit (PLC) & Supervisory Control	Shahin Gani
and Data Acquisition (SCADA)	AP/EEE



Principal



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF EEE**

Date:26/07/2017

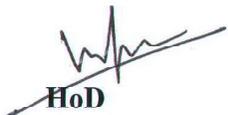
Ref:01/MSAJCE/EEE/ODD/2017-2018

**CIRCULAR**

Our department is organizing a "ADD ON" on Introduction to Programming Logic Circuit (PLC) & Supervisory Control and Data Acquisition (SCADA) during 21/08/2017 to 26/08/2017. The following III & IV Year EEE Students register with Mr.K.A.Mohamed Shahin Gani AP/EEE on or before 3/08/2017.

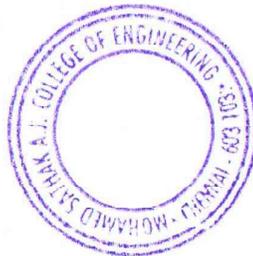
The session schedule is as follows

**Timing** : 9.00 AM to 3.30 PM  
**Company Name** : EMBware Technologies & Components  
**Resource Person** : K.A. MOHAMED SHAHIN GANI  
**Venue** : MSAJCE

  
HoD

  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
EGATTUR-603 103.  
KANCHIPURAM DT

COPY TO: EEE  
Dept. of EEE  
III & IV Year EEE





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF EEE

### COURSE MODULE

#### Course Objectives:

1. Students will be able to describe typical components of a Programmable Logic Controller.
2. Students will be able to explain and apply the concept of electrical ladder logic, its history, and its relationship to programmed PLC instruction.
3. Students will be able to design and program a small, automated industrial production line.
4. Students will be able to use timer, counter, and other intermediate programming functions.

#### MODULE-1

##### 1. Basics Of PLC

Definition and History of PLC-PLC advantage and disadvantages- Over all PLC systems CPU and Programmer/Monitors-PLC input and output models – Architecture- PLC Programming language – Relay logic.

#### MODULE-2

##### 2. PLC Programming

Programming of Timers – Introduction - ON delay, OFF delay, Retentive Timers – PLC Timer functions – Examples of timer function Industrial application. Programming Counters – up/down counter – Combining counter.

#### MODULE-3

##### 3. PLC Data Handling Functions

PLC Program Control Instructions: Master Control Reset - Skip – Jump and Move Instruction. Sequencer instructions - Types of PLC Analog modules and systems, PLC analog signal processing – BCD or multi bit data processing.

#### MODULE-4

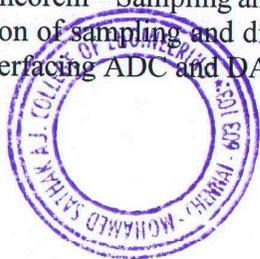
##### 4. Computer Control – Introduction

Need of computer in a control system-Functional block diagram of a computer control system-Data loggers- Supervisory computer control- Direct digital control-Digital control interfacing-SCADA.

#### MODULE-5

##### 5. Data Acquisition Systems

Sampling theorem – Sampling and digitizing – Aliasing – Sample and hold circuit – Practical implementation of sampling and digitizing – Definition, design and need for data acquisition systems – Interfacing ADC and DAC with Microprocessor / Multiplexer.



  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
EGATTUR 603 103  
KANCHIPIRAM DT



**MOHAMED SATHAKAJ COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

From ,

Dr. M.Muralidharan  
Associate Professor  
Department of S&H  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD ON course – reg.

With reference to the subject mentioned below, we have proposed to conduct ADD ON courses for all the I Year students. The selected courses will be useful to the students for learning the emerging technical fields.

Kindly provide permission for the same

Year / Sem	Title	Dates
I Year / II Sem	PC Hardware & Network Troubleshooting problems	05/03/2018 to 11/03/2018

Thanking you

Place: Chennai

Date: 22/02/2018

Your's faithfully

*[Signature]*  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park, Egattur, Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,

Dr. S. Sivasubramanian

Associate Professor

Department of Computer Science and Engineering

Mohamed Sathak A.J.College of Engineering,

Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2017-2018 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD ON course curriculum design for the academic year 2017-2018 Dated: 05/03/2018 to 11/03/2018

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD ON course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking into consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
PC Hardware & Network Troubleshooting problems	Mrs. V. Subapriya AP/CSE

  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

Ref:01/MSAJCE/S&H/EVEN/2017-2018

Date:22/02/2018

**CIRCULAR**

It is hereby informed to all the 1<sup>st</sup> year students that the Value-Added Course“PC  
**Hardware & Network Troubleshooting Problems”** during 05/03/2018 to 11/03/2018.  
All are advised to attend the training course without fail.

The session schedule is as follows

**Timing: 9.00 AM to 3.30 PM**

**Resource Person: Mrs. V. Subapriya**

Venue	4 <sup>th</sup> Floor Auditorium	TF- 403	TF- 306	TF- 411
Faculties	Mrs.V.Subapriya	Mrs. V. Indumathi	Mr.R.Vigneshwar	Mrs. J. Vimala

  
**HoD**

COPY TO: S&H

Dept. of S&H

I Year

  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



---

**DEPARTMENT OF SCIENCE & HUMANITIES**

**COURSE MODULE**

**Course Objectives:**

- 1.To Identify characterize / define a problem.
- 2.To acquire knowledge about basic networking topologies, models.
- 3.To acquire basic knowledge in various networking devices like routers, switches, hubs.
- 4.To acquire knowledge about PC assembling, trouble shooting and maintenance.
5. To generate basic knowledge of servers and network security.

**MODULE-1: Introduction and basic networking concepts**

Software and hardware – Input / Output devices - Network technologies – LAN, WAN, MAN, PAN, CAN – Networking model – OSI model – TCP/ IP model- Networking adapters

**MODULE-2: Introduction to various networking devices**

Routers – switches – Modems – hubs – Wired and wireless technology

**MODULE-3: Inside the PC and Network basic**

Opening the PC and identification – Study of different blocks – Assembling and disassembling – setting IP addresses

**MODULE-4: Network configuration**

Sharing files and folders – Network troubleshooting – PING test, ipconfig

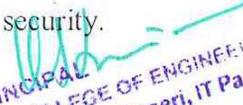
**MODULE-5: Introduction to servers and network security**

Types of servers- Basics of internet and Intranet – Types of internet connection – cloud application – Audio video conferencing – VOIP

**Course Outcomes:**

The students will be able to

- CO1. Student should able to know about hardware, software and network technologies.
- CO2. Students will have in-depth knowledge about networking devices.
- CO3. The student will able to know the basic of computer assembling and troubleshooting.
- CO4. Students will have brief knowledge about network troubleshooting
- CO5. The student will able to know the basic of servers and network security.

  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**Design and Development of Curriculum for Add on /  
certificate / Diploma Courses**

**Academic Year 2016-17**



**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
3a, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr.Hussain,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Mechanical department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV/VII-Mechanical	Analysis of solid Components using ANSYS	05.12.2016 to 13.12.2016

Thanking you

Place : Chennai

Date : 15.11.2016

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Your's faithfully

**Head of the Department**  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering,  
Egattur, Chennai - 603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

From ,

Mr. Hussain,  
Professor,  
Department of Mechanical Engineering,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2016-2017-Reg

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2016-2017 Dated: 05.12.2016 to 13.12.2016.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Analysis of solid Components using ANSYS	Mr. V.G.Sathish AP/MECH

PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF MECHANICAL ENGINEERING**

Ref:MSAJCE/VAC01MECH/2016-2017

Date: 25.11.2016

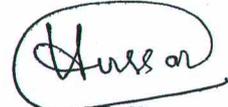
**CIRCULAR**

Our department is organizing a “ADD ON ” on Analysis of solid Components using ANSYS during 05.12.2016 to 13.12.2016. The following IV Year Mechanical Students register with Mr.V.G.Sathish AP/MECH on or before 30.11.2016.

The session schedule is as follows

**Timing: 9.00 AM to 1.00 PM**

**Location : CAD Laboratory**

  
HoD

Head of the Department  
Department of Mechanical Engineering  
Mohamed Sathak A.J.College of Engineering  
Egattur, Chennai - 603 103.

Copy To:

Dept. of Mechanical

IV Year Mechanical



**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

## DEPARTMENT OF MECHANICAL ENGINEERING

### COURSE MODULE

#### Course Objectives:

The Students will acquire to

1. To give exposure to software tools needed to analyze engineering problems.
2. To expose the students to different applications of simulation and analysis tools.

#### MODULE

1	Getting started with ANSYS.
2	Introduction to Ansys & FEA and Meshing
3	Pre-processing and Post-processing
4	Boundary condition and Boolean operation
5	Creating nodes and elements co -ordinate system
6	Basic Linear & Torsional equation
7	Analytical method to solve any mechanics problems
8	Stress analysis – solids, shells, beams, trusses
9	Static and Dynamic Analysis
10	Heat transfer problem analysis
11	Buckling problems and Non-linear problem analysis
12	Practice

**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF MECHANICAL ENGINEERING

### Course Outcome

Students will able to

1. Analyze the stresses and strains induced in plates, brackets and beams and heat transfer problems.
2. Calculate the natural frequency and mode shape analysis of 2D components and beams.

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.





**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,  
The Head of Department,  
Department of CSE & IT,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To,  
The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of CSE, IT, ECE& EEE department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
IV/VII	Photoshop	18/07/2016 – 26/07/2016

Thanking you

Place: Chennai

Date: 15/07/2016

  
yours faithfully



**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,  
The Head of Department,  
Department of CSE & IT,  
Mohamed Sathak A.J.College of Engineering,  
Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2016-2017 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD ON course curriculum design for the academic year 2016-2017 Dated: 18/07/16 to 26/07/16. The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
Photoshop	Mr. A. Syed Ismail AP/CSE

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

Date:15/07/2016

Ref:01/MSAJCE/COMMON CIRCULAR/ODD/2016-2017

**CIRCULAR**

Our department is organizing a "ADDON" on Photoshop during 18/07/2016 to 26/07/2016. The IV Year Students from CSE, IT, ECE & EEE enroll their names to their class in-charges respectively on or before 18/07/2016.

The session schedule is as follows

**Timing: 8.30 AM to 3.30 PM**

**Resource Person: Mr.A.Syed Ismail AP/CSE**

**Venue: Computer Lab - I**

  
HOD

COPY TO:

Dept. of CSE, IT, ECE & EEE,

Notice board, File



**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
**34, Rajiv Gandhi Road (OMR), Siruseri, IT Park**  
**Chennai-603 103.**



## **COURSE CONTENT**

**Total Hours: 36 Hours**

### **CHAPTER-1: INTRODUCTION TO PHOTOSHOP**

- History of Photoshop Business Decisions
- Photoshop Features

### **CHAPTER -2: ADOBE BRIDGE**

- The Adobe Bridge Environment
- Display Options
- Compact Mode
- Navigating, Opening & Placing Files

### **CHAPTER-3: BASIC IMAGE MANIPULATION**

- Bitmap Images
- Vector Images
- Image Size and Resolution Settings

### **CHAPTER-4: COLOR BASICS**

- Color Modes and Models
- Color Mode Conversion

### **CHAPTER-5: PAINTING TOOLS**

- Painting Tools
- The Brush Tool
- Blending Modes

### **CHAPTER-6: LAYERS**

- Using Layers and Layer Groups/Sets
- Creating Layers and Layer Groups/Sets
- Stacking and Linking Layers

**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF CIVIL ENGINEERING**

From ,

Dr.S.Sivasankar

Department of Civil Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

To

The Principal,  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD on course – reg.

With reference to the above cited subject, we have proposed to conduct ADD on courses for the students of Civil Engineering department. The selected courses are useful to the students for learning the emerging technical fields.

Kindly provide the permission for the same.

Year/Sem	Title	Dates
II/IV- Civil Engineering	MS - Project	13/12/2016 to 18/12/2016

Thanking you

Place : Chennai

*S. Sivasankar*  
Your's faithfully

Date:

*[Signature]*  
PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

From,

Dr.S.Sivasankar

Department of Civil Engineering  
Mohamed Sathak A.J.College of Engineering,  
Chennai – 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for VAC course curriculum design for the academic year 2016-2017 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD on course curriculum design for the academic year 2016-2017 Dated: 13/12/2016 to 18/12/2016. The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD on course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking in to consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
MS Project	Ms.Sharmila Ponnammal AP/Civil

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

Date:08/12/2016

Ref:01/MSAJCE/CIVIL/ODD/2016-2017

**CIRCULAR**

Our department is organizing a "ADD ON " on MS Project 13/12/2016 to 18/12/2016. The following II Year Civil Engineering Students register with Mrs.Sharmila Ponnammal AP/Civil.

*S. Sivasubramanian*  
HoD

*[Signature]*  
**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

**DEPARTMENT OF CIVIL ENGINEERING**

**COURSE MODULE**

**Course Objectives:**

1. A complete skill set, confidence and knowledge required to manage projects using Microsoft Project.
2. The knowledge of industry-standard best practices to apply during the process of managing a project.
3. The required confidence and knowledge to plan budgets and allocate resources to the project, thus preventing under or over-allocation of any kind.
4. The necessary knowledge and information to prepare schedules, anticipating delays/disturbances due to risks.

**MODULE-1**

**Introduction to Microsoft Project Environment and configuration**

Calendar, Currency & Time- scale Scheduling options -Types of Resources, Generic & Budget resources- Resource cost Views, Tables, Filters & Groups-Detail View .Sorting, Outline, Highlight, and Timeline, Saving as Template.

**MODULE-2**

**Planning**

Tasks mode – Auto & Manual-Duration – 8/80 rule-Sub task, Summary task and Milestones-Task types-Task Dependencies ( Links ), Lag and Lead-Dependency types-Task constraints, Deadline-Assigning Resources-Variable rates for Resource-Fixed Cost, Project cost calculation-Resolving scheduling conflicts-Understanding Critical path, Float/Slack etc.-Resource conflicts. Team Planner.-Schedule Crashing, Fast tracking-Resource Levelling and Smoothing

**MODULE-3**

**Advance Option**

Recurring tasks-Outline Number, Work Breakdown Structure ( WBS )-Formatting Gantt bar and text-Understanding various fields-Creating Custom fields-Sharing project element through Organizer.

**MODULE-4**

**Tracking**

Baseline--Tracking strategies-%Complete, %Work Complete & Physical complete-Tracking tasks without Resources-Tracking tasks with Resources-When to update existing or create new Baseline-Reviewing progress-Master Plan.

**MODULE-5**

**Reporting**

Schedule printing, PDF and exporting to Excel-Copy & paste as text and image-Reports, Progress S Curve-Creating new reports-Visual reports.

  
**PRINCIPAL**  
**MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

---

## DEPARTMENT OF CIVIL ENGINEERING

### Course Outcomes:

The students will be able to

**CO1**-Use the key elements and capabilities of Microsoft Project at beginner to intermediate level.

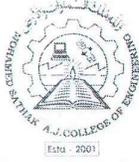
**CO2**-Create and edit key project management views such as GANTT charts

**CO3**-Work with Tasks, Sub-Tasks, Sub-Projects

**CO4**-Manage Critical Paths analysis and work with Calendar and other Project views

**CO5**-Understand and utilize resource control elements of Microsoft Project

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

## Department of ECE

From  
Dr.Dhiravidachelvi,  
Head/ECE,  
Mohamed SathakA J College of Engineering,  
Chennai.

To  
The Principal,  
Mohamed SathakA J College of Engineering,  
Chennai.

Respected Sir,

Sub: Seeking Permission for conducting Certificate Program Regarding.

PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai 603 103.

We are planning to conduct a certificate program on the topic "Introduction to Networks-Cisco Networking Academy" for II & III Year ECE Students for Even Semester by Mr.Justin Xavier/CSE. So I kindly request you to give permission for conducting this certificate program.

Thanking You,

Place: Chennai

Date: 09.1.2017



Yours faithfully



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**Department of EEE**

From  
Dr.K.Thangalakshmi  
Head/EEE,  
Mohamed SathakA J College of Engineering,  
Chennai.

To  
The Principal,  
Mohamed SathakA J College of Engineering,  
Chennai.

Respected Sir,

PRINCIPAL  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

Sub: Seeking Permission for conducting Certificate Program Regarding.

We are planning to conduct a certificate program on the topic "Introduction to Networks-Cisco Networking Academy" for II & III Year EEE Students for Even Semester by Mr.Justin Xavier/CSE. So I kindly request you to give permission for conducting this certificate program.

Thanking You,

Place: Chennai

Date:



Yours faithfully



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**

Sponsored by Mohamed Sathak Trust

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Siruseri IT Park, Egattur, Chennai 603 103

**Department of CSE**

From

Head/CSE,  
Mohamed Sathak A J College of Engineering,  
Chennai.

To  
The Principal,  
Mohamed Sathak A J College of Engineering,  
Chennai.

Respected Sir,

Sub: Seeking Permission for conducting Certificate Program Regarding.

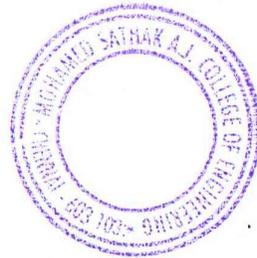
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Kaji Gandhi Road (OMBI), Siruseri, IT park  
Chennai-603 103

We are planning to conduct a certificate program on the topic "Introduction to Networks-Cisco Networking Academy" for II & III Year CSE Students for Even Semester by Mr. Justin Xavier/CSE. So I kindly request you to give permission for conducting this certificate program.

Thanking You,

Place: Chennai

Date: 9.01.2017



Yours faithfully



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**

Sponsored by Mohamed Sathak Trust

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Siruseri IT Park, Egattur, Chennai 603 103

**Department of IT**

From

Head/IT,  
Mohamed Sathak A J College of Engineering,  
Chennai.

To  
The Principal,  
Mohamed Sathak A J College of Engineering,  
Chennai.

Respected Sir,

Sub: Seeking Permission for conducting Certificate Program Regarding.

We are planning to conduct a certificate program on the topic "Introduction to Networks-Cisco Networking Academy" for III & IV Year IT Students for Even Semester by Mr. Justin Xavier/CSE. So I kindly request you to give permission for conducting this certificate program.

Thanking You,

Place: Chennai

Date: 09.1.2017

*Saintu*  
Yours faithfully

*[Handwritten Signature]*



**PRINCIPAL**  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**

Sponsored by Mohamed Sathak Trust

Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**Value Added Course Summary 2016-17**

**Course code and Name** : "Introduction to Networks-Cisco Networking Academy"

**Course Duration** : 45 hours

**Years offered** : II Year and III Year Students of ECE,EEE,CSE and IT

**Course Instructors** : Mr.D.Justinxavier

**Course Outcome's**

The Students will be outfitted with hands on Knowledge in Networks Upon completion of the program, the students will be able to understand the Performance in Computer Networks, various protocols used in Communication, Managing and configuring Cisco Switches and Routers and various WAN technologies.

**Course Type** : Add on course Organized by Msajce, Conducted by Cisco

Networking Academy.

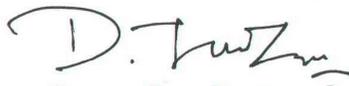
**Assessment Mode** : Attendance : 45 Hours

Number of Participants: 165

Scheme of Exam : Online Assesment Examination

Date of Exam : 27.04.2017

**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.

  
Course Coordinator

  
HOD/ECE



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

From ,

Dr. M.Muralidharan

Associate Professor

Department of S&H

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

To

The Principal,

Mohamed Sathak A.J.College of Engineering,

Chennai – 603103.

Respected Madam/Sir,

Sub: Permission for conducting ADD ON course – reg.

With reference to the subject mentioned below, we have proposed to conduct ADD ON courses for all the I Year students. The selected courses will be useful to the students for learning the emerging technical fields.

Kindly provide permission for the same

Year/Sem	Title	Dates
I Year/II Sem	PC Hardware & Peripherals	15/03/17 to 20/03/17

Thanking you

Place : Chennai

Date: 02/03/2017

Your's faithfully

  
**PRINCIPAL**

**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34 Pally Gandhi Road (OMPA), Siruseri - 603 103



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

From,

Mr. Gori Mohamed

Associate Professor

Department of Computer Science and Engineering

Mohamed Sathak A.J.College of Engineering,

Chennai- 603103.

Respected Madam/Sir,

Sub: Assigning of faculty for ADD ON course curriculum design for the academic year 2016-2017 reg.

Ref: Letter of Requisition for the appointment of faculty for ADD ON course curriculum design for the academic year 2016-2017 Dated: 15/03/2017 - 20/03/2017.

The undersigned appreciates the department for proposing to conduct such kind of programme. As per your recommendation and referring to the above subject. I am pleased to nominate the following faculty members for ADD ON course curriculum design.

The above listed faculty is hereby instructed to design the curriculum taking into consideration the thrust areas of the respective field and ensure it should enhance the employability opportunities for the students.

Title	Name of the Faculty
PC Hardware & Peripherals	Mr.A.Syed Ismail AP/CSE

**PRINCIPAL**  
**MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING**  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



**MOHAMED SATHAK A J COLLEGE OF ENGINEERING**  
Sponsored by Mohamed Sathak Trust  
(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Siruseri IT Park, Egattur, Chennai 603 103

**DEPARTMENT OF SCIENCE & HUMANITIES**

Date:02/03/2017

Ref:01/MSAJCE/S&H/EVEN/2016-2017

**CIRCULAR**

It is hereby informed to all the 1<sup>st</sup> year students that the Value-Added Course "PC Hardware & Peripherals" during 15/03/2017 to 20/03/2017. All are advised to attend the training course without fail.

The session schedule is as follows

**Timing: 9.00 AM to 3.30 PM**

**Resource Person: Mr. A. Syed Ismail**

Venue	4 <sup>th</sup> Floor Auditorium	TF- 403	TF- 409	TF- 411
Faculties	Mr. A. Syed Ismail	Mrs.K. Thamaraiselvi	Mrs. S. Kavitha	Ms. Preethi

*A. N. L. K.*

HoD

COPY TO: S&H

Dept. of S&H

I Year

*Ushini*  
PRINCIPAL  
MOHAMED SATHAK A.J. COLLEGE OF ENGINEERING  
34 Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.



---

**DEPARTMENT OF SCIENCE & HUMANITIES**

**COURSE MODULE**

**Course Objectives:**

- 1.To Identify characterize / define a problem.
- 2.To design a program to solve the problem.
- 3.To acquire basic knowledge in computer hardware and peripherals.
- 4.To acquire knowledge about PC assembling and trouble shooting.
5. To generate basic knowledge of TCP /IP networks, Internet and Intranet.

**MODULE-1: Introduction about computer**

Basics of computer – organization of computer – software and hardware – Input / Output devices

**MODULE-2: Basic networking concepts**

Network technologies – LAN, WAN, MAN, PAN, CAN – Networking model – OSI model – TCP/ IP model – Networking adapters – Introducing protocols – cabling and troubleshooting

**MODULE-3: Inside the PC**

Opening the PC and identification – Study of different blocks – Assembling and disassembling

**MODULE-4: Introduction to various networking devices**

Routers – switches – modems – Hubs etc.. – Wired and Wireless technology

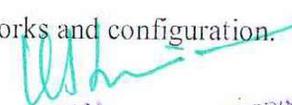
**MODULE-5: Network basic and configuration**

Setting IP Addresses – sharing files and folders – network troubleshooting

**Course Outcomes:**

The students will be able to

- CO1. Student should able to know about hardware and software of system.
- CO2. Students will have in-depth knowledge of LAN, WAN, MAN, CAN.
- CO3. The student will able to know the basic of computer assembling and troubleshooting.
- CO4. Students will have brief knowledge about computer networking.
- CO5. The student will able to know the basic of networks and configuration.

  
**PRINCIPAL**  
MOHAMED SATHAK A.J.COLLEGE OF ENGINEERING  
34, Rajiv Gandhi Road (OMR), Siruseri, IT Park  
Chennai-603 103.