

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25)
CMS Nagar, Eranapuram Post, Namakkal Dt., Pin: 637 003. Tamilnadu, India.
Contact No: 98433 46065, 84899 10651.

Website:www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com,principal602@gmail.com

## **ACADEMIC YEAR 2018-19**



(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25)
CMS Nagar, Eranapuram Post, Namakkal Dt., Pin: 637 003. Tamilnadu, India.
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# DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING VALUE ADDED PROGRAM ACADEMIC YEAR: 2018-2019

S.NO	NAME OF VALUE ADDED PROGRAM OFFERED	DURATION (HOURS)	NUMBER OF STUDENTS COMPLETING THE COURSE IN THE YEAR	TYPE OF VALUE ADDED PROGRAM
1	WEB DEVELOPMENT	30	49	SELF- FRAMED PROGRAM



PRINCIPAL
CMS COLLEGE OF ENGINEERING,
NAMAKKAL-637 003



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Website:www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com.principal602@gmail.com

DATE: 25.07.2018

#### FROM

S.Dhinesh

Head of the Department

Department of Computer Science and Engineering

CMS College of Engineering

Namakkal-637003

TO

The Principal

CMS College of Engineering

Namakkal-637003

#### Respected sir,

Sub: Request for permission to organize value added program - Reg.,

I wish to inform you that, we are planning to conduct value added program on "Web Development" for B.E. Computer Science and Engineering students from 04.08.2018 to 14.09.2018.In this regard, I kindly request you to avail permission to conduct the program successfully.

Thanking you

Yours Sincerely

(S.DHINESH)

Dr.K.MAHADEVAN, B.E., M.E., Ph.D. PRINCIPAL CMS COLLEGE US THE FRING,

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Website:www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com,principal602@ gmail.com

DATE: 31.07.2018

#### CIRCULAR

This is to bring to your kind notice that our Department of Computer Science and Engineering of CMS College of Engineering Namakkal has planned to conduct a value added program on Web Development from 04.08.2018 to 14.09.2018. The session will be organized by **Dr.K.Somasundaram**, **Professor**, **Chennai Institute of Technology** All the students of III & II Year are intimated to attend the program without fail in order to enrich their knowledge.

HEAD OF THE DEPARTMENT

Copy to

1. The Principal

2. HOD

3. Notice Board

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Or.K.MAHADEVAN,B.E.,M.E.,Ph.D. PRINCIPAL



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### VALUE ADDED PROGRAM-WEB DEVELOPMENT

ACADEMIC YEAR: 2018-2019

#### STUDENTS NAME LIST

S.NO	REG NO	NAME
1	620516104002	BACKIYALAKSHMI.B
2	620516104003	DEIVANAI.M
3	620516104004	ELANTHAMIZHAN.T
4	620516104006	GEETHA.L
5	620516104007	GUNASELVI.S
6	620516104010	JENIFAR.B
7	620516104011	KADHARVALI.S
8	620516104012	KARTHICK.T
9	620516104013	KAVIYA.N
10	620516104015	MANIKANDAN.A
11	620516104016	MANIKANDAN.P
12	620516104017	MOHAN RAJU.R
13	620516104018	NANDHINI.G
14	620516104019	PAVITHRA.M
15	620516104020	PRADEEPA.P
16	620516104022	PRIYANKA.M
17	620516104023	RADHA.K



Dr.K.MAHADEVAN, B.E., M.E., Ph.D. PRINCIPAL



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18	620516104024	RAJESHWARI.C
19	620516104027	RENUKA.R
20	620516104028	SATHYA.S
21	620516104032	SRIDHAR.A
22	620516104033	SUBASRI.J
23	620516104034	TAMILSELVAN.R
24	620516104035	TAMILSELVAN.V
25	620516104036	VEMBU.S
26	620516104041	VISHWANATHAN.G
27	620517104001	AARTHI P
28	620517104002	ABITHA M
29	620517104003	AKASH K
30	620517104006	AMUTHA M
31	620517104007	BARATH K
32	620517104008	DHARSHINI S
33	620517104009	DINESH A
34	620517104010	EVANGELIN EMIMA GRACE S
35	620517104014	ISWARYA P
36	620517104016	KARTHICKKUMAR G
37	620517104017	KARTHIKA K
38	620517104018	KASTHURI A



Dr.K.MAHADEVAN.B.E.,M.E.,Ph.D.
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39	620517104020	KAVIYARASU K
40	620517104021	KIRUBALAN A
41	620517104022	LAKSHMI A
42	620517104023	MANIVEL M
43	620517104024	MANORANJITHAM M
44	620517104025	MATHESH R
45	620517104029	NANDHINI P
46	620517104030	PANDIYARAJAN V
47	620517104031	PAVITHRA E
48	620517104033	POOVARASAN L
49	620517104034	PRATHIBA R
50	620517104035	PRIYADHARSHINI E
51	620517104036	RAMYA M
52	620517104038	RESHMA R
53	620517104040	SAHANAVARSHNI C S
54	620517104042	SANGAVI S
55	620517104043	SANJAY A
56	620517104044	SANJAY S
57	620517104049	SUSANTHIKA B
58	620517104050	VEERAKUMAR N
59	620517104051	VIGNESH C

PROGRAM CO-ORDINATOR

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Dr.K.MAHADEVAN BE, M.E., Ph.D.

GMS COLLEGE OF ENGINEERING, NAMAKKAL-637 003

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#### CMS COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25) CMS Nagar, Eranapuram Post, Namakkal Dt., Pin: 637003. Tamilnadu, india

## Organised by

DATE: 04.08.2018-14.09.2018

PLACE: CMSCE, Lecture Hall.





Dr. K. MAHADEVAN B. E., M.E., Ph.D. PRINCIPAL GMS COLLEGE OF ENGINEERING,

NAMAKKAL-637 003



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## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

# VALUE ADDED PROGRAM WEB DEVELOPMENT SYLLABUS

#### Unit I HTML

History of the Internet and World Wide Web – HTTP, SMTP, POP3, MIME, Understanding roles of Web Browsers and Web Servers. Structure of HTML, Text formatting, Text styles, hyperlink, image, and ables.

#### Unit II Frames, Forms and CSS

Frames, Forms and controls, Embedding audio, video and animated files inHTML,CSS-UnderstandingCSS,InternalCSS,ExternalCSS,FontProperties,TextProperties,ColorandBackgroundproperties,Tableproperties,NumberingandListProperties.

#### Unit III JavaScript

Data types and literals, operators, conditional statements, loop constructs, reserved words; core Objects Array Object, Date Object; Functions passing value to Java Script functions, user defined functions, Handling old browsers java script events formatting cookie, retrieving cookie value from the cookie file, removing a cookie, animations using events.

#### Unit IV ASP&XMI

ASP-WorkingofASP-RequestandResponseObjects-FileSystemObjects-Sessiontrackingandcookies ADO-Access a Database from ASP-XML-Structure in Data-Namespaces-DTD-Vocabularies Accessing Web servers-IIS-Apache web server.

#### Unit V PHP & MvSOL

Why PHP and MySQL-Server-SideWebScripting-GettingStartedwithPHP-AddingPHPtoHTML-SyntaxandVariables-ControlandFunction-PassingInformationbetweenPages-Strings-Arrays &ArrayFunctions-Numbers-MySQLDatabaseAdministration-PHP/MySQLFunctions-DisplayingQueriesinTables-BuildingFormsfromQueries.

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Dr.K.MAHADEVAN, B.E., M.E., Ph.D.
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#### Course Outcomes

On successful completion of the course, the students will be able to,

- ✓ Develop a dynamic webpage by the use of java script and DHTML.
- ✓ Create web pages using DHTML and Cascading Styles sheets.
- √ Build dynamic webpage using JavaScript(client side programming)
- ✓ Write a well formed/valid XML document.

PROGRAM CO-ORDINATOR

HOD HOD BY BY

Dr.K.MAHADEVAN.B.E.,M.E.,Ph.D. PRINCIPAL

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# DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING VALUE ADDED PROGRAMS

ACADEMIC YEAR: 2018-2019

S.NO	NAME OF VALUE ADDED PROGRAMS OFFERED	DURATION (HOURS)	NUMBER OF STUDENTS COMPLETING THE COURSE IN THE YEAR	TYPE OF VALUE ADDED PROGRAMS
1	ROBOTICS	30	3	SELF-FRAMED PROGRAM
2	XILINX/FPGA BASED SYSTEM DEVELOPMENT	30	22	SELF-FRAMED PROGRAM



Dr.K.MAHADEVAN.B.E.,M.E.,Ph.D. PRINCIPAL



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Website; www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com.principal602@ gmail.com

DATE: 25.07.2018

#### FROM

K.Periyasamy

Head of the Department

Department of Electronics and Communication Engineering

CMS College of Engineering

Namakkal-637003

TO

The Principal

CMS College of Engineering

Namakkal-637003

#### Respected sir,

Sub: Request for Permission to organize value added program - Reg.,

I wish to inform you that, we are planning to conduct value added program on "Robotics" for B.E. Electronics and Communication Engineering students from 04.08.2018 to 14.09.2018.In this regard, I kindly request you to avail permission to conduct the program successfully.

Thanking you

(K.PERIYASAMY)



Dr.K.MAHADEVAN, B.E., M.E., Ph.D.

PRINCIPAL



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Website:www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com.principal602@gmail.com

DATE: 25.07.2018

#### FROM

K.Periyasamy

Head of the Department

Department of Electronics and Communication Engineering

CMS College of Engineering

Namakkal-637003

TO

The Principal

CMS College of Engineering

Namakkal-637003

Respected sir,

Sub: Request for Permission to organize value added program - Reg.,

I wish to inform you that, we are planning to conduct value added program on XILINX/FPGA BASED SYSTEM DEVELOPMENT for B.E. Electronics and Communication Engineering students from 04.08.2018 to 14.09.2018. In this regard, I kindly request you to avail permission to conduct the program successfully.

Thanking you

(K.PERIYASAMY)

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Dr.K.MAHADEVAN,B.E.,M.E.,Ph.D.
PRINCIPAL
CMS COLLEGE OF ENGINEERING,

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Website:www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com.principal602@ gmail.com

DATE: 31.07.2018

#### CIRCULAR

This is to bring to your kind notice that our Department of Electronics and Communication Engineering of CMS College of Engineering, Namakkal has planned to conduct a value added program on ROBOTICS 04.08.2018 to 14.09.2018. The session will be organized by Mr.Viswanathan Rajendran, MD, Avaikalam Private Limited. All the students of IV Year are intimated to attend the program without fail in order to enrich their knowledge.

HEAD OF THE DEPARTMENT

#### Copy to

- 1. The Principal
- 2. HOD
- 3. Notice Board

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Dr.K.MAHADEVAN,B.E.,M.E.,Ph.D
PRINCIPAL
GMS COLLEGE OF ENGINEERING



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Website:www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com.principal602@ gmail.com

DATE:31.07.2018

#### CIRCULAR

This is to bring to your kind notice that our Department of Electronics and Communication Engineering of CMS College of Engineering Namakkal has planned to conduct a value added program on "XILINX/FPGA BASED SYSTEM DEVELOPMENT" from 04.08.2018 to 14.09.2018. The session will be organized by Mr.K.VETRICHELVAN, CO-FOUNDER, Studio Q Web solutions. All the students of II & III Year are intimated to attend the program without fail in order to enrich their knowledge.

HEAD OF THE DEPARTMENT

Copy to

- 1. The Principal
- 2. HOD
- 3. Notice Board

NAMAKKAL 3 Z

Dr.K.MAHADEVAN,B.E.,M.E.,Ph.D.
PRINCIPAL



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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING VALUE ADDED PROGRAM-ROBOTICS

ACADEMIC YEAR: 2018-2019 STUDENTS NAME LIST

S.NO	REG NO	NAME
1	620515106001	S.VIJAYARAJ
2	620515106002	S. VINOTH RAJA
3	620515106301	M.DINESH
4	620515106302	S.PRIYADHARSHNI

PROGRAM CO-ORDINATOR

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Or.K.MAHADEVAN, B.E., M.E., Ph.D. PRINCIPAL

GMS COLLEGE OF ENGINEERING, NAMAK: 837 003



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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING ACADEMIC YEAR: 2018-2019

## VALUE ADDED PROGRAM - XILINX/FPGA BASED SYSTEM DEVELOPMENT STUDENTS NAME LIST

S.NO	REG NO	NAME
1	620517106001	ABINAYA S
2	620517106002	ABINAYA.T
3	620517106003	AJITH KUMAR.P
4	620517106005	ARULMOZHI.M
5	620517106006	BARATHKUMAR K
6	620517106010	GIRIJA.R
7	620517106013	KIRUTHIGA DEVI A
8	620517106014	MALLESWARI.K
9	620517106016	NANTHINI.R
10	620517106018	PRAVEN E
11	620517106020	SARANYA.R
12	620517106022	SHARMILADEVI R
13	620517106023	SUJITHRA.P
14	620517106026	VETRIVEL.M
15	620517106027	VIJAYALAKSHMI.M
16	620516106001	ABARNA.K



Dr.K.MAHADEVAN,B.E.,M.E.,Ph.D. PRINCIPAL



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17	620516106003	ANJALI.A
18	620516106005	BIRUNTHA.S
19	620516106007	DIVYA.M
20	620516106008	MADHUMATHI.S
21	620516106009	MATHESH.L
22	620516106010	MURUGAMMA.M
23	620516106011	PAVITHRA.C
24	620516106014	PRIYADHARSHINI.R
25	620516106016	SATHASIVAN.D
26	620516106017	SATHYA.G
27	620516106019	SOUNDHARYA.S

PROGRAM CO-ORDINATOR

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Dr.K.MAHADEVAN, B.E., M.E., Ph.D.
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CMS COLLEGE NGINEERING,

NAMAKKA 1103



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## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### VALUE ADDED PROGRAM

ROBOTICS

SYLLABUS

**UNIT 1: Introduction of Robotics** 

Historical development of Robotics, Definitions of Industrial Robot, Type and Classification of Robots, Asimov's laws of robotics, Methodology of robotics

UNIT 2: Principles of Robotics

Robot configurations, Robot Components, Robot Degrees of Freedom, Work volume and work envelope, Robot Joints and symbols, Robot Coordinates, Robot Reference Frames, Resolution, accuracy and precision of Robot, Work cell control

UNIT 3: Robotics in Inspection Robots for Inspection:

Robotic vision systems, image representation, object recognition and categorization, depth

**UNIT 4: Industrial Applications of Robotics** 

Introduction of processes like Coating, Deburring, cleaning, Die Casting, Molding, Material handling. Picking, Palletizing, Packaging, hospitals and patient care, sports and recreation, defense and surveillance industry, home automation, mining industry

UNIT 5: Planning and control in Robotics

Trajectory planning, position control, force control, Robot programming methods, hybrid control, Industrial and medical robotics: application in manufacturing processes

Course Outcomes: On the completion of the course, students will be able to,

- 1. Understand basics of robotics, types, classification and methodology.
- 2. Acquire the skills in understanding principles of robotics.
- 3. Acquire the skills in understanding robotics in inspection.
- 4. Develop skills in understanding industrial robotics.
- 5. Identifying opportunities for robotics to enhance productivity in manufacturing.

6. Learn Socio-economic aspects of Robotics.

Dr.K.MAHADEVAN, B.E., M.E., Ph.D. PRINCIPAL

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#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### VALUE ADDED PROGRAM

#### XILINX/FPGA BASED SYSTEM DEVELOPMENT

#### SYLLABUS

#### UNIT-I: INTRODUCTION TO ASICS, CMOS LOGIC AND ASIC LIBRARY DESIGN

Types of ASICs – Design Flow – CMOS transistors, CMOS design rules – Combinational Logic Cell – Sequential logic cell – Data path logic cell – Transistors as Resistors – Transistor Parasitic Capacitance – Logical effort – Library cell design – Library architecture.

#### UNIT-II: PROGRAMMABLE LOGIC CELLS AND I/O CELLS

Anti fuse – static RAM – EPROM and EEPROM technology – PREP bench marks – Actel ACT – Xilinx LCA – Altera FLEX – Altera MAX DC & AC inputs and outputs – Clock and power inputs – Xilinx I/O blocks.

#### UNIT-III: INTERCONNECTS AND ASIC DESIGN SOFTWARE

Actel ACT – Xilinx LCA – Xilinx EPLD – Altera MAX 5000 and 7000 – Altera MAX 9000 Altera FLEX – Design systems – Logic Synthesis – Half Gate ASIC – Schematic entry – Low level design language – PLA tools – EDIF – CFI design representation.

#### UNIT-IV: LOGIC SYNTHESIS, SIMULATION AND TESTING

Verilog and logic synthesis – VHDL and logic synthesis - Types of simulation – Boundary scan test – Fault simulation – Automatic test pattern generation Built-in self test.

#### UNIT-V: FLOOR PLANNING, PLACEMENT AND ROUTING

System partition – FPGA partitioning – partitioning methods – floor planning – placement – physical design flow – global routing – detailed routing – special routing – circuit extraction – DRC

#### COURSE OUTCOME

The role of FPGA's and ASIC are perceived to be enormous in embedded systems and hence this subject is offered.

PROGRAM CO-ORDINATOR

Br.K.MAHADEVAN,B.E.,M.E.,Ph.D. PRINCIPAL

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#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### VALUE ADDED PROGRAM

ACADEMIC YEAR: 2018-2019

S.NO	NAME OF VALUE ADDED PROGRAM OFFERED	DURATION (HOURS)	NUMBER OF STUDENTS COMPLETING THE COURSE IN THE YEAR	TYPE OF VALUE ADDED PROGRAM
1	INDUSTRIAL AUTOMATION	30	10	SELF- FRAMED PROGRAM



Dr.K.MAHADEVAN, B.E., M.E., Ph.D.
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Website: www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com,principal602@gmail.com

DATE: 25.07.2018

#### FROM

**G.SURESH** 

Head of the Department

Department of Electrical and Electronics Engineering

CMS College of Engineering

Namakkal-637003

TO

The Principal

CMS College of Engineering

Namakkal-637003

#### Respected sir,

Sub: Request for Permission to organize value added program - Reg.,

I wish to inform you that, we are planning to conduct value added Program on "Industrial Automation" for B.E. Electrical and Electronics Engineering students from 04.08.2018 to 14.09.2018. In this regard, I kindly request you to avail permission to conduct the program successfully.

Thanking you

(G.SURESH)

MAMARKAL 3) TO SERVICE OF THE SERVIC

Dr.K.MAHADEVAN, B.E., M.E., Ph.D. PRINCIPAL

CMS COLLEGE OF ENGINEERING,

NAMAKKAL-637 003



(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25)
CMS Nagar, Eranapuram Post, Namakkal Dt., Pin: 637 003. Tamilnadu, India.
Contact No: 98433 46065, 84899 10651.

Website:www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com.principal602@ gmail.com

DATE: 31.07.2018

#### CIRCULAR

This is to bring to your kind notice that our Electrical and Electronics Engineering of CMS College of Engineering Namakkal has planned to conduct a value added program on "INDUSTRIAL AUTOMATION" from 04.08.2018 to 14.09.2018. The session will be organized by Dr.Pallikonda Rajasekaran, Dean Kalasalingam Academy of Research Education. All the students of III Year are intimated to attend the program without fail in order to enrich their knowledge.

HEAD OF THE DEPARTMENT

Copy to

- 1. The Principal
- 2. HOD
- 3. Notice Board

SE OF ENOUGH

Dr.K.MAHADEVAN, B.E., M.E., Ph.D.
PRINCIPAL



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# DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ACADEMIC YEAR: 2018-2019 VALUE ADDED PROGRAM- INDUSTRIAL AUTOMATION STUDENTS NAME LIST

S.NO	REG NO	NAME	SIGNATURE	
1	620516105002	DEVARAJ K		
2	620516105003	DHANASEKAR		
3	620516105005	GNANASEKAR B		
4	620516105007	GOKULNATH R		
5	620516105010	NANDHINI K		
6	620516105011	NITHIYAN R		
7	620516105012	PRAVEENKUMAR P		
8	620516105013	RAGUL R		
9	620516105015	RANJITH K		
10	620516105019	THANGARASU G		
11	620516105022	VIDHYAPATHI M		
12	620516105023	VIJAYALAKSHMI S		
13	620516105024	VISHWARAKSHAIYA M		

D. WY /4/8/18
PROGRAM CO-ORDINATOR

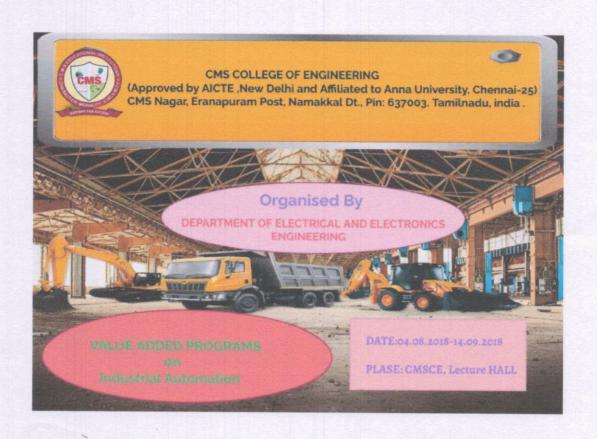
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Dr.K.MAHADEVAN, B.E., M.E., Ph.D.
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Dr.K.MAHADEVAN.B.E.,M.E.,Ph.D. PRINCIPAL
GMS COLLEGE OF ENGINEERING.



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## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINERING VALUE ADDED PROGRAM

#### INDUSTRIAL AUTOMATION

#### **SYLLABUS**

#### **OBJECTIVES:**

- To inculcate sound understanding of industrial automation among students.
- To impart the knowledge on the basic concepts, programming and interfacing of PLC as a member in industrial automation.

#### UNIT I: PLC

Introduction, types, leading hardware and software, logic development, important instruction, Industrial real applications, Industrial I/Ps & O/Ps, PLC wiring & Industrial project development.

#### UNIT II: SCADA

Introduction, interfacing with PLC, screen development, digital & analog data configuration, analog data scaling, driver selection and configuration, tag creation and configuration & Industrial project development.

#### UNIT III: HMI / MMI

Introduction, interfacing with PLC, screen development, digital & analog data configuration, analog data scaling, password level, screen display & Industrial project development.

#### UNIT IV: AC DRIVE

Introduction, hardware, parameter setting, speed, direction, acceleration and deceleration time control of induction motor, interfacing with PLC, multispeed & multidirectional control project.

#### UNIT V: ANALOG

Introduction to analog signal, standard signal type, block diagram, ATD and DTA conversion program and wiring, Interface with SCADA.

#### Course Outcome:

A value-added course on "Industrial Automation" would likely focus on enhancing students' knowledge and skills in the latest technologies and methodologies used in industrial automation systems.

PROGRAM CO-ORDINATOR



HOPTS

Dr.K.MAHADEVAN, B.E., M.E., Ph.D. PRINCIPAL

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# DEPARTMENT OF MECHANICAL ENGINEERING VALUE ADDED PROGRAM 2018-2019

S.NO	NAME OF VALUE ADDED PROGRAM OFFERED	DURATION (HOURS)	NUMBER OF STUDENTS COMPLETING THE COURSE IN THE YEAR	TYPE OF VALUE ADDED PROGRAM
1	CNC PROGRAMMING	30	55	SELF- FRAMED PROGRAM



Dr.K.MAHADEVAN,B.E.,M.E.,Ph.D. PRINCIPAL GMS COLLEGE OF ENGINEERING, NAMAKKAL-637 003



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#### DEPARTMENT OF MECHANICAL ENGINEERING

#### VALUE ADDED PROGRAM

2018-2019

S.NO	NAME OF VALUE ADDED PROGRAM OFFERED	DURATION (HOURS)	NUMBER OF STUDENTS COMPLETING THE COURSE IN THE YEAR	TYPE OF VALUE ADDED PROGRAM
1	CNC PROGRAMMING	30	62	SELF- FRAMED PROGRAM



Dr.K.MAHADEVAN,B.E.,M.E.,Ph.D.
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GMS COLLEGE OF ENGINEERING,
NAMAKKAL-637 003



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Contact No: 98433 46065, 84899 10651.

Website:www.cmsgroupofinstitutions.in Email:cmscollegeofengg@gmail.com.principal602@gmail.com

DATE: 25.07.2018

#### FROM

G.Gopal

Head of the department

Department of Mechanical Engineering

CMS College of Engineering

Namakkal-637003

TO

The Principal

CMS College of Engineering

Namakkal-637003

#### Respected sir,

Sub: Request for permission to organize value added program - Reg.,

I wish to inform you that, we are planning to conduct value added Program on "CNC PROGRAMMING" for B.E. Mechanical Engineering students from 04.08.2018 to 14.09.2018. In this regard, I kindly request you to avail permission to conduct the program successfully.

Thanking you

(G.Gopal)

NAMAKKAL 3 Pro

Dr.K.MAHADEVAN, B.E., M.E., Ph.D.



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Website:www.cmsgroupofinstitutions.in Email:cmscoilegeofengg@gmail.com,principal602@ gmail.com

DATE: 31.07.2018

#### CIRCULAR

This is to bring to your kind notice that our Mechanical Engineering of CMS College of Engineering Namakkal has planned to conduct a value added program on CNC PROGRAMMING from 04.08.2018 to 14.09.2018. The session will be organized by Dr.B.Meenakshi Sundaram, Dean, Sethu Institute of Technology. All the students of II & III Year are intimated to attend the program without fail in order to enrich their knowledge.

Copy to

1. The Principal

2. HOD

3. Notice Board

Dr.K.MAHADEVAN, B.E., M.E., Ph.D. PRINCIPAL CMS COLLEGE OF ENGINEERING, NAMAKA 1 003



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# DEPARTMENT OF MECHANICAL ENGINEERING ACADEMIC YEAR: 2018-2019 VALUE ADDED PROGRAM-STUDENTS NAME LIST CNC PROGRAMMING

S.NO	REG NO	NAME
1	620517114001	АЛТН KUMAR M
2	620517114002	AKASH A
3	620517114003	ALLWIN V
4	620517114004	ARIVUMANI V
5	620517114005	ARUN PRASANTH A
6	620517114006	BALAMURUGAN B
7	620517114007	BHARATHI P
8	620517114008	CHANDRU T
9	620517114012	ELAMBARUTHI B
10	620517114013	GEORGEFERNANDEZ J
11	620517114014	GOKUL BALAN M
12	620517114015	HARI HARAN S
13	620517114016	KARUNAKARAN.S
14	620517114018	KUMARAVEL.G
15	620517114019	MAGESHKUMAR.V



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16	620517114021	MOHANDASS M
17	620517114022	MUHAMMED SANJEED R
18	620517114023	MUTHUMANI K
19	620517114024	NARASIMMAN R
20	620517114025	PAZHANIBARATHI P
21	620517114026	PAZHANIVEL B
22	620517114027	POOVARASAN.M
23	620517114028	PRABHAKARAN K
24	620517114032	PRIYADHARSHAN M
25	620517114033	RANJITH A
26	620517114034	SANTHOSH KUMAR.S
27	620517114035	SATHISH KUMAR M
28	620517114038	THAMIZHARASAN.E
29	620517114039	VENKATESH.C
30	620517114040	VINOTH KUMAR K
31	620517114301	TAMILARASAN I



Dr. K. MAHADEVAN BE N

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32	620516114001	ARULNANDAN
33	620516114002	ARUNRAJ
34	620516114003	BALAGURU
35	620516114004	BALAMURUGAN
36	620516114005	DINESH
37	620516114006	GOPALAKRISHNAN
38	620516114012	MAHESH KUMAR
39	620516114013	MANIKANDAN
40	620516114014	MANOJ
41	620516114015	MOHAMED HARUN RAZEETH
42	620516114016	MOHAMED SHARIF
43	620516114017	MUNIVEL
44	620516114020	NIRMAL RAJ
45	620516114022	POOVARASAN
46	620516114023	POWELL JOHN THOMAS





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47	620516114027	RADHAKRISHNAN
48	620516114029	SABARINATHAN
49 -	620516114030	SAKTHIVEL
50	620516114032	SANTHOSH
51	620516114033	SARAVANA KUMAR
52	620516114034	SARAVANAN
53	620516114036	SATHISH KUMAR
54	620516114037	SATHISH KUMAR
55	620516114038	SATHYAMOORTHY
56	620516114039	SATHYAMOORTHY
57	620516114041	SIVARAMACHANDRAN
58	620516114042	SORUPKEERTHI
59	620516114043	SURESH
60	620516114049	VIGNESH
61	620516114301	GOKUL
62	620516114302	SAKTHIVEL

PROGRAM CO-ORDINATOR



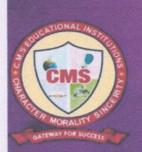
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Dr.K.MAHADEVAN, B.E., M.E., Ph.D..
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ON COLLEGE OF ENGINEERING,
NAMAKKAL-637 003



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CMS Nagar, Eranapuram Post, Namakkal Dt.,
Pin: 637003. Tamilnadu, india.

## **Organised By**

DEPARTMENT OF MECHANICAL ENGINEERING

Value Added Course (VAC)
on
CNC PROGRAMMING

DATE:04.08.2018-14.09.2018

PLACE: CMSCE, Lecture Hall



Dr.K.MAHADEVAN, B.E., M.E., Ph.D.
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# DEPARTMENT OF MECHANICAL ENGINERING VALUE ADDED COURSE CNC PROGRAMMING SYLLABUS

#### UNIT-I Introduction to CNC technology and CNC programming

Introduction to CNC technology – CNC machines & controls. History & development of CNC technology. Conventional Vs. non-conventional machine tool. Numerical control on CNC machine tools CNC control and CNC Control and types of CNC control Calculation of technological data for CNC machining. CNC clamping system. Implementation of JH for CNC Basic health and safety CNC programming basics. Introduction to manual NC programming Manual NC programming for lathe & milling machines. Application Numerical Control, Advantages, & Disadvantages, Adoptive Control System. Practical training & workshop for above sub topics on CNC Machine.

#### **UNIT-II CNC Programming**

Introduction to CNC programming Introduction and demonstration of line programs CNC programming for lathe & milling machine using iso codes into the CNC simulator. CNC programming for lathe and milling machines using different machining cycles into the CNC simulator. Procedures Associated with part programming, Cutting process parameter selection, Process planning issues and path planning, G & M Codes, Interpolations, Canned Cycles and Subprograms, Tool compensations Exposure for programming and simulator of FANUC, SINUMERIC, DMG TURNPLUS & Controls through post processors. Programming exercise. Machining of programmed exercise on CNC lathe & milling machines.

#### UNIT-III CNC Machining - Lathe

Plan and optimize programs for CNC turning operations. Calculate parameters like speed feed etc. and set a references for the various operations Prepare operation and operation sequence for the lathe operations like turning, grooving etc. Prepare & set CNC lathe operations and test run programmed Execute program and inspect simple geometrical forms / standard parts Use of various PPE's on CNC lathe machine

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PRINCIPAL



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#### UNIT-IV CNC Machining -Milling

Plan and optimize programs for CNC Milling operations. Calculate parameters like speed feed , depth of cut etc. and set references for the various operations Various methods of work process like edge finding block center etc. Prepare & set CNC Milling operations and test run programd Execute program and inspect simple geometrical forms / standard parts Use of various PPE's on CNC milling machine

#### UNIT-V CNC Machining -EDM & WEDM

Plan and optimize programs for CNC Wire EDM operations. Calculate parameters affecting surface finish Calculate various machining parameters like Ip, voltage etc Prepare & set CNC Wire EDM operations and test run programd Execute program and inspect simple geometrical forms / standard parts Plan and optimize programs for CNC EDM operations. Prepare & set CNC EDM operations and test run programd Execute program and inspect simple geometrical forms / standard parts Use of various PPE's on CNC milling machines

PROGRAM CO-ORDINATOR

40104/08/18

Br.K.MAHADEVAN, B.E., M.E., Ph.D.

