AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE,RECOGNISED BY GOVT OF A.P&AFFLIATED TO JNTU ,KAKINADA)

CHERUKUPALLY(V),NEAR TAGARAPUVALASABRIDGE,VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF CSE

CIRCULAR

Date: 16/10/2016

This is to inform that the staff members are requested to attended the Department meeting will be held on 16-10-2016 at 3:30 PM to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selecting the Elective Subjects for IV year II Semester students for the academic year 2016-17.

Signature of the HoD

Head of The Department
Department of Computer Science of Engineering
Avanthi Institute of Engg. & Tech.
Cherukupally (V), Chittivalasa (SAO)
Bhogapuram (M), Vizianagaram(Dist)-531163

Copy to:

1. All Faculty Members of the Department.

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE,RECOGNISED BY GOVT OF A.P&AFFLIATED TO JNTU ,KAKINADA)

CHERUKUPALLY(V),NEAR TAGARAPUVALASABRIDGE,VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF CSE

Department Minutes of Meeting :

Minutes of the meeting of the Department held on 24-10-2016 at **03.30 PM** in the HOD Chamber.

The following agenda was discussed at meeting:

- Selecting the Elective Subjects for IV year II Semester students for the academic year 2016-17.

Discussion:-

- It is finalized that as per the students opinion we are electing two subjects out of 4.
- Subjects are:1) Embedded Real Time System 2)Human Computer Interaction

List of the faculty members attended

S.No	Name of the Faculty	Designation	Signature
1	AKULA CHANDRA SEKHAR	PROFESSOR	
2	ANNEPU BALA KRISHNA	PROFESSOR	
3	Dr G S S RAO	PROFESSOR	
4	Dr V HARI PRASAD	PROFESSOR	
5	YEJJIPURAPU RAMESH KUMAR	ASSOC. PROFESSOR	
6	KOMALI RAVENDRA	ASSOC. PROFESSOR	
7	CHINTU KODANDA RAMU	ASSOC. PROFESSOR	
8	BANDAM RAMESH BABU	ASSOC. PROFESSOR	
9	VASUPALLI MAHESH	ASSOC. PROFESSOR	
10	PODUGU RAVIKUMAR	ASSOC. PROFESSOR	
11	H.DEVA RAJU	ASST. PROFESSOR	
12	SWAPNA YELLABILLI	ASST. PROFESSOR	
13	NANUBALA UDAYA KUMAR	ASST. PROFESSOR	
14	NALANAGEELA HARINI	ASST. PROFESSOR	
15	BADUKONDA	ASST. PROFESSOR	

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE, RECOGNISED BY GOVT OF A.P & AFFLIATED TO JNTU, KAKINADA)

CHERUKUPALLY(V), NEAR TAGARAPUVALASA BRIDGE, VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF CSE

	MADHUSUDHANA RAO		
16	KARRA MEHAR PRASAD	ASST. PROFESSOR	
17	NIMMALA SAKITA SRI	ASST. PROFESSOR	
18	ASOKARAJU PENNETSA	ASST. PROFESSOR	
19	KUNA VENKATA KIRAN	ASST. PROFESSOR	
20	KOPPULA CHINABUSI	ASST. PROFESSOR	
21	P.SRINIVAS VARMA	ASST. PROFESSOR	
22	G. CHANDRA SEKHAR	ASST. PROFESSOR	
23	SEERAPU KESAVA RAO	ASST. PROFESSOR	
24	VASANTHA MURALI KRISHNA	ASST. PROFESSOR	
25	S.SANTOSH LAKSHMI	ASST. PROFESSOR	
26	ETYALA RAMYA SREE	ASST. PROFESSOR	
27	ACHANTI RAJESH KUMAR	ASST. PROFESSOR	
28	CHEKURI KAVITHA	ASST. PROFESSOR	
29	SRIKANTH MURAPAKA	ASST. PROFESSOR	
30	SURAGALI CHANTI	ASST. PROFESSOR	
31	PUCHA RAMESH	ASST. PROFESSOR	
32	MAHANTHI SRIDHAR	ASST. PROFESSOR	
33	KANTREDI VISALA	ASST. PROFESSOR	
34	P SRILAKSHMI	ASST. PROFESSOR	
35	KOLA HARI BHARGAVI	ASST. PROFESSOR	
36	NAMBALA V S ARAVIND	ASST. PROFESSOR	
37	P.DILEEP	ASST. PROFESSOR	
38	PARAVADA REVATHI	ASST. PROFESSOR	
39	TERLI MADHAVA RAO	ASST. PROFESSOR	

Signature of H.O.D.

Head of The Department
Department of Computer Science & Engineering
Avanthi Institute of Engg. & Tech.
Cherukupally (V), Vizianagaram (D.T.)

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE, RECOGNISED BY GOVT OF A.P & AFFLIATED TO JNTU, KAKINADA)

CHERUKUPALLY(V), NEAR TAGARAPUVALASA BRIDGE, VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF CIVIL ENGINEERING

Department Minutes of Meeting :

Minutes of the meeting of the Department constituted held on 2-12-2016 **at 03.30** in the HOD Chamber .

In the Department meeting it is discussed the following agenda at the meeting:

- Regarding Certificate program
- Regarding Selection of Electives from students
- Regarding Time table preparation

Regarding CRT classes Discussion:-

Faculty given the list for the conduction of certificate programs
HOD & faculty are decided to conduct CRT classes for 2rd years students.

List of the members attended

S.No.	Name of the Faculty	Exact Designation	Signature
1	Dr A RANGANATHAN	PROFESSOR	
2	THAYARU MUNNAM HIMANGESWARI	ASST PROFESSOR	
3	REDDY BHANU PRAKASH	ASST PROFESSOR	
4	KIRAN KUNTA GAYATRI	ASST PROFESSOR	
5	JANAPAREDDY CHANDRA SEKHAR	ASST PROFESSOR	
6	PALLAVI PASUMARTHI	ASST PROFESSOR	
7	NIRMALA PALIKILA	ASST PROFESSOR	
8	AJAY CHAPPA	ASST PROFESSOR	
9			
10			
11			
12			
13			
14			
15			
16			

SIGNATURE OF HOD

AVANTHI INSTITUTE OF ENGG. & TECH.
Cherukupally (Vill), Chittivalasa (S.A.O.)
Bhogapuram (M)
Vizianagaram (Dist.)

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE, RECOGNISED BY GOVT OF A.P& PERMANENTLY AFFLIATED TO JNTU ,KAKINADA)

CHERUKUPALLY(V),NEAR TAGARAPUVALASA BRIDGE,VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

ELECTRONICS AND COMMUNICATION ENGINEERING

CIRCULAR

Circular No: 01/Jn2016-17 **Date: 1-6-16**

This is to inform All the faculty members that Department meeting will be held on 3-06-2016 so we are requested you to attend the meeting at 03.30 pm to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selecting the Elective Subjects for 4th year 1ST Semester students for the academic year 2016-17.
- Allotment of 2nd,3rd,4th year 1ST sem subjects.
- Regarding lab requirement.
- Regarding work shop on 3rd&4th year students.

Signature of the HOD

Head of the Department
Electronics & Communication Engineering
AVANTHI INSTITUTE OF ENGG. & TECH
Cherukupally (Vill), Bhogapuram (M)
VIZIANAGARAM (DIST) .

Copy To:

1. All Faculty Members of the Department.

Department Minutes of Meeting :

Minutes of the meeting of the Department constituted held on 3-06-**2016 at 03.30** in the HOD Chamber .

In the Department meeting it is discussed the following agenda at the meeting:

- Selecting the Elective Subjects for 4TH YEAR 1ST Semester students for the academic year 2016-17.
- Allotment of 2nd ,3rd,4th year 1st Sem subjects.
- Regarding lab requirement.
- Regarding work shop on 3rd&4th year students.

Discussion:-

- It is finalized that as per the students opinions
- Subject allocation is made based on the faculty specialization and core experience
- Decisions taken by the department to avail new equipment based on the deficiency and maintenance of old equipments.
- Faculties are assigned for the smooth conductance of workshop and student discipline activities

List of the members attended

S.NO	NAME OF THE FACULTY	DESIGNATION	SIGNATURE
1	Dr V S V PRABHAKAR	PRINCIPAL	
2	PASUPULA KRISHNA RAO	PROFESSOR	
3	DR CH SRINIVAS	PROFESSOR	
4	DR M MAHARAJAN	PROFESSOR	
5	DR M MURALI	PROFESSOR	
6	G V SRIDHAR	ASSOC. PROFESSOR	
7	MATANGI KESAB CHANDRA SEN	ASSOC. PROFESSOR	
8	BOKKA NAVEEN	ASSOC. PROFESSOR	
9	KANCHIMANI SYAMALA	ASSOC. PROFESSOR	
10	AADIGARLA MADHUSUDHNA RAO	ASSOC. PROFESSOR	
11	BARRE T R PRASUNA	ASSOC. PROFESSOR	
12	POTNURU SATEESH KUMAR	ASSOC. PROFESSOR	
13	MACHETTI RAMESH	ASSOC. PROFESSOR	
14	RAO V SIVA BHASKARA	ASSOC. PROFESSOR	
15	KUMAR K SURESH	ASST PROFESSOR	
16	MACHA RAJESH	ASST PROFESSOR	
17	VALIVETI RAVI TEJESVI	ASST PROFESSOR	
18	VELAGA SURESH	ASST PROFESSOR	
19	BHAVANI SANTHOSHI SEELA	ASST PROFESSOR	
20	KUSUMANCHI AVINASH KUMAR	ASST PROFESSOR	
21	P SRIHARIRAO	ASST PROFESSOR	
22	GODUGU MADHURI UMA	ASST PROFESSOR	
23	AKULA LEELAVATHI	ASST PROFESSOR	
24	K. RAVI KUMAR	ASST PROFESSOR	

25	SANAPALA KISHORE	ASST PROFESSOR	
26	MYLAPALLI NAGARAJU	ASST PROFESSOR	
27	PETLURI SUPARNARAJ	ASST PROFESSOR	
28	VASANTHA SUDHEERNAGU	ASST PROFESSOR	
29	SMV KHAN	ASST PROFESSOR	
30	GANGADHARA SAISOWJANYA	ASST PROFESSOR	
31	SEELAM LAVANYA	ASST PROFESSOR	
32	M RAJENDRAKUMAR	ASST PROFESSOR	
33	GORLE RAVIKUMAR	ASST PROFESSOR	
34	CHINTALA MEERAMADHURI	ASST PROFESSOR	
35	SIRIPURAPU HARISH	ASST PROFESSOR	
36	PENTAKOTA SANTOSH KUMAR	ASST PROFESSOR	
37	CH. PRATAP	ASST PROFESSOR	
38	P. ADITYA	ASST PROFESSOR	
39	GUNUPURU SOWJANYA LAKSHMI	ASST PROFESSOR	
40	GORREMUTCHU BUELA DIVY	ASST PROFESSOR	
41	BODABALLA RAVIKIRAN	ASST PROFESSOR	
42	DADI VENKATA RAO	ASST PROFESSOR	
43	MAHAMMED ABDUALYASEENABABA	ASST PROFESSOR	

Signature of H.O.D.

Head of the Department
Electronics & Communication Engineer
AVANTHI INSTITUTE OF ENGG. & TEC.
Cherukupally (Vill), Bhogapuram (M)
VIZIANAGARAM (DIST)

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE, RECOGNISED BY GOVT OF A.P & AFFLIATED TO JNTU, KAKINADA)

CHERUKUPALLY(V), NEAR TAGARAPUVALASA BRIDGE, VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGGINEERING

CIRCULAR

Date: 03-05-16

Circular No: 01/May2016-17

This is to inform All the faculty members that Department meeting will be held on 3-05-2012 so we are requested you to attend the meeting at 03.30 pm to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selecting the Elective Subjects for 4th year 1ST Semester students for the academic year 2016-17.
- Allotment of 2nd,3rd,4th year 1ST sem subjects.
- Regarding lab requirement.
- Regarding faculty requirement
- Regarding Certificate program by Matchwell technology solutions.

Signature of the HOD

Head of The Department
Dept. Electrical & Electroncis Engineering
Avanthi Institute of Engg. & Tech.
Cherukupally(V), Chittivalasa (SAO),
Bhogapuram(M), Vizianagaram(Dist)-531162

Copy To:

1. All Faculty Members of the Department.

DP KK

P SS

GP PV

MA

AR

AK

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE,RECOGNISED BY GOVT OF A.P&AFFLIATED TO JNTU ,KAKINADA)

CHERUKUPALLY(V),NEAR TAGARAPUVALASABRIDGE,VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGGINEERING

Department Minutes of Meeting :

Minutes of the meeting of the Department constituted held on 3-05-2016 at 03.30 in the HOD Chamber .

In the Department meeting it is discussed the following agenda at the meeting:

- Selecting the Elective Subjects for 4TH YEAR 1ST Semester students for the academic year 2016-17.
- Allotment of 2nd ,3rd,4th year 1st Sem subjects.
- Regarding lab requirement.
- Regarding faculty requirement
- To conduct Certificate programs by Matchwell technology solutions. We have MOUs.

Discussion:-

- It is finalized that as per the students opinion electives are
- Faculty incharges listed the requirement of labs
- HOD allotted workload to the faculty
- Certificate program will be conduct in September, we have MOU with MAtchwell Technology .

List of the members attended

S.No.	Name of the Faculty	Exact Designation	Signature
1	Dr K JAYA KUMAR	PROFESSOR	
2	Dr J POORNACHANDRAN	PROFESSOR	
3	Dr P SHANKAR BAU	PROFESSOR	
4	ANUKA ARJUNA RAO	ASSOC. PROFESSOR	
5	SWAROOP BURRA ANAND	ASSOC. PROFESSOR	
6	GORLA PRASANT	ASST PROFESSOR	
7	DHANA PRASAD DUGGAPU	ASST PROFESSOR	
8	GUBBALA PHANINIDRA VENKATA	ASST PROFESSOR	
9	SUDHAKAR VEDULA	ASST PROFESSOR	
10	NEMALI VENKATA NAGA ANUSHA	ASST PROFESSOR	
11	VOLLURU SARATH KUMAR	ASST PROFESSOR	
12	ASLK GOPALAMMA	ASST PROFESSOR	
13	GEDELA HARIKA SWETHA	ASST PROFESSOR	
14	A KRISHNAVENI	ASST PROFESSOR	
15	KARRI HEMANTH KUMAR	ASST PROFESSOR	
16	SHAIK SHAHEEM	ASST PROFESSOR	
17	PRASAD BAMMIDI VARA SIVA	ASST PROFESSOR	
18	JHANSI RANI SEERAM	ASST PROFESSOR	

Signature of H.O.D.

Head of The Department
Dept. Electrical & Electroncis Engineering
Avanthi Institute of Engg. & Tech.
Cherukupally(V), Chittivalasa (SAO),
Bhogapuram(M), [illegible]

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE, RECOGNISED BY GOVT OF A.P & AFFLIATED TO JNTU, KAKINADA)

CHERUKUPALLY(V), NEAR TAGARAPUVALASA BRIDGE, VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF MANAGEMENT STUDIES

CIRCULAR

Circular No: 02/Jn2016-17

Date: 23/06/2016

This is to inform All the staff members that Department meeting will be held on 24-06-2016 so we are requested you to attend the meeting at 03.30 pm to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selecting the Elective Subjects for 2nd year 3rd Semester students for the academic year 2016-17.
- Allotment of 3rd Sem subjects.
- Any other issues.

Signature of the HOD

Head of the Department
Master of Business Applica
Avanthi Institute of Engg. & Tech
Cherukupalli (V), Bhogapuram
VIZIANAGARAM (Dist.)

Copy To:

1. All Faculty Members of the Department.

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(APPROVED BY AICTE,RECOGNISED BY GOVT OF A.P&AFFLIATED TO JNTU ,KAKINADA)

CHERUKUPALLY(V),NEAR TAGARAPUVALASABRIDGE,VIZIANAGARAM DIST-531162

www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF MANAGEMENT STUDIES

Department Minutes of Meeting :

Minutes of the meeting of the Department constituted held on 24-06-2016 **at 03.30** in the HOD Chamber.

In the Department meeting it is discussed the following agenda at the meeting:

- Selecting the Elective Subjects for 2nd year 3rd Semester students for the academic year 2016-17.
- Allotment of 3rd Sem subjects.

Discussion:-

- It is finalized that as per the student's opinions we are allotting their specializations.
- 3rd sem subjects are allotted to the faculty.

List of the members attended

S.NO	NAME OF FACULTY	SIGNATURE
1	Dr. L.RAMESH	
2	J.SOWMYA	
3	B.MADHU LATHA	
4	T.SRINIVAS	
5	B.ASHOK	
6	Y.SRAVAN KUMAR	
7	J.GANAPATHI	
8	M.RPUSUNDAR RAO	
9	K.RATNA MADHURI	
10	N.NAGAMANI	
11	K.RAVI KUMAR	
12	G.KRUSHNA KANTH	
13	N.ASWINI	
14	J.BHASKAR REDDY	
15	B.VARALAKSHMI	

Signature of the H.O.D.

Head of the Department
Master of Bussiness Applications
Avanthi Institute of Engg. & Technology
Cherukupalli (V), Bhogapuram (M)
VIZIANAGARAM (Dist.)

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(APPROVED BY AICTE, RECOGNISED BY GOVT OF A.P & AFFLIATED TO JNTU, KAKINADA)
CHERUKUPALLY(V), NEAR TAGARAPUVALASA BRIDGE, VIZIANAGARAM DIST-531162
www.avanthi.edu.in, www.aietta.ac.in

DEPARTMENT OF MECHANICAL ENGINEERING

CIRCULAR

Date: 2-11-2016

Circular No: 02/11- 2016-17

This is to inform All the faculty members that Department meeting will be held on 2-11-2016 so we are requested you to attend the meeting at 03.30 pm to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selection of elective subject for 3rd year 2nd semester students for the academic year 2016-17.

Copy To:

1. All Faculty Members of the Department.

Signature of the HOD

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(APPROVED BY AICTE,RECOGNISED BY GOVT OF A.P&AFFLIATED TO JNTU ,KAKINADA)
CHERUKUPALLY(V),NEAR TAGARAPUVALASABRIDGE,VIZIANAGARAM DIST-531162
www.avanthi.edu.in, www.aietta.ac.in
DEPARTMENT OF MECHANICAL ENGINEERING

CIRCULAR

Circular No: 02/9- 2013-14

Date: 2-9-2013

This is to inform All the faculty members that Department meeting will be held on 2-9-2013 so we are requested you to attend the meeting at 03.30 pm to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selection of elective subject for M.Tech 2nd semester students for the academic year 2014-15.

Signature of the HOD

Copy To:

1. All Faculty Members of the Department.

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(APPROVED BY AICTE,RECOGNISED BY GOVT OF A.P&AFFLIATED TO JNTU ,KAKINADA)
CHERUKUPALLY(V),NEAR TAGARAPUVALASABRIDGE,VIZIANAGARAM DIST-531162
www.avanthi.edu.in, www.aietta.ac.in
DEPARTMENT OF MECHANICAL ENGINEERING

CIRCULAR

Circular No: 03/6- 2013-14 **Date: 3-6-2013**

This is to inform All the faculty members that Department meeting will be held on 3-6-2013 so we are requested you to attend the meeting at 03.30 pm to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selection of elective subject for 4th year 2nd semester students for the academic year 2013-14.

Signature of the HOD

Copy To:

1. All Faculty Members of the Department.

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(APPROVED BY AICTE, RECOGNISED BY GOVT OF A.P & AFFLIATED TO JNTU, KAKINADA)
CHERUKUPALLY(V), NEAR TAGARAPUVALASA BRIDGE, VIZIANAGARAM DIST-531162
www.avanthi.edu.in, www.aietta.ac.in
DEPARTMENT OF MECHANICAL ENGINEERING

CIRCULAR

Circular No: 16/12- 2015-16

Date: 16-12-2015

This is to inform All the faculty members that Department meeting will be held on 16-12-2015 so we are requested you to attend the meeting at 03.30 pm to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selection of elective subject for M.Tech 2nd semester students for the academic year 2015-16.

Signature of the HOD

Copy To:

1. All Faculty Members of the Department.

AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
(APPROVED BY AICTE, RECOGNISED BY GOVT OF A.P & AFFILIATED TO JNTU, KAKINADA)
CHERUKUPALLY(V), NEAR TAGARAPUVALASA BRIDGE, VIZIANAGARAM DIST-531162
www.avanthi.edu.in, www.aietta.ac.in
DEPARTMENT OF MECHANICAL ENGINEERING

CIRCULAR

Circular No: 2/12- 2014-15

Date: 2-12-2015

This is to inform All the faculty members that Department meeting will be held on 2-12-2015 so we are requested you to attend the meeting at 03.30 pm to discuss the following agenda.

Venue: H.O.D. Chamber.

Agenda:

- Selection of elective subject for M.Tech 2nd semester students for the academic year 2014-15.

Signature of the HOD

Copy To:

1. All Faculty Members of the Department.

Noise Pollution: Noise standards, Measurement and control methods – Reducing residential and industrial noise – ISO14000.

UNIT –II

Industrial wastewater Management: – Strategies for pollution control - Volume and Strength reduction – Neutralization – Equalization – Proportioning – Common Effluent Treatment Plants - Recirculation of industrial wastes – Effluent standards.

UNIT – III

Solid Waste Management: solid waste characteristics – basics of on-site handling and collection – separation and processing - Incineration-Composting-Solid waste disposal methods – fundamentals of Land filling.

UNIT – IV

Environmental Sanitation: Environmental Sanitation Methods for Hostels and Hotels, Hospitals, Swimming pools and public bathing places, social gatherings (melas and fares), Schools and Institutions. Rural Sanitation-low cost waste disposal methods.

UNIT – V

Hazardous Waste: Characterization - Nuclear waste – Biomedical wastes – Electronic wastes - Chemical wastes – Treatment and management of hazardous waste-Disposal and Control methods.

UNIT- VI

Sustainable Development: Definition- elements of sustainable developments-Indicators of sustainable development- Sustainability Strategies- Barriers to Sustainability–Industrialization and sustainable development – Cleaner production in achieving sustainability- sustainable development.

TEXT BOOKS:

1. Environmental Engineering, by Ruth F. Weiner and Robin Matthews – 4th Edition Elesevier, 2003.
2. Environmental Science and Engineering by J.G. Henry and G.W. Heinke – Pearson Education.
3. Environmental Engineering by Mackenzie L Davis & David A Cornwell. McGraw Hill Publishing.

III Year – II SEMESTER

T	P	C
3+1*	0	3

(Open Elective)

CE606 (a) - ENVIRONMENTAL POLLUTION AND CONTROL

Lecture :	3 hrs/Week	Internal Assessment :	Marks
Tutorial :	1 Hrs/Week	Semester End Examination :	Marks
Practical :	--	Credits :	3

Course Learning Objectives:

The objective of this course is:

1. Impart knowledge on fundamental aspects of air pollution & control. noise pollution, and solid waste management.
2. Provide basic knowledge on sustainable development.
3. Introduces some basics of sanitation methods essential for protection of community health.
4. Differentiate the solid and hazardous waste based on characterization.

Course Learning Outcomes:

By the end of successful completion of this course, the students will be able to:

a. Identify the air pollutant control devices
b. Have knowledge on the NAAQ standards and air emission standards
c. Differentiate the treatment techniques used for sewage and industrial wastewater treatment methods.
d. Understand the fundamentals of solid waste management, practices adopted in his town/village and its importance in keeping the health of the city.
e. Appreciate the methods of environmental sanitation and the management of community facilities without spread of epidemics.
f. Appreciate the importance of sustainable development while planning a project or executing an activity.

SYLLABUS:

UNIT – I

Air Pollution: Air pollution Control Methods–Particulate control devices – Methods of Controlling Gaseous Emissions – Air quality standards.

T	P	C
4	0	3

Elective - IV
Embedded and Real Time Systems

Course Objectives:

Develop an understanding of the technologies behind the embedded computing systems

1. technology capabilities and limitations of the hardware, software components
2. methods to evaluate design tradeoffs between different technology choices.
3. design methodologies

Course Outcomes:

Understand the basics of an embedded system

1. Program an embedded system
2. Design, implement and test an embedded system.

Identify the unique characteristics of real-time systems

1. Explain the general structure of a real-time system
2. Define the unique design problems and challenges of real-time systems

Syllabus:

Unit-I:

Introduction to Embedded systems: What is an embedded system Vs. General computing system, history, classification, major application areas, and purpose of embedded systems. Core of embedded system, memory, sensors and actuators, communication interface, embedded firmware, other system components, PCB and passive components.

UNIT-II:

8—bit microcontrollers architecture: Characteristics, quality attributes application specific, domain specific, embedded systems. Factors to be considered in selecting a controller, 8051 architecture, memory organization, registers, oscillator unit, ports, source current, sinking current, design examples.

UNIT-III:

RTOS and Scheduling, Operating basics, types, RTOS, tasks, process and threads, multiprocessing and multitasking, types of multitasking, non preemptive, preemptive scheduling.

UNIT-IV:

Task communication of RTOS, Shared memory, pipes, memory mapped objects, message passing, message queue, mailbox, signaling, RPC and sockets, task communication/synchronization issues, racing, deadlock, live lock, the dining philosopher's problem.

UNIT-V:

The producer-consumer problem, Reader writers problem, Priority Inversion, Priority ceiling, Task Synchronization techniques, busy waiting, sleep and wakery, semaphore, mutex, critical section objects, events, device, device drivers, how to clause an RTOS, Integration and testing of embedded hardware and fire ware.

UNIT-VI:

Simulators, emulators, Debuggers, Embedded Product Development life cycle (EDLC), Trends in embedded Industry, Introduction to ARM family of processor.

TEXT BOOK:

1. Introduction to embedded systems Shibu. K.V, TMH, 2009.

REFERENCE BOOKS:

1. Ayala & Gadre: The 8051 Microcontroller & Embedded Systems using Assembly and C, CENGAGE

2. Embedded Systems, Rajkamal, TMH, 2009.
3. Embedded Software Primer, David Simon, Pearson.
4. The 8051 Microcontroller and Embedded Systems, Mazidi, Mazidi, Pearson,.

IV Year – II SEMESTER

T	P	C
4	0	3

Elective - III

Human Computer Interaction

Course Objectives:
The main objective is to get student to think constructively and analytically about how to design and evaluate interactive technologies.

Course Outcomes:

1. Explain the capabilities of both humans and computers from the viewpoint of human information processing.
2. Describe typical human–computer interaction (HCI) models, styles, and various historic HCI paradigms.
3. Apply an interactive design process and universal design principles to designing HCI systems.
4. Describe and use HCI design principles, standards and guidelines.
5. Analyze and identify user models, user support, socio-organizational issues, and stakeholder requirements of HCI systems.
6. Discuss tasks and dialogs of relevant HCI systems based on task analysis and dialog design.

Syllabus:

UNIT I:
Introduction: Usability of Interactive Systems- introduction, usability goals and measures, usability motivations, universal usability, goals for our profession
Managing Design Processes: Introduction, Organizational design to support usability, Four pillars of design, development methodologies, Ethnographic observation, Participatory design, Scenario Development, Social impact statement for early design review, legal issues, Usability Testing and Laboratories

UNIT II:
Menu Selection, Form Fill-In and Dialog Boxes: Introduction, Task- Related Menu Organization, Single menus, Combinations of Multiple Menus, Content Organization, Fast Movement Through Menus, Data entry with Menus: Form Fill-in, dialog Boxes, and alternatives, Audio Menus and menus for Small Displays

UNIT III:
Command and Natural Languages: Introduction, Command organization Functionality, Strategies and Structure, Naming and Abbreviations, Natural Language in Computing
Interaction Devices: Introduction, Keyboards and Keypads, Pointing Devices, Speech and Auditory Interfaces, Displays- Small and large

UNIT IV:
Quality of Service: Introduction, Models of Response-Time impacts, Expectations and attitudes, User Productivity, Variability in Response Time, Frustrating Experiences
Balancing Function and Fashion: Introduction, Error Messages, Nonanthropomorphic Design, Display Design, Web Page Design, Window Design, Color

UNIT V:
User Documentation and Online Help: Introduction, Online Vs Paper Documentation, Reading from paper Vs from Displays, Shaping the content of the Documentation, Accessing the Documentation, Online tutorials and animated documentation, Online communities for User Assistance, The Development Process

UNIT VI:
Information Search: Introduction, Searching in Textual Documents and Database Querying, Multimedia Document Searches, Advanced Filtering and Searching Interfaces
Information Visualization: Introduction, Data Type by Task Taxonomy, Challenges for Information Visualization

Text Books:

1. Designing the User Interface, Strategies for Effective Human Computer Interaction, 5ed, Ben Shneiderman, Catherine Plaisant, Maxine Cohen, Steven M Jacobs, Pearson
2. The Essential guide to user interface design,2/e, Wilbert O Galitz, Wiley DreamaTech.

Reference Books:

1. Human Computer, Interaction Dan R.Olsan, Cengage ,2010.
2. Designing the user interface. 4/e, Ben Shneidermann , PEA.
3. User Interface Design, Soren Lauesen , PEA.
4. Interaction Design PRECE, ROGERS, SHARPS, Wiley.

II Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	Probability and statistics	4	--	3
2	Java Programming	4	--	3
3	Advanced Data Structures	4	--	3
4	Computer Organization	4	--	3
5	Formal Languages and Automata Theory	4	--	3
6	Advanced Data Structures Lab	--	3	2
7	Java Programming Lab	--	3	2
8	Free Open Source Software(FOSS) Lab	--	3	2
Total Credits				**21**

III Year – I SEMESTER

S. No.	Subject	T	P	Credits
1	Compiler Design	4	-	3
2	Data Communication	4	-	3
3	Principles of Programming Languages	4	-	3
4	Database Management Systems	4	-	3
5	Operating Systems	4	-	3
6	Compiler Design Lab	-	3	2
7	Operating System Lab	-	3	2
8	Database Management Systems Lab		3	2
9	Linux Programming Lab	-	3	2
10	IPR and Patents- 1	2	-	-
11	Seminar	--	--	1
Total Credits				**24**

III Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	Computer Networks	4	-	3
2	Data Ware housing and Mining	4	-	3
3	Design and Analysis of Algorithms	4	-	3
4	Software Engineering	4	-	3
5	Web Technologies	4	-	3
6	Computer Networks Lab	-	3	2
7	Software Engineering Lab	-	3	2
8	Web Technologies Lab	-	3	2
9	IPR and Patents- II	2	--	--
Total Credits				**21**

IV Year – I SEMESTER

S. No.	Subject	T	P	Credits
1	Cryptography and Network Security	4	-	3
2	UML & Design Patterns	4	-	3
3	Mobile Computing	4	-	3
4	**Elective –I**	4	-	3
5	**Elective – II**	4	-	3
6	UML & Design Patterns Lab	-	3	2
7	Mobile Application Development Lab	-	3	2

8	Software Testing Lab	-	3	2
9	Hadoop & BigData Lab	-	3	2
Total Credits				**23**

IV Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	**Elective – III**	4	-	3
2	**Elective – IV**	4	-	3
3	Distributed Systems	4	-	3
4	Management Science	4	-	3
5	Project	-	-	9
Total Credits				**21**

Elective – I:
i) Software Testing Methodologies
ii) Simulation Modeling
iii) Information Retrieval Systems
iv) Artificial Intelligence
v) Multimedia Computing
vi) High Performance Computing

Elective – II:
i. Digital Forensics
ii. Hadoop and Big Data
iii. Software Project Management
iv. Machine Learning
v. Advanced Databases

Elective – III:
i) Human Computer Interaction
ii) Advanced Operating Systems
iii) Mobile Adhoc & Sensor Networks
iv) Pattern Recognition
v) Digital Image Processing
vi) Micro processers and Multi Core Systems

Elective-IV:
i) Embedded and Real Time Systems
ii) Neural Networks & Soft Computing
iii) Social Networks and the Semantic Web
iv)Cloud Computing

COURSE STRUCTURE AND SYLLABUS

For

ELECTRICAL AND ELECTRONICS ENGINEERING

(Applicable for batches admitted from 2016-2017)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA - 533 003, Andhra Pradesh, India

I Year – I Semester

S. No	Subjects	L	T	P	Credits
1-HS	English – I	4	--	--	3
2-BS	Mathematics - I	4	--	--	3
3-ES	Applied Chemistry	4	--	--	3
4-BS	Engineering Mechanics	4	--	--	3
5-BS	Computer Programming	4	--	--	3
6-ES	Environmental Studies	4	--	--	3
7-HS	Applied / Engineering Chemistry Laboratory	--	--	3	2
8-BS	English- Communication Skills Laboratory - I	--	--	3	2
9-ES	Computer Programming Laboratory	--	--	3	2
	Total Credits				**24**

I Year – II Semester

S. No	Subjects	L	T	P	Credits
1-HS	English – II	4	--	--	3
2-BS	Mathematics – II (Mathematical Methods)	4	--	--	3
3-BS	Mathematics – III	4	--	--	3
4-ES	Applied Physics	4	--	--	3
5	Electrical Circuit Analysis - I	4	--	--	3
6-ES	Engineering Drawing	4	--	--	3
7-BS	English - Communication Skills Laboratory - II	--	--	3	2
8-HS	Applied / Engineering Physics Laboratory	--	--	3	2
9-ES	Applied / Engineering Physics – Virtual Labs - Assignments	--	--	2	--
10	Engg.Workshop & IT Workshop	--	--	3	2
	Total Credits				**24**

II Year – I Semester

S. No	Subjects	L	T	P	Credits
1	Electrical Circuit Analysis - II	4	--	--	3
2	Electrical Machines-I	4	--	--	3
3	Basic Electronics and Devices	4	--	--	3
4	Electro Magnetic Fields	4	--	--	3
5	Thermal and Hydro Prime Movers	4	--	--	3
6	Managerial Economics & Financial Analysis	4	--	--	3
7	Thermal and Hydro Laboratory	--	--	3	2
8	Electrical Circuits Laboratory	--	--	3	2
	Total Credits				**22**

II Year – II Semester

S. No	Subjects	L	T	P	Credits
1	Electrical Measurements	4	--	--	3
2	Electrical Machines-II	4	--	--	3
3	Switching Theory and Logic Design	4	--	--	3
4	Control Systems	4	--	--	3
5	Power Systems-I	4	--	--	3
6	Management Science	4	--	--	3
7	Electrical Machines -I Laboratory	--	--	3	2
8	Electronic Devices & Circuits Laboratory	--	--	3	2
	Total Credits				**22**

III Year – I Semester

S. No	Subjects	L	T	P	Credits
1	Power Systems-II	4	--	--	3
2	Renewable Energy Sources	4	--	--	3
3	Signals and Systems	4	--	--	3
4	Pulse & Digital Circuits	4	--	--	3
5	Power Electronics	4	--	--	3
6	Electrical Machines-II Laboratory	--	--	3	2
7	Control Systems Laboratory	--	--	3	2
8	Electrical Measurements Laboratory	--	--	3	2
9-MC	IPR & Patents	--	2	--	--
	Total Credits				**21**

III Year – II Semester

S. No	Subjects	L	T	P	Credits
1	Power Electronic Controllers & Drives	4	--	--	3
2	Power System Analysis	4	--	--	3
3	Micro Processors and Micro controllers	4	--	--	3
4	Data Structures	4	--	--	3
5	Open Elective 1. Unix and Shell Programming 2. OOPS Through JAVA 3. VLSI Design 4. Robotics 5. Neural Networks &Fuzzy Logic 6. Energy Audit and Conservation& Management	4	--	--	3
6	Power Electronics Laboratory	--	--	3	2
7	Microprocessors & Microcontrollers Laboratory	--	--	3	2
8	Data Structures Laboratory	--	--	3	2
9-MC	Professional Ethics & Human Values	--	3	--	--
	Total Credits				**21**

IV Year – I Semester

S. No	Subjects	L	T	P	Credits
1	Utilization of Electrical Energy	4	--	--	3
2	Linear IC Applications	4	--	--	3
3	Power System Operation & Control	4	--	--	3
4	Switchgear and Protection	4	--	--	3
5	**Elective – I:** 1. Electrical Machine Modeling and Analysis 2. Advanced Control Systems 3. Programmable Logic Controllers& Applications 4. Instrumentation	4	--	--	3
6	**Elective – II:** 1. Optimization Techniques 2. Electric Power Quality 3. Special Electrical Machines	4	--	--	3
7	Electrical Simulation Laboratory	--	--	2	2
8	Power Systems & Simulation Laboratory	--	--	2	2
	Total Credits				**22**

IV Year - II Semester

S. No	Subjects	L	T	P	Credits
1	Digital Control Systems	4	--	--	3
2	HVDC Transmission	4	--	--	3
3	Electrical Distribution Systems	4	--	--	3
4	**Elective – III:** 1. High Voltage Engineering 2. Flexible Alternating Current Transmission Systems 3. Power System Reforms	4	--	--	3
5	Seminar	--	3	--	2
6	Project	--	--	--	10
	Total Credits				**24**

ACADEMIC REGULATIONS & COURSE STRUCTURE

For

POWER ELECTRONICS (PE)
POWER AND INDUSTRIAL DRIVES (P&ID)
POWER ELECTRONICS AND ELECTRICALDRIVES (PE &ED)
POWER ELECTRONICS AND DRIVES (PE&D)
POWER ELECTRONICS AND SYSTEMS (PE&S)
ELECTRICAL MACHINES AND DRIVES (EM&D)

(Applicable for batches admitted from 2016-2017)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA - 533 003, Andhra Pradesh, India

I Semester

S. No.	Subject	L	P	Credits
1	Electrical Machine Modeling & Analysis	4	--	3
2	Analysis of Power Electronic Converters	4	--	3
3	Power Electronic Control of DC Drives	4	--	3
4	Flexible AC Transmission Systems	4	--	3
5	**Elective – I** i. Modern Control Theory ii. Power Quality ii. Optimization Techniques	4	--	3
6	**Elective – II** i. Energy Auditing, Conservation and Management ii. Artificial Intelligence Techniques iii. HVDC Transmission	4	--	3
7	Simulation Laboratory	--	4	2
Total Credits				**20**

II Semester

S. No.	Subject	L	P	Credits
1	Switched Mode Power Conversion	4	--	3
2	Power Electronic Control of AC Drives	4	--	3
3	Digital Controllers	4	--	3
4	Custom Power devices	4	--	3
5	**Elective – III** i. Renewable Energy Systems ii. Reactive Power Compensation & Management iii. Electrical Distribution Systems	4	--	3
6	**Elective – IV** i. Smart Grid Technologies ii. Special Machines iii Programmable Logic Controllers & Applications	4	--	3
7	Power Converters & Drives Laboratory	--	4	2
Total Credits				**20**

III Semester

S. No.	Subject	L	P	Credits
1	Comprehensive Viva-Voce	**--**	**--**	2
2	Seminar – I	--	--	2
3	Project Work Part - I	--	--	16
Total Credits				**20**

IV Semester

S. No.	Subject	L	P	Credits
1	Seminar – II	--	--	2
2	Project Work Part - II	--	--	18
Total Credits				**20**

ACADEMIC REGULATIONS &

COURSE STRUCTURE

For

POWER SYSTEMS (PS)
POWER SYSTEM CONTROL AND AUTOMATION (PSC&A)
POWER SYSTEM ENGINEERING (PSE)
POWER SYSTEM CONTROL (PSC)
ADVANCED POWER SYSTEMS (APS)
ELECTRICAL POWER ENGINEERING (EPE)
POWER ENGINEERING & ENERGY SYSTEMS (PE&ES)
(Applicable for batches admitted from 2016-2017)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA - 533 003, Andhra Pradesh, India

I Semester

S. No.	Subject	L	P	Credits
1	Microprocessors & Microcontrollers	4	--	3
2	HVDC Transmission	4	--	3
3	Power System Operation and Control	4	--	3
4	Reactive Power Compensation & Management	4	--	3
5	**Elective – I** i. Electrical Distribution Systems ii. EHVAC Transmission iii. Analysis of Power Electronics Converters iv. Renewable Energy Systems v. Artificial Intelligence Techniques	4	--	3
6	**Elective – II** i. Power System Security ii Advanced Digital Signal Processing iii. Generation & Measurement of High Voltages iv. Programmable Logic Controllers & Applications v. Modern Control Theory	4	--	3
7	Simulation Laboratory	--	4	2
Total Credits				**20**

II Semester

S. No.	Subject	L	P	Credits
1	Power System Dynamics and Stability	4	--	3
2	Flexible AC Transmission Systems	4	--	3
3	Real Time Control of Power Systems	4	--	3
4	Advanced Power System Protection	4	--	3
5	**Elective – III** i. Smart Grid Technologies ii. Power Quality iii. Power System Reliability iv. Voltage Stability	4	--	3
6	**Elective – IV** i. Power System Deregulation ii.High Voltage Testing Techniques iii.Power System Transients iv.Demand Side Energy Management	4	--	3
7	Power Systems Laboratory	--	4	2
Total Credits				**20**

III Semester

S. No.	Subject	L	P	Credits
1	Comprehensive Viva-Voce	**--**	**--**	2
2	Seminar – I	--	--	2
3	Project Work Part - I	--	--	16
Total Credits				**20**

IV Semester

S. No.	Subject	L	P	Credits
1	Seminar – II	--	--	2
2	Project Work Part - II	--	--	18
Total Credits				**20**

ACADEMIC REGULATIONS & COURSE STRUCTURE

For

MBA (Regular)

(Applicable for batches admitted from 2016-2017)

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA - 533 003, Andhra Pradesh, India

I Semester

Subject	Title	Marks	Credits
C-101	Principles of Management	100	3
C-102	Managerial Economics	100	3
C-103	Accounting for Managers	100	3
C-104	Managerial Communication & Soft skills	100	3
C-105	Business Environment	100	3
C-106	Quantitative Analysis for Business Decision	100	3
C-107	IT – LAB	100	3
Total Credits			**21**

II Semester

Subject	Title	Marks	Credits
C-201	Financial Management	100	3
C-202	Human Resource Management	100	3
C-203	Marketing Management	100	3
C-204	Production and Operations Management	100	3
C-205	Business Research Methods	100	3
C-206	Organizational Behavior	100	3
C-207	Mini Project *	50	2
	Seminar on Mini Project	50	2

III Semester

Subject	Title	Marks	Credits
C-301	Strategic Management	100	3
C -302	Legal Aspects of Business	100	3
C -303	Business Ethics & Corporate Governance	100	3
E -301	Elective – 1	100	3
E-302	Elective – 2	100	3
E-303	Elective – 3	100	3
E-304	Elective – 4	100	3

IV Semester

Subject	Title	Marks	Credits
C -401	Logistic and Supply Chain Management	100	3
C -402	Entrepreneurship Development	100	3
E-401	Elective – 5	100	3
E-402	Elective – 6	100	3
E-403	Elective – 7	100	3
E-404	Elective – 8	100	3
	Major Project & Comprehensive Viva	Grade	8
Total Marks / Credits		**2700**	**90**

Elective: The student has to choose any **ONE** Specialization from the following areas in the beginning of III Semester

III SEMESTER

HR

	SUBJECT TITLE
Elective-1	Leadership Management
Elective-2	Compensation and Reward Management
Elective-3	Performance Management
Elective-4	Strategic Human Resource Management

FINANCE

	SUBJECT TITLE
Elective-1	Security Analysis & Portfolio Management
Elective-2	Banking and Insurance Management
Elective-3	Advance Management Accounting
Elective-4	Strategic Financial Management

MARKETING

	SUBJECT TITLE
Elective-1	Consumer Behavior
Elective-2	Retail Management
Elective-3	Customer Relationship Management
Elective-4	Strategic Human Resource Management

SYSTEMS

	SUBJECT TITLE
Elective-1	E-Business
Elective-2	RDBMS
Elective-3	Web Designing
Elective-4	Strategic Human Resource Management

IV SEMESTER

HR

	SUBJECT TITLE
Elective-5	Organizational Development & Change Management
Elective-6	Global HRM
Elective-7	Labor Welfare & Legislation
Elective-8	Management of Industrial Relations

FINANCE

	SUBJECT TITLE
Elective-5	Financial Markets and Services
Elective-6	Global Financial Management
Elective-7	Risk Management
Elective-8	Tax Management

MARKETING

	SUBJECT TITLE
Elective-5	Services Marketing
Elective-6	Promotional Distribution Management
Elective-7	Global Marketing Management
Elective-8	Supply Chain Management

SYSTEMS

	SUBJECT TITLE
Elective-5	Business Intelligence
Elective-6	Enterprise Resource Planning
Elective-7	Cyber Laws & Security
Elective-8	Information Systems Audit

III Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	Operations Research	3+1*		3
2	Interactive Computer Graphics	3+1*		3
3	Design of Machine Members– II	3+1*		3
4	Robotics	3+1*		3
5	Heat Transfer	3+1*		3
6	Industrial Engineering Management	3+1*		3
7	**Departmental Elective – I**	3+1*		3
8	Heat Transfer Lab		3	2
Total Credits				23

IV Year – I SEMESTER

S. No.	Subject	T	P	Credits
1	Automobile Engineering	3+1*		3
2	CAD/CAM	3+1*		3
3	Finite Element Methods	3+1*		3
4	Unconventional Machining Processes	3+1*		3
5	**Open Elective**	3+1*		3
6	**Departmental Elective – II**	3+1*		3
7	Simulation Lab		3	2
8	Design/Fabrication Project		2	1
Total Credits				**21**

IV Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	Production Planning and Control	3+1*		3
2	Green Engineering Systems	3+1*		3
3	**Departmental Elective – III**	3+1*		3
4	**Departmental Elective – IV**	3+1*		3
5	Project Work			9
Total Credits				**21**

OPEN ELECTIVE:

1. MEMS
2. Nanotechnology

Departmental Elective -I:

1. Refrigeration & Air-conditioning
2. Computational Fluid Dynamics
3. Condition Monitoring
4. Rapid Prototyping

Departmental Elective -II:

1. Material Characterization Techniques
2. Design for Manufacture
3. Automation in Manufacturing
4. Industrial Hydraulics & Pneumatics

Departmental Elective -III:

1. Experimental Stress Analysis
2. Mechatronics
3. Advanced Materials
4. Power Plant Engineering

Departmental Elective -IV:

1. Non Destructive Evaluation
2. Advanced Optimization Techniques
3. Gas Dynamics & Jet Propulsion
4. Quality and Reliability Engineering

COURSE STRUCTURE

I Year – I SEMESTER

S. No.	Subject	T	P	Credits
1	English – I	3	--	3
2	Mathematics - I	3+1	--	3
3	Mathematics – II (Mathematical Methods)	3+1	--	3
4	Engineering Physics	3+1	--	3
5	Professional Ethics and Human Values	3+1	--	3
6	Engineering Drawing	1+3	--	3
7	English - Communication Skills Lab -1	--	3	2
8	Engineering Physics Laboratory	--	3	2
9	Engineering Physics – Virtual Labs - Assignments	--	2	--
10	Engineering Workshop& IT Workshop	--	3	2
Total Credits				**24**

I Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	English – II	3	--	3
2	Mathematics – III	3+1	--	3
3	Engineering Chemistry	3+1	--	3
4	Engineering Mechanics	3+1	--	3
5	Computer Programming	3+1	--	3
6	Network Analysis	3+1	--	3
7	Engineering Chemistry Laboratory	--	3	2
8	English - Communication Skills Lab -2	--	3	2
9	Computer Programming Lab	--	3	2
Total Credits				**24**

II Year – I SEMESTER

S. No.	Subject	T	P	Credits
1	Managerial Economics and Financial Analysis	3+1	--	3
2	Electronic Devices and Circuits	3+1	--	3
3	Data Structures	3+1	--	3
4	Environmental Studies	3	--	3
5	Signals & Systems	3+1	--	3
6	Electrical Technology	3+1	--	3
7	Electronic Devices and Circuits Lab	--	3	2
8	Networks &Electrical Technology Lab	--	3	2
Total Credits				**22**

II Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	Electronic Circuit Analysis	3+1	--	3
2	Management Science	3+1	--	3
3	Random Variables & Stochastic Processes	3+1	--	3
4	Switching Theory & Logic Design	3+1	--	3
5	EM Waves and Transmission Lines	3+1	--	3
6	Analog Communications	3+1	--	3
7	Electronic Circuit Analysis Lab	--	3	2
8	Analog Communications Lab	--	3	2
Total Credits				**22**

III Year – I SEMESTER

S. No.	Subject	T	P	Credits
1	Pulse & Digital Circuits	3+1	-	3
2	Linear IC Applications	3+1	-	3
3	Control Systems	3+1	-	3
4	Digital System Design & Digital IC Applications	3+1	-	3
5	Antennas and Wave Propagation	3+1	-	3
6	Pulse & Digital Circuits Lab		3	2
7	LIC Applications Lab	-	3	2
8	Digital System Design & DICA Lab		3	2
9	IPR& Patents	3		2
Total Credits				**23**

III Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	Microprocessors and Microcontrollers	3+1	-	3
2	Digital Signal Processing	3+1	-	3
3	Digital Communications	3+1	-	3
4	Microwave Engineering	3+1	-	3
5	**Open Elective**	3+1	-	3
6	Microprocessors and Microcontrollers Lab	-	3	2
7	Digital Communications Lab	-	3	2
8	Digital Signal Processing Lab		3	2
9	Seminar		2	1
Total Credits				**22**

IV Year – I SEMESTER

S. No.	Subject	T	P	Credits
1	VLSI Design	3+1	-	3
2	Computer Networks	3+1	-	3
3	Digital Image Processing	3+1	-	3
4	Computer Architecture & Organization	3+1	-	3
5	**Elective – I** 1. Electronic Switching Systems 2. Analog IC Design 3. Object Oriented Programming & O S 4. Radar Systems 5. Advanced Computer Architecture	3+1	-	3
6	**Elective – II** 1. Optical Communication 2. Digital IC Design 3. Speech Processing 4. Artificial Neural Network & Fuzzy Logic 5. Network Security & Cryptography	3+1	-	3
7	V L S I Lab	-	3	2
8	Microwave Engineering Lab	-	3	2
Total Credits				**22**

IV Year – II SEMESTER

S. No.	Subject	T	P	Credits
1	Cellular Mobile Communication	3+1		3
2	Electronic Measurements and Instrumentation	3+1		3
3	**Elective III** 1. Satellite Communication 2. Mixed signal Design 3. Embedded systems 4. RF Circuit Design 5. Cloud Computing	3+1		3
4	**Elective IV** 1.Wireless Sensors and Networks 2.System on Chip 3.Low Power IC Design 4.Bio-Medical Instrumentation 5.EMI/EMC	3+1		3
5	Project & Seminar			9
Total Credits				**21**

Total course credits = 48+ 44 + 45 + 43 = 180

Open Electives:

1. Bio Medical Engineering
2. Fuzzy & Neural Networks
3. Image Processing (not for ECE Students)
4. Principles of Signals, Systems and Communications (Not for ECE Students)
5. Electronic Instrumentation (Not for ECE Students)