WORKSHOPS
B.E. 1st SEMESTER (CIVIL)
SUBJECT CODE : CC106
Teaching Scheme (Credits and Hours)

Teaching Scheme				Total Credit	Evaluation Scheme					
L	T	P	Total		Theory		Midsem	CIA	Pract.	Total
Hrs	Hrs	Hrs	Hrs		Hrs	Marks	Marks	Marks	Marks	Marks
0	0	4	4	2	--	--	--	40	60	100

Note: - 2hrs (1 Credit) will be taken by Mechanical engineering department and remaining 2 hrs (1 Credit) will be taken by concern department. CIA Marks and Practical Marks will be equally shared by Mechanical Engineering Department and Concern Department.

COURSE OBJECTIVE:

- Exposure to Industrial environment, work culture, hand tools and general purpose machine.
- Developing Creativity, Craft man skill, approach to work and Planning capability.
- To learn Fundamentals of Civil engineering.
- To learn Concept and Methodology of different types of building.
- To give descriptions knowledge of building components and materials.
- To study of planning, designing and execution methods of structures.
- To study of general guidelines of environmental education

DETAILED SYLLABUS

Unit No	Topics (Unit 1 & 2 will be taken by Mechanical Engineering Department and remaining units will be taken by concern department.)
1	**Demonstration** of Hand tools, Power tools, Machine tools, Processes, Materials, Marking, and Measurement in following shops:Carpentry, Pattern making, Foundry, Fitting, Smithy, Welding,, Tin smithy, Plumbing, Machine shop and Electroplating.
2	**Making Jobs** in Fitting, Carpentry.
3	Introduction of Civil Engineering Introduction, Scope of civil engineering, Role of civil engineer
4	General guidelines for Civil Engineering Components Overview of Civil engineering Structures, Construction Methods, Construction Materials, Construction equipments, Objectives and overview of Environmental Education
5	Draw the sheets Building Components, Construction material Symbols
6	Field Visit Construction Site (i.e. building construction site, Road construction site) Material Testing Laboratories (i.e. Testing of Construction materials)

Total Hours (Theory):00, Total Hours (Lab):60, Total Hours: 60

INSTRUCTIONAL METHOD AND PEDAGOGY (Continuous Internal Assessment (CIA) Scheme)

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed
- Attendance is compulsory in Practical which carries 10 Marks.
- At regular intervals assignments is given. In all, a student should submit all assignments of 10 marks each.
- Laboratory participation and involvement in solving the problems in Laboratory carries 10 Marks.
- Viva Voce will be conducted at the end of the semester of 10 Marks.
- Experiments shall be performed in the laboratory related to course contents.
- The course includes a laboratory, where students have an opportunity to build an appreciation for the concept being taught in lectures.

STUDENTS LEARNING OUTCOMES: At the end of the course

- The students will be able to understand the different manufacturing technique for production out of the given raw material.
- The students of all branches of engineering may come across problems related to the manufacturing during their career and their day to day life too, so this course will provide such information.

Reference Book :

- Choudhary, Hajara " Elements of Workshop Technology", Media Promotors & Publishers, 1997
- Raghuvanshi B.S. "Workshop Technology" Vol. I & II, Dhanpat Rai & Sons. 1998
- Chapman W.A. J and Arnold E. "Workshop Technology". Student edition, 1998
- Elements of civil engineering by Prof .R.B.Khasiya.
- Basics of Environmental Studies by B.R.Shah

WEB MATERIALS:

http://www.wikipedia.org

WORKSHOPS
B.E. 1st SEMESTER (EC)
SUBJECT CODE : CC106
Teaching Scheme (Credits and Hours)

Teaching Scheme				Total Credit	Evaluation Scheme					
L	T	P	Total		Theory		Midsem	CIA	Pract.	Total
Hrs	Hrs	Hrs	Hrs		Hrs	Marks	Marks	Marks	Marks	Marks
0	0	4	4	2	--	--	--	40	60	100

Note: - 2hrs (1 Credit) will be taken by Mechanical engineering department and remaining 2 hrs (1 Credit) will be taken by concern department. CIA Marks and Practical Marks will be equally shared by Mechanical Engineering Department and Concern Department.

COURSE OBJECTIVE:

- Exposure to Industrial environment, work culture, hand tools and general purpose machine.
- Developing Creativity, Craft man skill, approach to work and Planning capability.

DETAILED SYLLABUS

Unit No	Topics (Unit 1 & 2 will be taken by Mechanical Engineering Department and remaining units will be taken by concern department.)	Lectures (Hours)
1	**Demonstration** of Hand tools, Power tools, Machine tools, Processes, Materials, Marking, and Measurement in following shops:Carpentry, Pattern making, Foundry, Fitting, Smithy, Welding,, Tin smithy, Plumbing, Machine shop and Electroplating.	-
2	**Making Jobs** in Fitting, Carpentry.	-
3	Symbols of electronic components & component identification Drawing of symbols in Sketchbook.	-
4	Study of various electronics components: Types, characteristics and applications, Testing of various components, Study and use of Laboratory equipments such as Multimeter, Function generator, Power supply, CRO etc.,	
5	Soldering & desoldering practice, Study of PCB, PCB fabrication, Exercises based on fabrication & testing of small electronics circuits (or a mini project).	

Total Hours (Theory):00, Total Hours (Lab):60, Total Hours: 60

INSTRUCTIONAL METHOD AND PEDAGOGY (Continuous Internal Assessment (CIA) Scheme)

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed
- Attendance is compulsory in Practical which carries 10 Marks.
- At regular intervals assignments is given. In all, a student should submit all assignments of 10 marks each.
- Laboratory participation and involvement in solving the problems in Laboratory carries 10 Marks.
- Viva Voce will be conducted at the end of the semester of 10 Marks.
- Experiments shall be performed in the laboratory related to course contents.
- The course includes a laboratory, where students have an opportunity to build an appreciation for the concept being taught in lectures.

STUDENTS LEARNING OUTCOMES:

At the end of the course

- The students will be able to understand the different manufacturing technique for production out of the given raw material.
- The students of all branches of engineering may come across problems related to the manufacturing during their career and their day to day life too, so this course will provide such information.

TEXT BOOKS & REFERENCE BOOKS:

- Choudhary, Hajara " Elements of Workshop Technology", Media Promotors & Publishers, 1997
- Raghuvanshi B.S. "Workshop Technology" Vol. I & II, Dhanpat Rai & Sons. 1998
- Chapman W.A. J and Arnold E. "Workshop Technology". Student edition, 1998
- Supekar, R. D. "Fundamental of Workshop Electricity and Electronics" published by Everest.

WEB MATERIALS:

http://www.wikipedia.org

WORKSHOPS
B.E. 2nd SEMESTER (ELECTRICAL)
SUBJECT CODE : CC106
Teaching Scheme (Credits and Hours)

Teaching Scheme				Total Credit	Evaluation Scheme					
L	T	P	Total		Theory		Midsem	CIA	Pract.	Total
Hrs	Hrs	Hrs	Hrs		Hrs	Marks	Marks	Marks	Marks	Marks
0	0	4	4	2	--	--	--	40	60	100

Note: - 2hrs (1 Credit) will be taken by Mechanical engineering department and remaining 2 hrs (1 Credit) will be taken by concern department. CIA Marks and Practical Marks will be equally shared by Mechanical Engineering Department and Concern Department.

COURSE OBJECTIVE:

- Exposure to Industrial environment, work culture, hand tools and general purpose machine.
- Developing Creativity, Craft man skill, approach to work and Planning capability.

DETAILED SYLLABUS

Unit No	Topics (Unit 1 & 2 will be taken by Mechanical Engineering Department and remaining units will be taken by concern department.)	Lectures (Hours)
1	**Demonstration** of Hand tools, Power tools, Machine tools, Processes, Materials, Marking, and Measurement in following shops:Carpentry, Pattern making, Foundry, Fitting, Smithy, Welding,, Tin smithy, Plumbing, Machine shop and Electroplating.	-
2	**Making Jobs** in Fitting, Carpentry.	-
3	Different types of wiring. 1Godown wiring, 2.stair case wiring, 3. control of one lamp by using one 1-way switch 4.tube light wiring.	-
4	Study of electric shocks and first aid treatments.	
5	Different types of electrical accessories (Demonstration) 1.Different types of switches., 2.Ceilling roses., 3.Terminal block., 4.Conectors.	
6	Different types of Joints (Demonstration) 1.Straight joints, 2.T joints, 3.right angle joints, 4.corner joints, 5.Married joints, 6.Tap joints 7.pigtail joints	

Total Hours (Theory):00
Total Hours (Lab):60
Total Hours: 60

INSTRUCTIONAL METHOD AND PEDAGOGY (Continuous Internal Assessment (CIA) Scheme)

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed
- Attendance is compulsory in Practical which carries 10 Marks.
- At regular intervals assignments is given. In all, a student should submit all assignments of 10 marks each.
- Laboratory participation and involvement in solving the problems in Laboratory carries 10 Marks.
- Viva Voce will be conducted at the end of the semester of 10 Marks.
- Experiments shall be performed in the laboratory related to course contents.
- The course includes a laboratory, where students have an opportunity to build an appreciation for the concept being taught in lectures.

STUDENTS LEARNING OUTCOMES:

At the end of the course

- The students will be able to understand the different manufacturing technique for production out of the given raw material.
- The students of all branches of engineering may come across problems related to the manufacturing during their career and their day to day life too, so this course will provide such information.

TEXT BOOKS & REFERENCE BOOKS:

- Choudhary, Hajara " Elements of Workshop Technology", Media Promotors & Publishers, 1997
- Raghuvanshi B.S. "Workshop Technology" Vol. I & II, Dhanpat Rai & Sons. 1998
- Chapman W.A. J and Arnold E. "Workshop Technology". Student edition, 1998
- Supekar, R. D. "Fundamental of Workshop Electricity and Electronics" published by Everest.

WEB MATERIALS:

http://www.wikipedia.org

WORKSHOPS
B.E. 2nd SEMESTER (ME/AE)
SUBJECT CODE : CC106
Teaching Scheme (Credits and Hours)

Teaching Scheme				Total Credit	Evaluation Scheme					
L	T	P	Total		Theory		Midsem	CIA	Pract.	Total
Hrs	Hrs	Hrs	Hrs		Hrs	Marks	Marks	Marks	Marks	Marks
0	0	4	4	2	--	--	--	40	60	100

COURSE OBJECTIVE:

- Exposure to Industrial environment, work culture, hand tools and general purpose machine.
- Developing Creativity, Craft man skill, approach to work and Planning capability.

DETAILED SYLLABUS

Unit No	Topics	Lectures (Hours)
1.	**Demonstration** of Hand tools, Power tools, Machine tools, Processes, Materials, Marking, and Measurement in following shops:Carpentry, Pattern making, Foundry, Fitting, Smithy, Welding,, Tin smithy, Plumbing, Machine shop and Electroplating.	-
2.	**Making Jobs** in Fitting, Carpentry, Smithy, Tin smithy and Welding shops.	-
3.	**Covering the topics** of demonstration and Report about Process /Methodology / Inspection for making jobs.	-

Total Hours (Theory):00
Total Hours (Lab):60
Total Hours: 60

INSTRUCTIONAL METHOD AND PEDAGOGY (Continuous Internal Assessment (CIA) Scheme)

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed
- Attendance is compulsory in Practical which carries 10 Marks.
- At regular intervals assignments is given. In all, a student should submit all assignments of 10 marks each.
- Laboratory participation and involvement in solving the problems in Laboratory carries 10 Marks.
- Viva Voce will be conducted at the end of the semester of 10 Marks.
- Experiments shall be performed in the laboratory related to course contents.
- The course includes a laboratory, where students have an opportunity to build an appreciation for the concept being taught in lectures.

STUDENTS LEARNING OUTCOMES:

At the end of the course

- The students will be able to understand the different manufacturing technique for production out of the given raw material.
- The students of all branches of engineering may come across problems related to the manufacturing during their career and their day to day life too, so this course will provide such information.

TEXT BOOKS & REFERENCE BOOKS:

- Choudhary, Hajara " Elements of Workshop Technology", Media Promotors & Publishers, 1997
- Raghuvanshi B.S. "Workshop Technology" Vol. I & II, Dhanpat Rai & Sons. 1998
- Chapman W.A. J and Arnold E. "Workshop Technology". Student edition, 1998

WEB MATERIALS:

http://www.wikipedia.org

WORKSHOPS
B.E. 1st SEMESTER (COMPUTER)
B.E.2nd SEMESTER (IT)
SUBJECT CODE : CC106
Teaching Scheme (Credits and Hours)

Teaching Scheme				Total Credit	Evaluation Scheme					
L	T	P	Total		Theory		Midsem	CIA	Pract.	Total
Hrs	Hrs	Hrs	Hrs		Hrs	Marks	Marks	Marks	Marks	Marks
0	0	4	4	2	--	--	--	40	60	100

Note: - 2hrs (1 Credit) will be taken by Mechanical engineering department and remaining 2 hrs (1 Credit) will be taken by concern department. CIA Marks and Practical Marks will be equally shared by Mechanical Engineering Department and Concern Department.

COURSE OBJECTIVE:

- Exposure to Industrial environment, work culture, hand tools and general purpose machine.
- Developing Creativity, Craft man skill, approach to work and Planning capability.
- To Focus Fundamentals of Computers and Peripherals.
- To introduce hardware and software Computers Basics.
- To Focus Concept and Methodology of different Parts of Computer and their assembling.
- To give descriptions of Keyboard, Monitors, Printers, Motherboard, etc.
- Brief the students regarding Computer Networks and Connections.
- To give clear idea of PC trouble shooting and Repairing.

DETAILED SYLLABUS

Unit No	Topics (Unit 1 & 2 will be taken by Mechanical Engineering Department and remaining units will be taken by concern department.)	Lectures (Hours)
1	**Demonstration** of Hand tools, Power tools, Machine tools, Processes, Materials, Marking, and Measurement in following shops:Carpentry, Pattern making, Foundry, Fitting, Smithy, Welding,, Tin smithy, Plumbing, Machine shop and Electroplating.	-
2	**Making Jobs** in Fitting, Carpentry.	-
3	**INTRODUCTION TO COMPUTER HARDWARE** • Definition of computer • Computer Hardware, Software and Firmware • History of computer • Classification of computer • Basic parts of Digital computer • General faults of computer system	-
4	**INPUT/OUTPUT DEVICE** Display Unit • Monitor (pixel, resolution etc.) • Laptop • Ipad • Notepad Keyboard and Mouse • Wired andWireless Printer • Dot Matrix printer • Inkjet printer • Laser printer Projector	
5	**PC TROUBLESHOOTING** • Hardware Troubleshooting and Repairing	

	• Software Troubleshooting and Repairing	
6	**OVERVIEW OF OS** • Windows XP/7 • Linux • Android • Mobile Computing	
7	**INSTALLATION OF OS** • Windows XP/2007 • Linux	
8	**INTRODUCTION OF INTEGRATED DEVELOPMENT ENVIRONMENTS:** • Dev-Cpp • Net Beans • Eclipse • Rational • Visual Studio	
9	**EXPOSURE ON INTERNET AND USAGE OF INTERNET**	
10	**INSTALLATION AND UNINSTALLATION OF ANTIVIRUS**	
11	**CONNECTIVITY TO LOCAL AREA NETWORK**	

Total Hours (Theory):00
Total Hours (Lab):60
Total Hours: 60

INSTRUCTIONAL METHOD AND PEDAGOGY (Continuous Internal Assessment (CIA) Scheme)

- At the start of course, the course delivery pattern, prerequisite of the subject will be discussed
- Attendance is compulsory in Practical which carries 10 Marks.
- At regular intervals assignments is given. In all, a student should submit all assignments of 10 marks each.
- Laboratory participation and involvement in solving the problems in Laboratory carries 10 Marks.
- Viva Voce will be conducted at the end of the semester of 10 Marks.
- Experiments shall be performed in the laboratory related to course contents.
- The course includes a laboratory, where students have an opportunity to build an appreciation for the concept being taught in lectures.

STUDENTS LEARNING OUTCOMES:

At the end of the course

- The students will be able to understand the different manufacturing technique for production out of the given raw material.
- The students of all branches of engineering may come across problems related to the manufacturing during their career and their day to day life too, so this course will provide such information.
- On successful completion of the course, the student will be having the basic knowledge of Computer Architecture, Peripherals and all the Hardware and Software basics required for a Computer Engineering Student.
- Student will be able to effectively solve any hardware/software troubleshooting problem.

TEXT BOOKS & REFERENCE BOOKS:

- Choudhary, Hajara " Elements of Workshop Technology", Media Promotors & Publishers, 1997
- Raghuvanshi B.S. "Workshop Technology" Vol. I & II, Dhanpat Rai & Sons. 1998
- Chapman W.A. J and Arnold E. "Workshop Technology". Student edition, 1998
- The complete PC update and maintenance guide by Mark
- Minasi
- IBM PC and clones by Govind Rajalu
- Computer Maintenance & Peripherals by H.B. Bhadke

WEB MATERIALS:

http://www.wikipedia.org