## SCHEME OF COURSE WORK

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|---|---|---|---|
| CourseTitle | ENGINEERING WORKSHOP | | |
| Course Code | 22ES11EW | L T P C | 1 0 4 3 |
| Program | B Tech | | |
| Specialization | Computer Science and Engineering | | |
| Semester | I | | |

**Course Outcomes(COs):**

At the end of the course, the student will be able to

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| **CO1** | Demonstrate Wood working and Sheet metal working skills |
| **CO2** | Demonstrate Fitting trade and House wiring skills |
| **CO3** | Demonstrate 3-D Printing and Engraving skills |
| **CO4** | Demonstrate the installation of Operating Systems and identify the components of the Computer. |
| **CO5** | Use MS office tools in crafting word documents, spreadsheets, and PowerPoint presentations |
| **CO6** | Use Latex tools to prepare documents |

**CourseOutcome**Versus**ProgramOutcomes**Versus**ProgramSpecificOutcomes:**

| COs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 | PSO3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CO-1** | 3 | | | 2 | | | | | | | | | | | |
| **CO-2** | 3 | | | 2 | | | | | | | | | | | |
| **CO-3** | 3 | | | 2 | | | | | | | | | | | |
| **CO-4** | 3 | | | 2 | | | | | | | | | | 2 | |
| **CO-5** | 3 | | | 2 | | | | | | | | | | | 2 |
| **CO-6** | 3 | | | 2 | | | | | | | | | | | 2 |

3-Stronglycorrelated,2-Moderatelycorrelated,1-Weaklycorrelated,Blank–Nocorrelation

## Teaching-LearningandEvaluation

| Week | Topic/contents | Course Outcomes | Sample questions | TEACHING-LEARNING STRATEGY | Assessment Method & Schedule |
|---|---|---|---|---|---|
| 1 | Preparation of half – lap joint using wooden pieces | CO1 | 1. What are different types of wood? 2. What is the function of trysquare? | Experiment | Day to Day Analysis -I and Lab Internal-I |
| 2 | Preparation of Mortise and Tenon joint using wooden pieces | CO1 | 1. Applications of mortise and tenon joint 2. What are various Marking tools | Experiment | |
| 3 | Preparation of a tapered tray using sheet metal, Preparation of a conical funnel using sheet metal | CO1 | 1. Name different tools of sheet metal 2. What do you mean by galvanization | Experiment | |
| 4 | Preparation of a V-fit using mild steel pieces, Preparation of a semi-circular fit using mild steel pieces | CO2 | 1. Name fitting tools 2. What is mild steel | Experiment | |
| 5 | Wiring of two bulbs in Parallel and Series, Wiring to control a lamp with two-way switches | CO2 | 1. What do you mean by parallel connection 2. What is series connection | Experiment | |
| 6 | Wiring to control a fluorescent tube light with one-way switch | CO2 | | Experiment | |
| 7 | Manufacture of components by 3-D Printing | CO3 | 1. Explain cutting with laser beam | Experiment | |
| 8 | Engraving / Cutting with laser beam | CO3 | | Experiment | |
| 9 | **Lab Internal-1** | | | | |
| 10 | peripherals of a computer or laptop, block diagram of the CPU | CO4 | 1. Draw the block diagram of CPU and explain them. | □ Lecture □ PPT | Day to Day Analysis -II and |

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| 11 | installation operating systems like Linux and MS windows | CO4 | 1. Write the steps to install linux operating system. | □ Discussion | Lab Internal-II |
| 12 | Using MS word perform functionalities | CO5 | 1. Format Images, Textboxes using MS Word<br>2. Use Drawing toolbar and Word Art in MS Word | □ Lecture<br>□ PPT<br>□ Discussion | |
| 13 | Using MS Excel perform functionalities | CO5 | 1. Perform conditional formatting in excel.<br>2. Use Charts in excel. | □ Lecture<br>□ PPT<br>□ Discussion | Day to Day Analysis -II and Lab Internal-II |
| 14 | Using MS Powerpoint functionalities | CO5 | 1. Perform Orientation in powerpoint.<br>2. Use Slide Layouts, Auto Shapes in powerpoint. | □ Lecture<br>□ PPT<br>□ Discussion | |
| 15 | simple document using Latex -1 | CO6 | 1. Perform Typesetting and use Tables in Latex | □ Lecture<br>□ PPT<br>□ Discussion | |
| 16 | Create a newsletter using Latex-2 | CO6 | 1. Use figures, Equations and References in Latex | □ Lecture<br>□ PPT<br>□ Discussion | |
| 17 | Create a newsletter using MS word ,Calculate GPA of all students in a class using Excel | CO5 | 1. Create a news letter in MS Word | □ Lecture<br>□ PPT<br>□ Discussion | |
| 18 | **Lab Internal-2** | | | | |