

LOK JAGRUTI UNIVERSITY (LJU)
INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Robotics and Artificial Intelligence (706)

Bachelor of Engineering (B.E.) – Semester – I

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|-----------------------------|---------------------------------------|
| Course Code: | 017062193 |
| Course Name: | Computer Workshop - Laboratory |
| Category of Course: | Engineering Science (ESC) |
| Prerequisite Course: | --- |

| Teaching Scheme | | | |
|------------------------|---------------------|----------------------|---------------|
| Lecture (L) | Tutorial (T) | Practical (P) | Credit |
| 0 | 0 | 4 | 2 |

| Sr No. | Practical Title | Link to Theory Syllabus |
|---------------|---|--------------------------------|
| 1 | Introduction to various components of computer, Input / Output devices. | -- |
| 2 | BIOS/UEFI settings | -- |
| 3 | Basics and Installation of operating system, concept of dual booting, virtualization | -- |
| 4 | Installation of device drivers and other required software, need and method of backup | -- |
| 5 | Basic security issues: computer viruses, malware, etc., anti-virus software | -- |
| 6 | Various office tools for text, spreadsheet and presentation documents | -- |
| 7 | Introduction to various online tools for forms, documents, storage, etc. | -- |
| 8 | Basic concepts of networking and resource sharing in a network | -- |

| Major Components/ Equipment | | |
|------------------------------------|----------------------------|-------------------------------------|
| Sr. No. | Component/Equipment | Specification |
| 1 | Computer | |
| 2 | Software's | MS Office, IP Messenger, Windows OS |

| Proposed Theory + Practical Evaluation Scheme by Academicians (% Weightage Category Wise and it's Marks Distribution) | | | | | | |
|--|---|-----------------------------|-------------------------------------|----------------------------|------------------------|----------|
| L : | 0 | T: | 0 | P: | 4 | |
| Note : In Theory Group, Total 4 Test (T1+T2+T3+T4) will be conducted for each subject. Each Test will be of 25 Marks. Each Test Syllabus Weightage: Range should be 20% - 30% | | | | | | |
| Group (Theory or Practical) | Group (Theory or Practical) Credit | Total Subject Credit | Category | % Weightage | Marks Weightage | |
| Theory | 0 | 2 | MCQ | 0% | 0 | |
| Theory | | | Theory Descriptive | 0% | 0 | |
| Theory | | | Formulas and Derivation | 0% | 0 | |
| Theory | | | Numerical | 0% | 0 | |
| Expected Theory % | 0% | | | Calculated Theory % | 0% | 0 |
| Practical | 2 | | Individual Project | 0% | 0 | |
| Practical | | | Group Project | 0% | 0 | |
| Practical | | | Internal Practical Evaluation (IPE) | 0% | 0 | |
| Practical | | | Viva | 20% | 20 | |
| Practical | | | Seminar | 80% | 80 | |
| Expected Practical % | 100% | | Calculated Practical % | 100% | 100 | |
| Overall % | 100% | | | 100% | 100 | |

| Course Outcome | |
|----------------------------------|---|
| | <i>Upon completion of the course students will be able to</i> |
| CO1 | Understand basics of computer hardware |
| CO2 | Install operating systems, drivers related to hardware and other software |
| CO3 | Create reports, presentation, and spread sheets |
| CO4 | Manage security related basic problem using anti-virus software |
| Suggested Reference Books | |

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|---|---|
| 1 | Scott Mueller, "Upgrading and repairing PCs", 21st Edition; Pearson Education. |
| 2 | Stephen J Bigelow, "Troubleshooting, Maintaining and Repairing PCs", 5th Edition; Tata McGrawHill Publication |
| 3 | M.Radhakrishnan and D. Balasubramanian, "Computer Installation and Troubleshooting" ISTE Learning Material. |

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| List of Open Source Software/Learning website |
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| 1 | www.youtube.com |
| 2 | www.wikihow.com |
| 3 | www.tomsguide.com |
| 4 | www.tutorialspoint.com |
| 5 | www.makeuseof.com |