

**LBS Centre for Science and Technology  
(Offline Course)**

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| Course Title                                                                                                                         | Basic Computer Familiarization     |              |                 |             |
| Abbreviation of Course Title                                                                                                         | BCF                                |              |                 |             |
| Duration of the course in Hours                                                                                                      | 20                                 |              |                 |             |
| Duration of the course in Months                                                                                                     | 1                                  |              |                 |             |
| Course Fees                                                                                                                          | 1500                               |              |                 |             |
| Eligibility                                                                                                                          | 5th & above                        |              |                 |             |
| About the Course                                                                                                                     |                                    |              |                 |             |
| A person to familiarise the functions and basic operations of a Computer                                                             |                                    |              |                 |             |
| Objectives of the course                                                                                                             |                                    |              |                 |             |
| On completing this course, the candidate becomes efficient to manage a computer and be able to do the essential Computer operations. |                                    |              |                 |             |
| Scheme of Study                                                                                                                      |                                    |              |                 |             |
| Subject Code                                                                                                                         | Name of the subject                | Theory (hrs) | Practical (hrs) | Total (hrs) |
| SC1                                                                                                                                  | Computer Basics and OS             | 2            |                 | 2           |
| SC2                                                                                                                                  | Windows and Linux Operating system | 3            | 6               | 9           |
| SC3                                                                                                                                  | Internet and email                 | 3            | 6               | 9           |
| Syllabus of the course                                                                                                               |                                    |              |                 |             |
| Computer Basics – Basic awareness of I/O devices, Software, Memory.                                                                  |                                    |              |                 |             |
| Windows and Linux – Accessories-folder creation-copy-move, File management, Program menu, differences in Windows and Linux           |                                    |              |                 |             |
| Internet -Browsing and searching in Internet, Creating e-mail , sending ,attach files . Google drive.                                |                                    |              |                 |             |
| Method of Evaluation                                                                                                                 |                                    |              |                 |             |
| End examination – Theory objective type (One hour).                                                                                  |                                    |              |                 |             |
| Software, Hardware and other infrastructural requirements for running this course                                                    |                                    |              |                 |             |
| The present facilities at LBS centres is enough for running the course.                                                              |                                    |              |                 |             |

## LBS Centre for Science and Technology (Offline Course)

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| <b>Course Title</b>                                                                                                                                        | Certified Computer Operator |                     |                        |                    |
| <b>Abbreviation of Course Title</b>                                                                                                                        | CCO                         |                     |                        |                    |
| <b>Duration of the course in Hours</b>                                                                                                                     | 25                          |                     |                        |                    |
| <b>Duration of the course in Months</b>                                                                                                                    | 1                           |                     |                        |                    |
| <b>Course Fees</b>                                                                                                                                         | 1600                        |                     |                        |                    |
| <b>Eligibility</b>                                                                                                                                         | 5th & above                 |                     |                        |                    |
| <b>About the Course</b>                                                                                                                                    |                             |                     |                        |                    |
| A Computer Operator is required to administrate, organise and sort different types of computer data using various software-related commands and functions. |                             |                     |                        |                    |
| <b>Objectives of the course</b>                                                                                                                            |                             |                     |                        |                    |
| On completing this course, the candidate becomes efficient to use a computer and do data entry work and manage efficiently an automated office.            |                             |                     |                        |                    |
| <b>Scheme of Study</b>                                                                                                                                     |                             |                     |                        |                    |
| <b>Subject Code</b>                                                                                                                                        | <b>Name of the subject</b>  | <b>Theory (hrs)</b> | <b>Practical (hrs)</b> | <b>Total (hrs)</b> |
| SC1                                                                                                                                                        | Computer Basics             | 2                   |                        | 2                  |
| SC2                                                                                                                                                        | Windows Operating system    | 2                   | 2                      | 4                  |
| SC3                                                                                                                                                        | MS Word                     | 4                   | 8                      | 12                 |
| SC4                                                                                                                                                        | MS Excel                    | 2                   | 3                      | 5                  |
| SC5                                                                                                                                                        | Internet                    |                     | 2                      | 2                  |
| <b>Syllabus of the course</b>                                                                                                                              |                             |                     |                        |                    |
| <b>Computer Basics</b> – Basic awareness of I/O devices, Software, Memory.                                                                                 |                             |                     |                        |                    |
| <b>Windows</b> – Accessories-folder creation -copy-move.                                                                                                   |                             |                     |                        |                    |
| <b>MS Word</b> – Editing, formatting text, paragraph, inserting shapes, tables, page layout column ,print.                                                 |                             |                     |                        |                    |
| <b>MS Excel</b> – Parts of a worksheet. Entering data in cells, formula, basic Excel functions, sort.                                                      |                             |                     |                        |                    |
| <b>Internet</b> - Creating e-mail , sending ,attach files . Google drive.                                                                                  |                             |                     |                        |                    |
| <b>Method of Evaluation</b>                                                                                                                                |                             |                     |                        |                    |
| End examination –Theory objective type (One hour).                                                                                                         |                             |                     |                        |                    |
| <b>Software, Hardware and other infrastructural requirements for running this course</b>                                                                   |                             |                     |                        |                    |
| The present facilities at LBS centres is enough for running the course.                                                                                    |                             |                     |                        |                    |

## LBS SKILL CENTRE

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| Course Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | CERTIFICATE - CONSTRUCTION QUALITY AUDITING ( ON-LINE ) |              |                 |             |
| Abbreviation of Course Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | CCQA                                                    |              |                 |             |
| Duration of the course in Hours                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 12 Hrs                                                  |              |                 |             |
| Duration of the course in Months                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 6 Days                                                  |              |                 |             |
| Course Fees                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2500                                                    |              |                 |             |
| Eligibility                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | B.TECH (Civil)                                          |              |                 |             |
| About the Course                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                         |              |                 |             |
| The course is designed to align with the demands and intricacies of the daily job responsibilities of a Quality Auditor working in a project. A student who undergoes will cover all the case studies & knowledge acquired by an experienced Quality Auditor.                                                                                                                                                                                                                                                                                                                                                                             |                                                         |              |                 |             |
| Objectives of the course                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                         |              |                 |             |
| This course fills crucial gap in the educational landscape by providing students with comprehensive training in the principles, practices, and methodologies essential for effective quality management within the construction sector. This specialized course equips students with the necessary skills to navigate the complex challenges of modern construction projects, including ensuring compliance with regulatory standards, implementing quality assurance protocols, and mitigating risks to enhance project outcomes. By offering a structured curriculum that blends theoretical knowledge with live projects case studies. |                                                         |              |                 |             |
| Scheme of Study                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                         |              |                 |             |
| Subject Code                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Name of the subject                                     | Theory (hrs) | Practical (hrs) | Total (hrs) |
| CCQA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | CERTIFICATE - CONSTRUCTION QUALITY AUDITING ( ON-LINE ) | 12           | 0               | 12          |
| Syllabus of the course                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                         |              |                 |             |
| Scheme of Study                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                         |              |                 |             |
| Subject Code(CCQA)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Name of the subject                                     | Theory (hrs) | Practical (hrs) | Total (hrs) |
| CCQA - 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ISO 9001 :2015 standards                                | 3            | 0               | 3           |
| CCQA - 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Quality management Tools                                | 3            | 0               | 3           |
| CCQA - 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Audit procedure and guidelines                          | 3            | 0               | 3           |
| CCQA - 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Defect analysis and report preparation                  | 3            | 0               | 3           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                         |              |                 |             |

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| <b>Syllabus of CCQA - 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <ul style="list-style-type: none"> <li>➤ ISO 9001:2015 principles.</li> <li>➤ Comparison of Clauses stating the standards of ISO 9001:2015 General business &amp; Construction related.</li> <li>➤ ISO standard documentation required for construction project site and general documentations.</li> <li>➤ Guidelines for Implementation of ISO 9001:2015 in a construction organization.<br/>Gap analysis and its importance</li> </ul>                                                                                                                                                                                 |  |
| <b>Syllabus of CCQA - 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <ul style="list-style-type: none"> <li>➤ PARETO ANALYSIS</li> <li>➤ FISH BONE DIAGRAM</li> <li>➤ CONTROL CHARTS</li> <li>➤ HISTOGRAMS</li> <li>➤ SCATTER DIAGRAMS</li> <li>➤ CHECK SHEET</li> <li>➤ PROCESS FLOW DIAGRAM</li> <li>➤ Introduction to Lean Six sigma</li> </ul>                                                                                                                                                                                                                                                                                                                                             |  |
| <b>Syllabus of CCQA - 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <ul style="list-style-type: none"> <li>➤ Types of audits</li> <li>➤ Audit procedure.</li> <li>➤ Audit schedule.</li> <li>➤ How to conduct an audit in a construction project.</li> <li>➤ How to provide ratings to a construction project. Purpose of implementing rating system.</li> <li>➤ NCR / CAPA and its importance and classification of grades of non-conformity for construction projects.</li> <li>➤ Check list for conducting Intensive audits.</li> <li>➤ How to review QAP / MOS for a project with case study.</li> <li>➤ Identification to improvement areas and recommendation to management.</li> </ul> |  |
| <b>Syllabus of CCQA – 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <ul style="list-style-type: none"> <li>➤ Commonly occurring post construction defects in structure – NDT to identify intensity of defects –</li> <li>➤ Repair and rework procedure for defects – Preparation of Quality templates</li> </ul>                                                                                                                                                                                                                                                                                                                                                                              |  |

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| <b>Method of Evaluation</b>                                                                                                                    |
| Written examination, Moc Audit report preparation<br><br>CCQA 1 to CCQA 5 – 100 Marks + 50 Marks                                               |
| <b>Software, Hardware and other infrastructural requirements for running this course</b><br><b>Lap top or desk top with internet facility.</b> |

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| Course Title                                                                                                                                                                                                                                                                                                                                                                 |                                                                                  | Junior Animator Course |                 |             |
| Abbreviation of Course Title                                                                                                                                                                                                                                                                                                                                                 |                                                                                  | JAC                    |                 |             |
| Duration of the course in Hours                                                                                                                                                                                                                                                                                                                                              |                                                                                  | 25 hrs                 |                 |             |
| Duration of the course in Months                                                                                                                                                                                                                                                                                                                                             |                                                                                  | 1                      |                 |             |
| Course Fees                                                                                                                                                                                                                                                                                                                                                                  |                                                                                  | 1600                   |                 |             |
| Eligibility                                                                                                                                                                                                                                                                                                                                                                  |                                                                                  | 7th & Above            |                 |             |
| About the Course                                                                                                                                                                                                                                                                                                                                                             |                                                                                  |                        |                 |             |
| Covers the fundamentals of 2D Animation using Adobe Flash software, Adobe Photoshop software, Microsoft PowerPoint Software                                                                                                                                                                                                                                                  |                                                                                  |                        |                 |             |
| Objectives of the course                                                                                                                                                                                                                                                                                                                                                     |                                                                                  |                        |                 |             |
| At the end of the course the student will learn basic concepts of 2D Animation, Making of storyboard, Image Editing, Audio &video editing, creating animated digital multimedia content.                                                                                                                                                                                     |                                                                                  |                        |                 |             |
| Scheme of Study                                                                                                                                                                                                                                                                                                                                                              |                                                                                  |                        |                 |             |
| Subject Code                                                                                                                                                                                                                                                                                                                                                                 | Name of the subject                                                              | Theory (hrs)           | Practical (hrs) | Total (hrs) |
| JAC1                                                                                                                                                                                                                                                                                                                                                                         | Creating 2D Animation using Adobe Flash , Microsoft PowerPoint , Adobe Photoshop | 10                     | 15              | 25          |
| Syllabus of the course                                                                                                                                                                                                                                                                                                                                                       |                                                                                  |                        |                 |             |
| Syllabus of the Subject 1JAC1                                                                                                                                                                                                                                                                                                                                                |                                                                                  |                        |                 |             |
| Introduction to 2D Animation                                                                                                                                                                                                                                                                                                                                                 |                                                                                  |                        |                 |             |
| <ul style="list-style-type: none"><li>• Animation Definition</li><li>• Animation Concepts: Frame Based Animation, Tweening.</li><li>• Concept of 2D Animation ,Concept of 3D Animation</li></ul>                                                                                                                                                                             |                                                                                  |                        |                 |             |
| Creating 2D Animation using Adobe Flash                                                                                                                                                                                                                                                                                                                                      |                                                                                  |                        |                 |             |
| <ul style="list-style-type: none"><li>• Adobe Flash Layout &amp; Interface</li><li>• Shapes and objects</li><li>• Transformation Tools</li><li>• Frame, key frames, layering</li><li>• Shape Tween,Symbols</li><li>• Motion Tween , masking</li><li>• Character design and character animation</li><li>• Frame-By-Frame Animation</li><li>• Storyboarding in Flash</li></ul> |                                                                                  |                        |                 |             |
| Creating a 2D Animation Using Microsoft PowerPoint                                                                                                                                                                                                                                                                                                                           |                                                                                  |                        |                 |             |
| <ul style="list-style-type: none"><li>• Power Point Basics , Animation effects used in presentation:Flash Once ,Motion Path , Spin</li></ul>                                                                                                                                                                                                                                 |                                                                                  |                        |                 |             |
| Creating an Animated GIF in Photoshop                                                                                                                                                                                                                                                                                                                                        |                                                                                  |                        |                 |             |
| <ul style="list-style-type: none"><li>• Photoshop basics, Steps for preparing animated GIF files</li></ul>                                                                                                                                                                                                                                                                   |                                                                                  |                        |                 |             |

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| <b>Method of Evaluation</b>                                                                                                                                                                                                                                                                                    |
| The scheme of evaluation shall consist of examination in Theory & Practical [ 50 marks each ].<br>The practical examination is based on Demonstration of developed story line concept through storyboarding                                                                                                    |
| <b>Software, Hardware and other infrastructural requirements for running this course</b><br>Software : Adobe Flash , Adobe Photoshop, Microsoft PowerPoint<br>Hardware : Processor Intel Pentium 4 or Intel Core Duo (or compatible) processor. 4GB of RAM<br>Microsoft Windows 7 (64 bit), Windows 8 (64 bit) |

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| Course Title                                                                                                                                                                                                                                                                           | Junior Programmer Course |              |                 |             |
| Abbreviation of Course Title                                                                                                                                                                                                                                                           | JPC                      |              |                 |             |
| Duration of the course in Hours                                                                                                                                                                                                                                                        | 50                       |              |                 |             |
| Duration of the course in Months                                                                                                                                                                                                                                                       | 2                        |              |                 |             |
| Course Fees                                                                                                                                                                                                                                                                            | 2500                     |              |                 |             |
| Eligibility                                                                                                                                                                                                                                                                            | 7th & Above              |              |                 |             |
| About the Course                                                                                                                                                                                                                                                                       |                          |              |                 |             |
| The course is designed for students 8th& Above, who have an aptitude in programming.                                                                                                                                                                                                   |                          |              |                 |             |
| Objectives of the course                                                                                                                                                                                                                                                               |                          |              |                 |             |
| <ul style="list-style-type: none"><li>To understand the basics of computer programming.</li><li>Learn core Python scripting elements such as variables and flow control structures.</li><li>Make the programs more robust by using advanced concepts like Exception handling</li></ul> |                          |              |                 |             |
| Scheme of Study                                                                                                                                                                                                                                                                        |                          |              |                 |             |
| Subject Code                                                                                                                                                                                                                                                                           | Name of the subject      | Theory (hrs) | Practical (hrs) | Total (hrs) |
| JPC                                                                                                                                                                                                                                                                                    | Subject 1                | 25           | 25              | 50          |
| Syllabus of the course                                                                                                                                                                                                                                                                 |                          |              |                 |             |
| Basics of computer, Algorithms, Flowchart, Introduction to python, Conditional Statements, Looping, Control Statements, String Manipulation, Lists, Tuples, Dictionaries, Functions, Modules, Input-Output, Exception Handling.                                                        |                          |              |                 |             |
| Method of EvaluationTheory + Practical                                                                                                                                                                                                                                                 |                          |              |                 |             |
| Software, Hardware and other infrastructural requirements for running this course                                                                                                                                                                                                      |                          |              |                 |             |
| Minimum System Requirements                                                                                                                                                                                                                                                            |                          |              |                 |             |
| <ul style="list-style-type: none"><li>Processors: Intel Atom® processor or Intel® Core™ i3 processor</li><li>Disk space: 1 GB</li><li>Operating systems: Windows* 7 or later, macOS, and Linux</li><li>Python* versions: 2.7.X, 3.6.X</li></ul>                                        |                          |              |                 |             |