# PIE INFOCOMM PVT. LTD.

## Where Quality Matters...

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## PROPOSAL FOR IN-HOUSE TRAINING IN LATEST TECHNOLOGIES

## FOR

## B.TECH. CS, IT, EC, EE, EN, CIVIL, MECHANICAL ENGINEERING, BCA, MCA, BBA, MBA DEPARTMENT

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### PIE INFOCOMM PVT.LTD.

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# COMPANY PROFILE

Pie Infocomm Pvt. Ltd. is a registered and ISO certified Software Development Company that has been providing specialized IT services and Business Solutions since 2002 to make the business operations easier. Our Company's motto is **"<u>Generating Ideas</u>"** and we implement it to give our clients best in the industry.

Today, Pie Infocomm majorly deals in :

1. **Software Development**
2. **Internship and LIVE Project Training in various technologies Of B.Tech. CS, IT, EC, EN, EE, Electrical, CIVIL, MECHANICAL, BCA, MCA, BBA, MBA students**
3. **Professional Education And Technology Training**

We believe in never compromising upon the quality of services we provide. We are proud to have a highly technical, skilled and qualified staff today which works like a team to offer everything to the best of our ability. We have our own Development Shell which is solely dedicated to development of Software and websites for our different customers. We specialize in developing Web Applications and Application Software as well. We cover the full software development life cycle from business analysis to quality assurance and post-launch maintenance. In our stride of growth and in exploring new frontiers of technology, we wish to benefit our customers by organizing their work and optimizing their resource requirements.

Our Projects and Clientele –

1. **Vodafone**
2. **Online Media Library**
3. **Websites for Educational Organizations and Schools**
4. **Websites for Hospitals and Clinics**
5. **E-Commerce Website**
6. **Real Estate Projects and Websites**
7. **Website for Government ITI Polytechnic**

Respected Sir/Ma'am,

We have designed a proposal for the students of your college for their training in latest technologies. These technologies are used by various relevant companies in their functioning. With sufficient training in these technologies, students have an upper hand in the recruitment process as well in future. In the process of the training, we will undertake both theory as well as practical sessions for the students so that they have both conceptual and practical knowledge.

## DETAILS OF IN-HOUSE TRAINING

- **Technology –** Based on different courses and branches
- **Duration –** 30 to 40 Hours
- **Mode of teaching –**
  - Lectures
  - Practical Sessions
  - Project Development
  - Query Sessions
- **Deliverables –**
  - Certificate on successful completion of the training

The training will include the following:

1. **Theory Lectures**
2. **Practical Aspects, wherever possible and necessary**
3. **Interview Questions Session**
4. **Student Assessment Test**

We anticipate a positive response from your side and a very fruitful, enriching and successful collaboration with your college.

**Regards,**

**Vijay Kumar Jaiswal**

**Pie Infocomm Private Limited**

# LIST OF PROGRAMS AND TECHNOLOGIES

| Sl. No. | TECHNOLOGY | FOR THE STUDENTS OF | WHAT IT INCLUDES | FEE STRUCTURE |
|---|---|---|---|---|
| 1. | ASP.NET | B.TECH. CS, IT, BCA, MCA | C#, ASP.NET, Silverlight, MVC | Rs. 5000 Per student |
| 2. | PHP | B.TECH. CS, IT, BCA, MCA | Complete PHP Technology, Laravel Framework | Rs. 5000 Per student |
| 3. | JAVA | B.TECH. CS, IT, BCA, MCA | J2EE, JSP, SWINGS, STRUTS, HIBERNATE, WICKETS, iBATIS | Rs. 5000 Per student |
| 4. | ANDROID | B.TECH. CS, IT, EC, EE, BCA, MCA | Using Kotlin | Rs. 5000 Per student |
| 5. | VLSI | B.TECH. EC, EE, EN | Mobile and consumer electronics, computing, telecommunications | Rs. 5000 Per student |
| 6. | EMBEDDED | B.TECH. EC, EE, EN | Designing, implementing, and integrating for modern embedded systems. | Rs. 5000 Per student |
| 7. | PLC/SCADA | B.TECH. EC, EE, EN | PLC as an intelligent 'black box' replacement for the relay panel and how, with the advent of modern communications architectures | Rs. 5000 Per student |
| 8. | MATLAB | B.TECH. EC, EE, EN | A numerical computing environment and fourth-generation language. | Rs. 5000 Per student |
| 9. | AUTO CAD | B.TECH. EC, EE, EN, CIVIL, MECHANICAL | Both 2D and 3D Designing and Drafting | Rs. 5000 Per Student |
| 10. | STAAD PRO | B.TECH. CIVIL | Most widely used structural analysis and design software | Rs. 5000 Per Student |
| 11. | SOLIDWORKS | B.TECH. MECHANICAL | Mechanical CAD, design Validation, and data management skills | Rs. 5000 Per Student |
| 12. | MANAGEMENT PROGRAM | BBA, MBA, PGDM | | Rs. 2000 Per Student |
| 13. | PERSONALITY DEVELOPMENT | ALL COURSES | | Rs. 1000 Per Student |

- **NOTE** – The fee structure is considering a batch of 50 students. If the number of students increases, the fee amount will reduce.

# SYLLABUS

## PHP TECHNOLOGY SYLLABUS

### DATABASES
DBMS / RDBMS – Databases and their connectivity
1. ORACLE
2. MYSQL
3. DERBY

### PHP TECHNOLOGY

- INTRODUCTION TO PHP
- FUNDAMENTALS OF PHP
- ARRAYS, FUNCTION IN PHP
- OBJECT ORIENTATION IN PHP
  a) COCEPT OF CLASS AND OBJECT
  b) CLASSES AS NAMESPACE
  c) OBJECT AS REFERENCE
  d) IMPLEMENTING INHERITANCE, METHOD OVERRIDING, MAGIC FUNCTION

- WORKING WITH FORMS
  a) GLOBAL AND ENVIRONMENTAL VARIABLE
  b) SCRIPT TO ACCEPT USER INPUT
  c) ACCESSING INPUT FORM
  d) VARIOUS ELEMENTS OF FORMS
  e) ACCESSING INPUT IN AN
  f) ASSOCIATE ARRAY
  g) GET AND POST METHOD
  h) FILE UPLOAD

- FILE MANIPULATION IN PHP
  a) TESTING , OPENING, CLOSING FILES
  b) READING, WRITING IN A FILE
  c) LOCKING FILE
  d) MISCELLANEOUS SHORTCUTS

- SAVING STATE IN PHP
  a) SETTING, DELETING A COOKIE

  b) CREATING SESSION COOKIE
  c) WORKING WITH QUERY STRING
  d) SESSION FUNCTION, SESSION VARIABLE

- ADVANCED CONCEPT IN PHP
  a) DATE, INCLUDE, EMAIL, SECURE EMAIL
  b) ERROR, PHP EXCEPTION
  c) PHP FILTER

- PHP AND DATABASE
  a) DATABASE CONCEPT
  b) DATABASE CONNECTION
  c) CREATING TABLES
  d) GETTING INFORMATION ON DATABASE
  e) INSERTING, CHINGING, DELETING DATA IN A TABLE

## JAVA TECHNOLOGY SYLLABUS

### DATABASES
DBMS / RDBMS – Databases and their connectivity
1. ORACLE
2. MYSQL
3. DERBY

### CORE JAVA CONTENTS
- Introduction And History Of Java
- Language Basics
- Object Oriented Programming
- Exception handling
- Threading
- Collection framework
- File handling

### J2EE CONTENTS

- JDBC
- GUI Programming Using SWING
  - APPLICATION, APPLET
- INTRODUCTION TO J2EE
- JAVASCRIPT
- SOCKET PROGRAMMING
- RMI
- JAVA SERVLETS
- JAVA SERVER PAGE – JSP Programming
- File Uploading

- E-Mail
- Using Data Access Objects
- Server Side Validations
- Using HTML + Javascript + AJAX + JSP

### FRAMEWORKS

- HIBERNATE
- STRUTS
- WICKETS
- iBATIS

# ASP.NET TECHNOLOGY - SYLLABUS

**VB.NET, C#**
**INTRODUCTION**
- MICROSOFT VISUAL STUDIO .NET EDITOR, .NET FRAMEWORK, INTERNET INFORMATION SERVICES, STATIC AND DYNAMIC PAGE

**STATE MANAGEMENT AND LIFE CYCLEOF PAGE**
- VIEWSTATE, SESSION, APPLICATION
- HIDDEN CONTROL

**WEB SERVER CONTROL**
- STANDARD CONTROL, NAVIGATION CONTROL, VALIDATION CONTROL, LOGIN CONTROL, HTML CONTROL, DATA CONTROL
- ✓ WEB USER CONTROL, E-MAILING & SENDING FEEDBACK

✓ CONCEPT OF MASTER PAGE
DATABASE CONNECTIVITY WITH ADO.NET TECHNOLOGY - MS-ACCESS, ORACLE, SQL SERVER

## ADVANCE ASP.NET
1) COOKIES, JAVA SCRIPT
2) CRYSTAL REPORT
3) SECURITY, CACHING
4) DEVELOPING NAMESPACE
5) PROFILE, ERROR HANDLING
6) AJAX CONTROL TOOLKIT
7) WEB CONFIGURATION FILE
8) XML DATABASE
9) CASCADING STYLE SHEET AND THEME (SKIN FILE)
10) WEB SETUP AND DEPLOYMENT

## SILVERLIGHT
1) SILVERLIGHT INTRODUCTION
2) SILVERLIGHT APPLICATION
   a) GRID LAYOUT, STACK PANEL
   b) CANVAS LAYOUT
3) DATABASE HANDLING IN SILVERLIGHT
   a) SILVERLIGHT WITH WEBSERVICE
   b) SILVERLIGHT APPLICATION WITH LINQ & WCF
   c) THREE TIER ARCHITECTURE
4) APPLICATION WITH SILVERLIGHT
5) WCF, UNQ, JQUERY

## DATABASES
DBMS / RDBMS
✓ ORACLE
✓ MYSQL
✓ DERBY

# ANDROID TECHNOLOGY SYLLABUS

1. **ANDROID INTRODUCTION**
2. **ANDROID ARCHITECTURE**
   a. Linux Kernel
   b. Android Runtime
   c. Application Framework
   d. Application
3. **APPLICATION OF ANDROID**
   a. Android Feature
   b. Future Scope
   c. Google Play
4. **ANDROID S/W DEVELOPMENT KIT**
   a. System Requirements
   b. Eclipse And SDK Installation
   c. AVD Manager
5. **ANDROID COMPONENTS**
   a. User Interface Components
   b. Android Other Components

6. **CREATING ANDROID APPLICATIONS**
7. **RESOURCES**
   a. Reference to resources in code
   b. Reference to resources in XML file
   c. Assets
8. **DDMS Perspective And Important Views**
   a. DDMS - Dalvik Debug Monitor Server
   b. LogCat View
   c. File explorer
9. **DATABASE HANDLING**
   a. SQLite Database Introduction
   b. Database Connectivity

10. **Sending SMS In ANDROID**
11. **Sending Email**
12. **Playing Sound In ANDROID**
    a. SoundPool
    b. MediaPlayer
13. **Toast**
14. **Notifications**
15. **Make A Phone Call**
16. **Turn On/Off Camera**
17. **Android Application Deployment**
    a. Deployment Via Eclipse
    b. Deployment Via External Sources
18. **URCES**

## MATLAB TECHNOLOGY SYLLABUS

1. **MATLAB Fundamentals**
   - Working with the MATLAB user interface
   - Entering commands and creating variables
   - Performing analysis on vectors and matrices
   - Visualizing vector, matrix data
   - Writing programs with logic and flow control, Writing functions
2. **MATLAB for Data Processing and Visualization**
   - Importing data
   - Organizing data
   - Visualizing data
   - Exporting data

3. **MATLAB Programming Techniques**
   - Programming for correctness
   - Structuring data
   - Structuring code
   - Classes and objects
4. **Communication with external devices**
   - Serial port
   - Parallel port
   - Sound card
   - Video input
5. **Building Graphical User Interfaces**
6. **SIMULINK**

7. **Final Project**
   - Image Processing with MATLAB
   - Signal Processing
   - Simulation of electric machine, drive systems using MATLAB
   - Circuit Analysis with MATLAB Applications
   - Control Design Acceleration
   - MATLAB for Data Acquisition and Instrument Control

# EMBEDDED SYSTEM C LANGUAGE & ASSEMBLY LANGUAGE – SYLLABUS

**INTRODUCTION TO EMBEDDED SYSTEM**

**MICROPROCESSOR & MICROCONTROLLER CLASSIFICATION**

**INTRODUCTION TO MCS-51**
**REGISTERS & MEMORY OF AT89C51**
- Description of RAM
- Description of CPU Registers
- Functions of SFR

**INTRODUCTION OF EMBEDDED C**
- Introduction to Embedded C
- Difference between C & Embedded C
- Programming style
- Basic structure of C program

**CONSTANTS, VARIABLES & DATA TYPES**

**OPERATORS**

**CONTROL STRUCTURES & LOOPS**

**FUNCTIONS**

**HANDLING POINTERS**

**INTERODUCTION TO SOFTWARES**
- Kiel Compiler
- Proteus

**INTERFACING OF LED**
- Introduction of LED's
- Interfacing Circuit Description of LED's
- Programming of LED's Interfacing

**INTERFACING OF SEVEN SEGMENT DISPLAY**

**INTERFACING OF LCD**

**INTERFACING OF SWITCHES & KEYBOARD MATRIX**

**INTERFACING OF MOTORS**

**TIMERS & COUNTERS PROGRAMMING**

**SERIAL COMMUNICATION PROGRAMMING**
- Introduction to Serial Communication
- Types of Serial Communication
- Description of SFR associated with Serial Communication
- Introduction & Interfacing of UART
- Programming of UART

**INTERRUPT DRIVEN PROGRAMMING**
- Introduction to Interrupts
- Types of Interrupts
- Programming of Software & Hardware Interrupts

**INTERFACING OF ADC**
- Introduction to ADC
- Programming of ADC

**SENSOR INTERFACING**
- Introduction to sensing devices
- Interfacing of IR Sensors
- Interfacing of Temperature Sensor

## AUTO CAD TECHNOLOGY - SYLLABUS

### INTRODUCTION

1. Taking the AutoCAD Tour
2. Getting started with AutoCAD
3. Modifying Objects
4. Creating Additional
5. Altering Objects
6. Hatching & Gradients
7. Drawing Organization and Inquiry Commands

### AutoCAD Intermediate training Course

1. Drawing Objects
2. Manipulating Objects and Data
3. Dimensioning
4. Isometric Drawings

### AutoCAD 3D Training Course

1. Introduction to 3D
2. Creating 3D Designs
3. Rendering

### AutoCAD Advanced

1. Working with reusable content
2. Design Centre & Tool-Pallets
3. Creating TEXT & Tables
4. Layer Management and Best Practices
5. Dimensioning and Annotation

(NOTE – This syllabus contains only major headings. Each and every subtopic will be taken up under them)

## STAAD PRO TECHNOLOGY SYLLABUS

1. Introduction To Staad.Pro
2. Structural Modeling
3. Other Useful Function To Complete The Geometry
4. Property Details
5. Member
6. Loading Particulars
7. Analysis
8. Post Processing
9. R. C. Design
10. Steel Design
11. Seismic Analysis
12. Wind Load Analysys
13. Design Of Elevated Water Tanks
14. Design Of Slabs
15. Introduction To StaadBeava

(NOTE – This syllabus contains only major headings. Each and every subtopic will be taken up under them)

# SOLIDWORKS TECHNOLOGY SYLLABUS

1. INTRODUCTION
2. SolidWorks Basics and the User Interface
3. Introduction to Sketching
4. Basic Part Modeling
5. Modeling a Casting or Forging
6. Patterning
7. Revolved Features
8. Shelling and Ribs
9. Editing: Repairs
10. Editing: Design Changes
11. Configurations
12. Using Drawings
13. Bottom-Up Assembly Modeling
14. Using Assemblies
15. Templates
   - Options Settings
   - Document Templates

(NOTE – This syllabus contains only major headings. Each and every subtopic will be taken up under them)

# MANAGEMENT INTERNSHIP

1. Business Writing
2. Personality Development- Communication, Grooming, Public Speaking
3. ERP, SAP
4. Management Training – What is Management?
5. MS Excel
6. Stock Trading
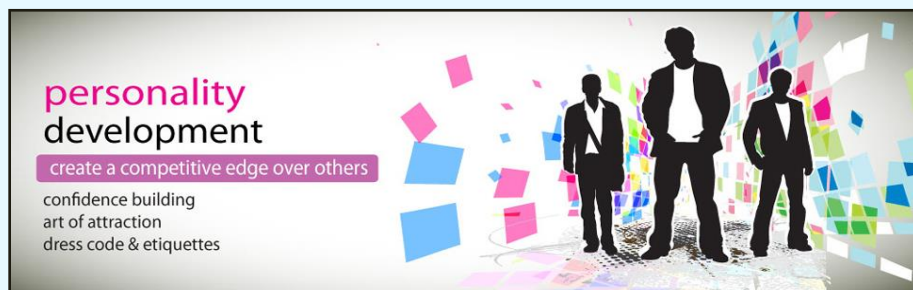7. Lectures on Specialization Stream
8. Guest Lectures by Management Professionals regarding working in LIVE Environment
10. Personal Interview Mock
11. Presentation Session

# PROPOSAL FOR MBA, B.TECH. (CS, IT, EC, EN, CIVIL, MECHANICAL) STUDENTS



## DETAILS OF PERSONALITY DEVELOPMENT TRAINING PROGRAMME

- **Beneficial for students of** – MBA, B.Tech. (all branches)

- **Duration of Programme** – 35 TO 40 Hours

- **Total Visits** – 15 TO 20 Visits (2 hours per visit)

- **What It Includes** – CV Preparation, Art of Facing Interviews, Personality Enhancement, Art of Leadership, Communication , Emotional Stability , Developing Positive Outlook towards life , Adjusting according to changes.

## KEY BENEFITS OF PROGRAMME TO THE STUDENTS:

1. Overall Personality Development of the Candidates
2. **Certificate of Participation** to all Participants
3. Special Guidance in **Correct CV Preparation**, **Facing Interviews.**
4. Skill Enhancing Sessions
5. Demo Interview Sessions and **Interview Preparations**
6. Teaching good communication skills
7. **Preparation of students based on their traits i.e. different for B.Tech. CS, IT, EC, Mechanical and  MBA so that it is helpful in their recruitment process.**
8. **Training of students according to the market they will face and their branches**.

## SALIENT FEATURES OF THE PROGRAMME:

1. Highly interactive sessions.
2. Not mere theory Lectures, instead activity based sessions which would provide candidates a fun learning experience.
3. Professional Behavior and Etiquettes taught to the candidates.
4. Confidence Building, Art of Attraction, Mannerisms.

# *PERSONALITY DEVELOPMENT PROGRAMME – SYLLABUS*

## 2. LEADERSHIP
- Introduction to Leadership
- Leadership Power
- Leadership in Administration

## 3. INTERPERSONAL RELATIONS
- Introduction
- Analysis of different ego states
- Analysis of Transactions

## 4. COMMUNICATION
- Introduction
- Flow of Communication
- Listening
- Barriers of Communication
- How to overcome barriers of communication

## 5. STRESS
- Introduction to Stress
- Causes of Stress
- Impact Management Stress
- Managing Stress

## 6. GROUP DYNAMICS
- Importance of groups in organization
- Team Interactions in group
- Group Building
- Team Building
- How to build a good team?

## 7. DEVELOPING POSITIVE OUTLOOK TOWARDS LIFE

## 8. TIME MANAGEMENT
- Time as a Resource
- Identify Important Time Management Wasters
- Techniques for better Time Management

## 9. VERBAL SKILLS
- Correct usage of Nouns, Pronouns
- Pronunciation
- Presentation skills
- The arts of extempore, discussion and debate
- Group Discussions
- Interview techniques

## 10. NON-VERBAL SKILLS : *Personality Enhancement Initiative*
- Grooming
- Emotions
- Punctuality
- Etiquette in all circumstances
- Office
- Mannerisms

## 11. Communication Skills And Personality Enhancement

## 12. Enhancing Business Writing

## 13. Know Your field / Industry

## 14. Grooming

## 15. Business Etiquettes

## 16. Negotiation Skill

- ✓ CV Preparation
- ✓ Facing Interviews
- ✓ Group Discussion
- ✓ Debate
- ✓ Aptitude
- ✓ Logical Reasoning

## Through Practice –
- Self Introduction
- Small Presentation
- Conversation
- Debate
- Public Speaking
- Business Writing Mock
- Group Discussion
- Preparing CV