

a proposal by



FACULTY DEVELOPMENT PROGRAM

EDUCATION REDEFINED

AN INTEGRATED FACULTY DEVELOPMENT PROGRAM
PROPOSAL



COMPANY PROFILE

PIE INFOCOMM, incorporated on March 23, 2002, is an IT specialized company, consulting and business process service provider. It operates through four segments:

- 1. IT Services and IT Products (SOFTWARE DEVELOPMENT)**
- 2. Training and Research (INTERNSHIP PROGRAM, WORKSHOPS, FACULTY DEVELOPMENT PROGRAM, IN- HOUSE TRAINING, INDUCTION PROGRAM, PERSONALITY DEVELOPMENT PROGRAM)**
- 3. Digital Marketing (SEO, PAY PER CLICK, SOCIAL MEDIA MARKETING, AFFILIATE MARKETING)**
- 4. Share Trading (TRADING, EQUITIES & SECURITIES)**

IT Services and Development - This segment consists of our IT Service offerings to the customers of various sectors which include Banking, Financial Services and Insurance, Healthcare and Life Science, Retail, Consumer Goods, and Educational Institutions. The Company provides a range of services, which include customer-centric software designs, Technology and IT consulting, Software, Website and Mobile Apps development, re-engineering and maintenance, Digital Marketing Services and ERP. The Company offers integrated business solutions that span across enterprise applications and digital transformation to security and testing.

Training and Research - *“Anyone who stops learning is old, whether at twenty or eighty”*. This spirit is deeply rooted in our unchanging essence. So we collaborate with colleges and universities all over India and nearby to provide Internship Programs, Training Programs (Technical Skills, Soft Skills, Management Skills), Workshops, Seminars, In-House Training, Faculty Development Program, Personality Development Programs to students and faculties. We have covered more than 100 colleges all over India for training and recruitment.



COMPANY PROFILE

Digital Marketing - The way we market our products and services is changing fast. What worked yesterday might not bring results tomorrow. We are moving from Physical Real world to Virtual World of Digital marketing where it is possible to reach wider, target smarter, and be more cost-effective. PIE INFOCOMM growing team of over 40 highly qualified professionals take great pride in the deep knowledge and value they bring their clients each day. Established as web agency & Digital Marketing Company Lucknow in 2010, when the Internet has become boom in India, Digital Way of Marketing is ingrained in our DNA. Our experts track and study the emerging Digital Marketing trends and recommend ways to promote businesses online. We use these methods for Digital Marketing -

1. PAY PER CLICK
2. AFFILIATE MARKETING
3. SOCIAL MEDIA MARKETING

Share Trading - We have a sister company 'YOY Capital Infra Private Limited' with branches in Noida and Lucknow. It is a Common Service Center, also dealing in Share Trading Services, Insurance and Mutual Funds.

Biotechnology - Development using Python Technology - We are working in the development and designing of Biotech projects using bio-python modules extracting from python technology.

CHIP LEVEL PROGRAMMING and IoT & ROBOTICS - Programming with Embedded Systems, Testing the product in controlled, real situations before going live and Working on VLSI & MATLAB, Automation using PLC/SCADA.

DESIGNING OF MOTOR SPARE PARTS & ARCHITECTURAL BUILDING - We are working on AutoCAD, 3D's MAX, PRO-E, NX GRAPHICS software, created by Autodesk Inc., preparing a visual description of a product needs to be constructed.

CHEMCAD DESIGNER - Designing of Chemical equipments and laboratory equipments using CHEMCAD Software.

AGRICULTURAL ENGINEERING - Drawing farm machinery, using 3D Max and Solidworks

PROGRAM OVERVIEW

OBJECTIVES

- Gain in knowledge and skill
- To help already experienced faculties add something to their skill set which motivates them.
- Use of latest tools, technology and concepts in modern teaching.
- To motivate faculties and assist them to overcome the barriers between faculty and students.
- Effective delivery of lectures using their knowledge and technology.
- Changes in organizational practise and student learning

Faculty development has become a priority at many academic institutions as a way to improve the quality of academic programs and to respond to emerging faculty, student, program, and industry needs.

It is an intensive program which focuses on the following aspects of teaching -

- Instructional development which emphasizes the development of faculty skills involving instructional technology, small group teaching, media, courses, and curriculum design.
- Professional development which emphasized the development of individual faculty members in their professional responsibilities as educators, researchers, and administrators.
- Organizational development which emphasized the requirements, and main concerns of the institution.
- Career development which emphasized faculty preparation for career advancement.
- Personal development which stressed on life planning, interpersonal and communication skills of faculty members.

PROGRAM OVERVIEW

PROGRAM DURATION - 6 Days

SESSION MODULES -

- TECHNICAL SESSIONS - 4
- NON-TECHNICAL SESSIONS - 2

SESSION DETAILS -

TECHNICAL SESSIONS - The Technical sessions will be based on the latest technologies being used in different fields. The detailed syllabus for each technology is provided further. The faculties may choose any technology they wish to go ahead with.

NON-TECHNICAL SESSIONS - The two non-technical sessions will primarily focus on these sub-topics :

- Mentoring Pedagogy and Teaching for Higher Education (Online mode)
- Practice relaxation methods and tips for creating a better work-life balance
- How to boost creativity and problem-solving skills in children
- Creative Teaching Techniques
- Experiential Learning

TECHNOLOGIES FOR FDP

CS , IT

JAVA

PYTHON

C++

CRYPTOGRAPHY

CLOUD COMPUTING

ARTIFICIAL INTELLIGENCE

PHP

EC, EE, EN

MATLAB

IoT

ROBOTICS

EMBEDDED SYSTEMS

CIVIL, MECHANICAL

STAAD PRO

AUTO CAD

CATIA

CREO

SOLIDWORKS

REVIT

BIOTECHNOLOGY

BIO PYTHON

CHEMICAL

AUTO CAD (PLANT 3D)

AGRICULTURE

AUTO CAD

MANAGEMENT

SHARE TRADING

DETAILED SYLLABUS

BCA/MCA/CS-IT ENGINEERING

JAVA

DAY 1

- Core JAVA & J2EE
- Machine learning using java

DAY 2

- Spring boot

DAY 3

- Big data(Apache Server) using Java
- AI using Java

DAY 4

- Angular and Node JS

C++

DAY 1

- Standard template library (STL)

DAY 2

- Pointers

DAY 3

- Hickey's Callbacks.
- Use of local class in class factories

DAY 4

- Templates

PYTHON

DAY 1

- Machine Learning using Python

DAY 2

- Artificial Intelligence using Python
- Data Science using Python

DAY 3

- Image and video processing
- UI development using Python

DAY 4

- Micro Python

CRYPTOGRAPHY

DAY 1

- Quantum Cryptography
- Homomorphic Encryption

DAY 2

- Biometric Encryption.
- Wearable Two-Factor Authentication

DAY 3

- Peer-To-Peer Encryption.
- Widespread End-To-End Encryption

DAY 4

- Search Engines With Free VPNs.
- Honey Encryption

DETAILED SYLLABUS

BCA/MCA/CS-IT ENGINEERING

CLOUD COMPUTING

DAY 1

- Cloud architect
- Cloud virtualisation

DAY 2

- Cloud Elasticity

DAY 3

- Data Centres Management

DAY 4

- Load Balance
- Security and integrity

PHP

DAY 1

- Introduction to PHP
- Form handling

DAY 2

- Session and Cookies
- String Manipulation

DAY 3

- MVC
- Decision Making and Loop

DAY 4

- PHP with MYSQL
- Framework(Laravel 7.x)

ARTIFICIAL INTELLIGENCE

DAY 1

- Natural Language Generation
- Speech Recognition

DAY 2

- Machine Learning Platforms
- Virtual Agents

DAY 3

- Decision Management
- AI Optimized Hardware

DAY 4

- Deep Learning Platforms
- Robotic Process Automation

DETAILED SYLLABUS

EC/EN/EEE ENGINEERING

MATLAB

DAY 1

- System Dynamics using MATLAB
- Transmission Models using MATLAB
- Hybrid Vehicle Design using MATLAB

DAY 2

- Vehicle Design using MATLAB
- Digital Signal Processing using MATLAB

DAY 3

- Simscape
- Electrical using MATLAB
- Image Processing using MATLAB

DAY 4

- Advanced Image Processing using MATLAB

IOT

DAY 1

- Introduction to IoT, Current products, Open source electronics for IoT, IoT languages and its tools.
- Communication protocols, interconnections, system design and development

DAY 2

- Latest sensors and actuators

DAY 3

- IoT cloud, Image processing applications in IoT
- App interface with real-time data synchronisation

DAY 4

- Discussion on real time projects. Upcoming researches

DETAILED SYLLABUS

EC/EN/EEE ENGINEERING

ROBOTICS

DAY 1

- Sensors & actuators

DAY 2

- Propagation Integration Directive

DAY 3

- Approach of robotics in different sector

DAY 4

- Basic knowledge of skill set required for robotics and Process of making robots

EMBEDDED SYSTEM

DAY 1

- Introduction to Embedded System

DAY 2

- Communication protocols in embedded systems

DAY 3

- Embedded Firmware and Development Environment
- RTOS based Embedded System Design

DAY 4

- Embedded System Application Development and Embedded Systems in Automotive and Medical

DETAILED SYLLABUS

CIVIL/MECHANICAL ENGINEERING

CATIA (MECHANICAL)

DAY 1

- Hellical Gear
- Stifender

DAY 2

- Upper Gear-Box Casing
- Sweep with Law

DAY 3

- Lower Gear-Box Casing
- Generative Sheet Metal-Cutting
Stamping Toolbar

DAY 4

- Pipe with Polyline

STAADPRO (CIVIL)

DAY 1

- Introduction and Structure Modelling

DAY 2

- Physical Modeller & Slab Design and
Interoperability

DAY 3

- Concrete Design and Ram connection

DAY 4

- Base Plate Design
-

SOLIDWORKS(Mechanical)

DAY 1

- Weldments
- Sheet Metal Forming
- Gusset

DAY 2

- Sheet Metal Elbow
- Concentric Cone
- Eccentric Reducer Development

DAY 3

- Sheet Metal Screw Conveyor
- Mate Controller
- Equation Driven Curve

DAY 4

- Vent
- Solidworks Motion-Gravity

DETAILED SYLLABUS

CIVIL/MECHANICAL ENGINEERING

AutoCAD

DAY 1

- Mesh Modelling, 3D Twisted Cable Emboss & Engrave Text

DAY 2

- Surface Modelling , 3D Pipe Design

DAY 3

- Material & Rendering, Walkthrough, 3D Nut

DAY 4

- AutoCAD VBA Programming, 3D Cap, 3D Hatch

REVIT

DAY 1

- Skyscraper
- Concrete Façade

DAY 2

- Wave Façade
- Massing

DAY 3

- Conceptual Massing

DAY 4

- Transformation Diagrams
-

CREO

DAY 1

- Parametric Gear
- Creo MapKey
- Draft Tips

DAY 2

- Flexible Rubber Hose
- Wire Wrapping
- Bottle Modelling

DAY 3

- Worm Gear Shaft
- Spinal Blend

DAY 4

- Convert Assembly to Solid Models

DETAILED SYLLABUS

BIO-TECHNOLOGY ENGINEERING

BIO-PYTHON

DAY 1

- Blast
- Accessing NCBI Entrez database
- Swiss port & ExPASy

DAY 2

- PDB MODULE
- CLUSTER ANALYSIS
- Supervised deep learning

DAY 3

- KEGG
- ANALYSIS OF PHENOTYPIC DATA

DAY 4

- BIOPYTHON TESTING FRAMEWORK

CHEMICAL ENGINEERING

AUTOCAD PLANT 3D

DAY 1

- Routing Pipe
- Isoss

DAY 2

- Navisworks
- Process & Instrumentation

DAY 3

- Catalog Builder

DAY 4

- Spec Editor
 - Report Creator
-

DETAILED SYLLABUS

AGRICULTURAL ENGINEERING

AUTO-CAD

DAY 1

- Mesh Modelling, 3D Twisted Cable Emboss & Engrave Text

DAY 2

- Surface Modelling , 3D Pipe Design

DAY 3

- Material & Rendering, Walkthrough, 3D Nut

DAY 4

- AutoCAD VBA Programming, ,3D Cap, 3D Hatch

REGISTRATION DETAILS

Registration Process -

- **Registration of college/university** - For colleges and universities to register themselves as a group for the program, please click on this link to register -

[Click here to register](#)

Registration Process -

Individual Faculty Registration - For faculties interested in individual registration, please click on this link to register -

[Click here to register](#)



REACH US



Website : www.pieinfocomm.in



Address: 1st Floor, B-12, Sector E, Aliganj,
Lucknow - 226024



Contact Number : 9453760339, 9621676532



E-Mail : hr@pieinfocomm.in,
hr.pieinfocomm@gmail.com

