PONDICHERRY UNIVERSITY

PLACEMENT CELL

S.K.V. Jayakumar, M.*E(CSE)., LMISTE., LCSI., (Ph.D).,*   **Kalapet**
Placement Co-ordinator   **Puducherry – 605014**

Ref. No: PU / PCell / Faculty Sabbatical @ Cognizant /

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Dear Colleagues,

Greetings from the Placement Cell.

Pondicherry University Placement Cell has been in tie up with Cognizant, Chennai for various Placement and Training related activities. Cognizant has been visiting the University for Campus Placements of Engineering, MBA and Arts and Science students. Through the Industry Academia Collaboration activities, Cognizant, Chennai has listed Pondicherry University as one of the Institutions for its Faculty Sabbatical Program.

Eligible faculty members (as per the eligibility defined by the company, as given hereunder) are requested to contact the Placement Cell with all necessary documents. Faculty members, who would like to apply for this programme, have to submit a "Faculty Self Evaluation Sheet", which needs to be submitted to the Company as requested. This can be downloaded from the University Website, under Downloads/Placement Cell.

Faculty Members who would like to apply to this programme need to get the approval of the Pondicherry University Administration, before submitting the application to the Placement Cell and the Administrative approval is to be enclosed with the application.

(s/d) S.K.V. Jayakumar

Information Received from the Company:

Dear Mr.Jayakumar,

Cognizant is always looking for opportunities to enhance the academia and industry synergy. The Faculty Sabbatical Program is one such significant milestone in the relationship between Cognizant and your institution. Aimed at bridging the gap between institutions and the industry, this program allows faculty members to make a vital difference to the student community.

Cognizant is proud to announce that your institution has been identified as one of the institutions for the pilot program! One faculty from your institution will work with us for a period of six months at Cognizant Academy. Especially because this is a mutually enriching experience, the faculty will help in curriculum development for Cognizant Academy, delivering training modules to associates including trainees; at the same time, the faculty, during the sabbatical, will get a glimpse into the latest trends in technology training and development which can be shared with their peers at their institution.

Duration of Sabbatical: 6 months

Eligibility Criteria for the Faculty

- Must belong to the CS or IT or Software Engineering Departments

- Must hold a PG degree (minimum) to their credit

- At least 5 years of experience in adult learning facilitation

- Specialist in the any ONE of the Groups (Group 1 – Fundamentals Knowledge; Group 2 – Java; Group 3 – Dot Net). Details of the groups and its sub-topics attached.

- Outstanding communication skills

Selection Process with Timelines

- Interested faculty to send their updated profiles

- Academy experts will review the nominations; and shortlisted Faculty members will be invited for a personal discussion

- Selected faculty will join Cognizant Academy in August / September as per mutual convenience

Remuneration / Stipend during sabbatical: Rs 20000 per month (net)

We request you to share the resumes of interested faculty members and revert with any queries.

Warm Regards,

TOPICS FOR FACULTY SABBATICALS

Group 1 - Fundamentals knowledge

Facilitation capabilities in at least 6 of the below (10) fundamental subjects ó

Topics	Sub-topics
Problem Solving and C Programming	✓ Introduction to Problem solving and Programming Languages ✓ Introduction to C Programming Language ✓ Selection and Control Structures ✓ Arrays and Strings ✓ Functions ✓ Structures and Unions ✓ Files and Preprocessor directives ✓ Pointers
Data Structures with C	✓ Introduction to Data Structures ✓ Arrays ✓ Linked Lists ✓ Sorting and Searching ✓ Trees ✓ Balanced Trees and Hashing ✓ Graphs
Database Management Systems	✓ Introduction to Database Systems ✓ DBMS Architecture ✓ Types of Databases ✓ Introduction to Data Modeling ✓ ER Model ✓ Normalization ✓ SQL - Operations ✓ File Organization and Database Tuning ✓ Emerging Trends
Data Modeling	✓ Overview of Data Model ✓ Categories of Data Model ✓ Stages of Data Model ✓ Logical Data Model Contents ✓ Demo on Erwin Tool ✓ Converting Logical to Physical Model ✓ Requirement Analysis ✓ Normalization ✓ Specialization & Generalization
Fundamentals of Computer Technology	✓ Introduction to Computer Fundamentals ✓ Introduction to Computer Networking ✓ CPU Structure ✓ OS Management ✓ Input/Output Interfacing ✓ Network Protocols & Cognizant Network System ✓ Internetworking & Network Management ✓ Advanced Computing Concepts ✓ Unix

	✓ Windows
Operating Systems Overview	✓ Operating System Basics ✓ Windows XP ✓ Unix
UNIX and Shell Scripting	✓ Introduction to Unix and Basic Concepts ✓ Commands, Editors and Shell Scripting ✓ Exploring Unix Utilities, Remote Login & Process Management
Object Oriented Programming with C++	✓ INTRODUCTION ✓ OBJECTS AND CLASSES ✓ INHERITANCE ✓ VIRTUAL FUNCTION AND POLYMORPHISM ✓ OPERATOR OVERLOADING ✓ TEMPLATES AND EXCEPTION HANDLING
PERL	✓ PERL Basics ✓ PERL Modules ✓ PERL DB Operations

Group 2 - Java

Facilitation capabilities in at least 8 of the below (14) core subjects in this group ó

Topics	Sub-topics
Oracle 10g SQL	✓ Overview Of RDBMS and Oracle Database ✓ Basic Element Of SQL ✓ SQL Statements ✓ SQL Operators ✓ SQL Function ✓ SQL Expressions ✓ Joins and Subqueries ✓ Schema Objects ✓ Query Flashback
Oracle 10g PL/SQL	✓ Fundamental Of PL/SQL ✓ PL/SQL Subprograms and Triggers ✓ Cursors and PL/SQL Error handling ✓ PL/SQL Collection,Record and Varrays ✓ Performing SQL operation from PL/SQL and Dynamic SQL
Core Java SDK Ver 1.5 / 1.6	✓ Introduction to OOPS ✓ Introduction to Java and SDE ✓ Keywords, Variable Declaration, Operators and Datatypes ✓ Control Flow statements, Wrapper classes and Auto Boxing ✓ Access Specifiers, Constructors and Methods ✓ Inheritance, Interfaces and Abstract Classes ✓ Exception Handling ✓ Strings, String Buffer and its functions. ✓ Collections and Util package ✓ Threads ✓ I/O operations in JAVA ✓ JDBC

	✓ Garbage Collection
	✓ Annotations
	✓ Updations in JDK 1.5/1.6
Exploring JUnit 4.x	✓ Testing Fundamentals
	✓ Jumpstart JUnit 4.x
	✓ About Test Annotation
	✓ Hamcrest
	✓ Parameterized Tests
	✓ Theories
HTML	✓ Introduction to HTML
	✓ Frames and Tables
	✓ Meta Information
	✓ Advanced HTML Tags
	✓ Form Elements
	✓ Various browsers & W3C Schools specification
	✓ Tools and HTML 4.0
Java Script Ver 1.5	✓ Introduction to JavaScript
	✓ JavaScript Events and Objects
	✓ Introduction to DOM
XML Ver 1.0	✓ DTD
	✓ Schema
	✓ SAX
	✓ DOM
	✓ JAXP
	✓ Xpath
	✓ Xquery
	✓ XSLT
J2EE Architecture	✓ Introduction to J2EE Architecture
	✓ Servlets and Java Server Pages
	✓ Best practices, sample
Servlets Ver 2.3	✓ Web Application and HTTP basics
	✓ Understanding Java servlets
	✓ Servlet Model
	✓ Beyond Servlet Basics
	✓ Servlet 2.5 updates
JSP Ver 2.3	✓ Understanding JSP
	✓ JSP Model - Basics
	✓ JSP Model - Advanced
	✓ Java Beans & JSP's
	✓ Custom Tags & Libraries
	✓ Ajax introduction
UML	✓ Introduction to OOAD
	✓ Software Development Lifecycle
	✓ Introduction to UML
	✓ Design process
	✓ Use Case
	✓ Class Diagrams

	✓ Sequence Diagrams ✓ Activity Diagrams ✓ Component Diagrams ✓ Deployment Diagrams
Struts Framework Ver 2.0	✓ Preparing Groundwork for STRUTS 2 ✓ STRUTS 2 Architecture ✓ My First STRUTS 2 Page ✓ STRUTS 2 Actions and Validations ✓ STRUTS 2 Tags ✓ STRUTS 2 Concepts ✓ STRUTS 2 Add On Features
J2EE Design Patterns	✓ Introduction to Design Patterns ✓ Design Patterns with Java Prespective

Object Oriented Analysis Design	✓ Introduction to OOAD
	✓ Design process
	✓ Use Case
	✓ Design Diagrams
	    o Class Diagrams
	    o Sequence Diagrams
	    o Activity Diagrams
	    o Component Diagrams
	    o Deployment Diagrams

Group 3 – Dot Net

Facilitation capabilities in at least 3 of the below (5) core subjects in this group ó

Topics	Sub-topics
C#	✓ Evolution and Overview of .Net Framework ✓ Introduction to C# ✓ Data Types and Control flow ✓ Arrays, Methods and Parameters ✓ Creating Value Types with Enumerations and Structs ✓ Classes and Objects ✓ Inheritance & Interfaces ✓ Generics & Collections ✓ Exception Handling ✓ File Handling ✓ XML and .Net Framework ✓ Delegates and Events ✓ Multithreading ✓ Reflection & Serialization ✓ .NET Interoperability ✓ Garbage collection and Memory Management ✓ ADO.Net ✓ LINQ beyond Collections ✓ WebServices ✓ New features in 4.0
ASP .Net	✓ Introduction to Web-Programming and Working with ASP.NET

	✓ Building ASP.NET pages ✓ Designing ASP.NET Websites ✓ Performing Data Access ✓ Building ASP.NET Components ✓ ASP.NET Site Navigation Control ✓ ASP.NET Security Control ✓ Building ASP.NET Application ✓ Custom Control Building in ASP.NET ✓ ASP.NET AJAX Implementation ✓ Globalization ✓ Web services
UML	✓ Introduction to UML ✓ Design process ✓ Use Case ✓ Class Diagrams ✓ Sequence Diagrams ✓ Activity Diagrams ✓ Component Diagrams ✓ Deployment Diagrams ✓ State machine Diagrams ✓ Collaboration Diagram
SQL Server 2008	✓ SQL Server 2008 Overview ✓ Data Integrity, Constraints, Sub-queries and Joins ✓ Views & Partition Tables ✓ Cursors ✓ Stored procedures and Functions ✓ Triggers and Indexes ✓ XML Support in SQL Server

Object Oriented Analysis Design	✓ Introduction to OOAD
	✓ Design process
	✓ Use Case
	✓ Design Diagrams
	    o Class Diagrams
	    o Sequence Diagrams
	    o Activity Diagrams
	    o Component Diagrams
	    o Deployment Diagrams