

About Electronics & ICT Academy at PDPM IIITDM Jabalpur

Department of Electronics and Information Technology, Government of India has instituted four Electronics and ICT Academies with one academy at PDPM IIITDM Jabalpur with the primary objective preparing manpower for two important missions - 'Digital India' and 'Make in India'. The Academy aims at the design and implementation of scalable training programmes in niche areas of electronics and ICT for the development of required knowledge base, skills and tools to unleash the talent of Indian population. The Academy at PDPM IIITDMJ will partner with IIITM Gwalior, MANIT Bhopal, and IIT Indore run high quality specialized courses for faculty, students and unemployed graduates. In addition, the Academy will conduct customized training programmes and research promotion workshops for corporate sector and educational institutions. The Academy is envisioned to become a central hub of activities on training, consultancy work and entrepreneurship programmes.

About PDPM IIITDM Jabalpur

IIITDM Jabalpur was established in 2005 with a focus on education and research in IT enabled Design and Manufacturing. Since its inception, PDPM IIITDM Jabalpur has been playing a vital role in producing quality human resources for contribution in India's mission of inclusive and sustainable growth. The Institute offers under- graduate, post graduate and PhD programmes in Computer Science and Engineering, Electronics and Communication Engineering, Mechanical Engineering, Design, and PhD programmes in Mathematics and Physics. Under IIIT act, the Institute has been declared an Institute of National Importance in January 2015. The Institute campus is being developed on 250 acres of land close to Dumna Airport, Jabalpur. The Institute is 10 kms from the main railway station and 5.5 kms from Dumna airport, Jabalpur.

Faculty Development Programme on Database Management Systems

Who can attend?

The programme is open to faculty and research scholars from all the colleges and universities in the states of M.P., Chhattisgarh, Maharashtra, Gujarat and Rajasthan. Industry personnel working in the concerned/allied discipline may also apply.

How to apply?

Online – The participants may log on to the website ict.iiitdmj.ac.in and fill up the application form by providing all the necessary details.

By Email – Scanned copy of the filled in application form duly endorsed by the forwarding authority may be mailed at academyiiitdmj@gmail.com.

Please also send/post your duly-filled application form endorsed by the forwarding authority along with the required DD of the registration fee (add accommodation charges, if needed) in favour of 'Electronics and ICT Academy, IIITDMJ' payable at Jabalpur to the contact address. Please ensure that your complete application should reach to us by November 30, 2015. No Travelling Allowance will be paid by the Academy.

Important Dates :

Last Date of Online Registration: Nov 30, 2015

Spot Registration also available if seats are available.

Course Dates: Dec 5-11, 2015

Registration Fee :

Rs. 2000/- (Course material + lunch inclusive)

Accommodation charges (if needed) :

Rs. 2000/- (including breakfast and dinner)

Course Coordinators

Dr. Pritee Khanna

Associate Professor, Computer Science and Engineering

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Dr. Vinod Kumar Jain

Assistant Professor, Computer Science and Engineering

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RDBMS: Theory and Practices

December 5-11, 2015

Seamless Learning Opportunities



Faculty Development Programme Under Electronics and ICT Academy

An Initiative of
Department of Electronics and Information Technology,
Government of India

Electronics and ICT Academy
PDPM Indian Institute of
Information Technology, Design and
Manufacturing, Jabalpur,
Dumna Airport Road,
Jabalpur 482005

Building
Human
Resources
For
Digital India

E&ICT Academy
IIITDMJ

Faculty Development Programme on Database Management Systems	Course Contents	Application Form
<p>About the course:</p> <p>Database processing has always been an important topic in the study of information systems. In recent years, the explosion of the Internet and the dramatic development of new technologies for the Internet have made knowledge of database technology one of the hottest career paths. Because of the immense need for database technology, the skills and knowledge developed in this area are in great demand. The goal of this course is to provide a solid foundation in the fundamentals of database technology with practical exposures.</p> <p>Designing databases is non-trivial and requires much imagination, flexibility, and thought process. This course is application-oriented and covers the relational database management system (RDBMS), which is the predominant system for business, scientific, and engineering applications .The course aims to enable you to design and use a database to support an application. The focus is on understanding the implications of a design in a lucid manner. The course includes many brain storming sessions for not only design but also precise implementation of the concepts discussed. Along with all essential topics, the course helps you to comprehend effective use of materialized views, assertions, triggers, and cursors for designing a better system. It includes discussion on the issues like SQL injection attack and distributed databases.</p>	<p>Introduction of DBMS: Primary concept of data models, database languages, transaction management, database structure & architectures.</p> <p>Data Models: ER Model: ER Schema, entity-sets, ER diagram, Specialization & generalization, Aggregation, Relational Model :- Relations, Keys, Constraints, ER Schema to Relational model, relational algebra, tuple and domain relational calculus.</p> <p>SQL: SQL data types, Types of SQL commands, SQL operators, Tables, views and indexes, Queries and sub queries, Aggregate functions, assertion, triggers, integrity & SQL, security implementation with SQL, Embedded SQL, Database connectivity with ODBC/JDBC.</p> <p>Database Design: Functional Dependencies, decomposition, canonical cover, Normalization (1NF-5NF), Dependency preservation, multivalued dependencies, Join dependencies.</p> <p>Transaction Management: Transaction concept, ACID properties, Concurrency control techniques, Recovery concepts and techniques.</p> <p>Storage Structure & File Organization: Indexing, ordered indices: B+ tree & B tree index files.</p> <p>Schedule:</p> <p>Each lecture session would be followed by hands on experience. Each stage of the course includes practical examples, exercises, and design patterns which are used in programming.</p> <p>Day-1: Introduction of DBMS and ER Model</p> <p>Day-2: Relational Model and Relational Algebra</p> <p>Day-3: Tuple Relational Calculus and Domain Relational Calculus.</p> <p>Day-4: Structural Query Language</p> <p>Day-5: Database design</p> <p>Day-6: Transaction Management, Concurrency Control & Recovery</p> <p>Day-7: Storage Structure & File Organization</p>	<p>Name of the Applicant (first, last):.....</p> <p>.....</p> <p>Gender:</p> <p>Designation:</p> <p>Name and Address of the Organization/Institute/college:</p> <p>.....</p> <p>.....</p> <p>City/town:..... Email:.....</p> <p>Alternate email (if any):.....</p> <p>Phone Number:.....</p> <p>Mobile Number:.....</p> <p>Do you need accommodation? (Yes/No):</p> <p>Note: Accommodation and meal facility will be available only from the evening of Dec 4 to the morning of Dec 12, 2015.</p> <p>DD Number:..... Date:</p> <p>Issuing Bank:..... payable at:</p> <p>Signature of the Applicant</p> <p>I hereby agree to relieve Mr./ Ms./ Dr.</p> <p>..... In case she/he is selected to attend the programme.</p> <p>Signature and Seal of the Forwarding Authority</p> <p>Name</p> <p>Designation</p>
<p>List of Resource Persons</p> <p>Prof. Shyam Kumar Gupta Computer Science and Engineering IIT Delhi</p> <p>Prof. Jitender Kumar Chhabra Computer Science and Engineering NIT Kurukshetra</p> <p>Dr. Pritee Khanna Computer Science and Engineering PDPM IITDM Jabalpur</p> <p>Dr. Vinod Kumar Jain Computer Science and Engineering PDPM IITDM Jabalpur</p>	<p>Contact us</p> <p>The Course Coordinator, RDBMS : Theory and Practices ictrdbms@iiitdmj.ac.in</p> <p>Electronics and ICT Academy PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur, Dumna Airport Road, Jabalpur 482005 academyiiitdmj@gmail.com Website: ict.iiitdmj.ac.in</p>	