

CSE department of NIT Rourkela presents short term courses on



Course Title	Programming in Java				
Date	07-18 May 2007				
Course Outline	<ul style="list-style-type: none"> • Java Overview • Classes & Objects, Packages, Interface • Inheritance • Polymorphism • Exception • I/O using Streams • Thread • Applet • Graphics with Swing • Event Handling using AWT • Database connectivity using JDBC • Networking • Distributed Computing using RMI • Images • Beans 				
Registration Fee	Rs. 3,000/-	DD favoring “ Continuing Education, NIT Rourkela ” payable at “ Rourkela ”			
Coordinators	Prof. Banshidhar Majhi				
	Prof. Pankaj Kumar Sa	pankajsa@nitrkl.ac.in	pankajsa.nitrkl@gmail.com	0661-246-2362, 4353	09437110444
Address	P. K. Sa, Coordinator, “PIJ-2007”, Dept. of CSE, NIT Rourkela, Rourkela – 769 008, Orissa, India				
Last Date	30 April 2007.				
	Limited seats. Enrollment is strictly on first-come-first-serve Basis. Accommodation and fooding may be arranged in hostel on payment basis (Approx Rs. 60/= per day)				
Course Title	Cryptography, Protocols and its Implementations				
Date	21 May – 02 June 2007				
Course Outline	<ul style="list-style-type: none"> • Mathematical Foundation <ul style="list-style-type: none"> ◦ Congruence ◦ Modular arithmetic ◦ Chinese Remainder Theorem ◦ Extended Euclid's Algorithm ◦ Discrete Logarithm Problem ◦ Miller-Rabin Test ◦ Fermat Test • Introduction to Cryptography • Symmetric Cryptosystems <ul style="list-style-type: none"> ◦ Simplified DES, DES, AES • Public Key Cryptosystems <ul style="list-style-type: none"> ◦ RSA, ◦ Diffie-Hellman ◦ ElGamal ◦ DSA ◦ ECC • Protocols and Application <ul style="list-style-type: none"> ◦ Blind Signature (RSA, ECC etc.) ◦ Key Exchange Protocol ◦ Electronic Voting ◦ Digital Cash • Implementations using Java/C 				
Registration Fee	Rs. 3,000/-	DD favoring “ Continuing Education, NIT Rourkela ” payable at “ Rourkela ”			
Coordinator	Prof. Banshidhar Majhi	bmajhi@nitrkl.ac.in	bm_nitrkl@yahoo.com	0661-246-2355	09437221124
Address	Prof. B. Majhi, Coordinator, “CPI-2007”, Dept. of CSE, NIT Rourkela, Rourkela – 769 008, Orissa, India				
Last Date	10 May 2007.				
	Limited seats. Enrollment is strictly on first-come-first-serve Basis. Accommodation and fooding may be arranged in hostel on payment basis (Approx Rs. 60/= per day)				

Course Title	Cluster Computing				
Date	13-18 August 2007				
Course Outline	<ul style="list-style-type: none"> • Overview of cluster computing hardware and software with applications to Beowulf clusters. General introduction to the concept of a concurrent computing. • Software and software architectures for cluster computing, including both shared memory and message-passing models. • Hardware technologies for cluster computing, including a survey of the key high-speed networking technologies and symmetric multiprocessing architectures, performance tradeoffs, and application development. • Cluster setup and administration. Parallel Programming models and environments. MPI and PVM programming. Load balancing and scheduling. Performance modeling. Heterogeneous clusters. Applications in parallel numerical analysis, genetic algorithms, and fault tolerance/high availability systems. 				
Registration Fee	Rs. 3,000/-	DD favoring “ Continuing Education, NIT Rourkela ” payable at “ Rourkela ”			
Coordinator	Prof. Bibhudatta Sahoo	bdsahu@nitrkl.ac.in	bibsss@yahoo.com	0661-246-2358	09937324437
Address	Prof. B.D. Sahoo, Coordinator, “CC-2007”, Dept. of CSE, NIT Rourkela, Rourkela – 769 008, Orissa, India				
Last Date	03 August 2007.				
	Limited seats. Enrollment is strictly on first-come-first-serve Basis. Accommodation and fooding may be arranged in visitors house on payment basis.				
Course Title	Recent Trends in Object Oriented Software Development				
Date	25-29 June 2007				
Course Outline	<ul style="list-style-type: none"> • OVERVIEW OF OBJECT-ORIENTED CONCEPTS <ul style="list-style-type: none"> ◦ Basic Mechanisms ◦ Key Concepts ◦ Advantages of OOD • INTRODUCTION TO UML • UML DIAGRAMS <ul style="list-style-type: none"> ◦ Use case diagram ◦ Class diagram ◦ Sequence diagram ◦ Collaboration Diagram ◦ Activity diagram ◦ State Chart diagram • DESIGN PATTERNS • OBJECT-ORIENTED ANALYSIS <ul style="list-style-type: none"> ◦ Overview ◦ Use case model development ◦ Domain Modeling ◦ Identification Entity objects ◦ Booch's Object Identification Method ◦ Interaction Modeling ◦ CRC cards • OBJECT-ORIENTED DESIGN <ul style="list-style-type: none"> ◦ Overview ◦ Construction of Interaction diagram ◦ Construction of detailed Class diagram ◦ Design of product in terms of clients of objects ◦ Detailed Design • OOD GOODNESS CRITERIA • Object Oriented Database • RATIONAL ROSE: A Tool for OOSD 				
Registration Fee	Rs. 3,000/- (For Students)	Rs. 6,000/- (For Industry and R&D Organizations)			
	DD favoring “ Continuing Education, NIT Rourkela ” payable at “ Rourkela ”				
Coordinator	Dr. S. K. Rath				
	Dr. D. P. Mohapatra	sdnitr@gmail.com		0661-246-2356	
Address	Dr. D.P. Mohapatra, Coordinator, “OOSD-2007”, Dept. of CSE, NIT Rourkela, Rourkela – 769 008, Orissa, India				
Last Date	01 June 2007.				
	Limited seats. Enrollment is strictly on first-come-first-serve Basis. Registration fee includes boarding, lodging and course materials				