NATIONAL INSTITUTE OF ELECTRONICS AND INFORMATION TECHNOLOGY, AURANGABAD

Name of the Group: IT and Networking

Name of the course: Internet Security And Data Base Management

Course code-ITDM001

starting date:27/06/2016

Duration: 4 Months

Preamble

Business @ the speed of thought has moved from a buzzword to a business reality owing to the integration of business and technology. Digital infrastructures , Database Management and internet security have become central to any business activity. The information residing on these computers, networks are an essential asset and due care should be taken for its security. The impact of any loss of this asset or any downtime of the infrastructure is quite high with the proliferation of easy-to-use tools and open how-to-discussions, the number of people aiming to hack in to or bring down the network is high, both in this country and abroad. Hence, there is a need for heightened security measures to protect both infrastructure and data.

We are providing an opportunity for unemployed youth to acquire the requisite knowledge and skills through*"**EARN WHILE YOU LEARN SCHEME**" to get employed in Database management.

Earn While You Learn Scheme is an opportunity for a student to secure first hand and practical work experience under the guidance of a qualified and experienced Supervisor/Mentor. It also aims at active participation in the learning process through putting into practice the knowledge acquired in the classrooms. This program will help the trainee students to gain experience, add value to students' resume, develop contacts, focus on a career direction. They will gain specialized inputs on subjects along with theoretical knowledge and the experience will add value to the student's resume.

Objectives of the Course

To enhance skill &knowledge of students by providing hands on experience to face real world challenges in internet &Information Security and to maintain the Systems & Database.

Course Outcome

On completion of this course, the participant will be able to understand data which forms the back-bone of any and every organisation. It will aid in direct or indirect user access to databases.

Course Structure Database Management Internet security

Course Fees : Course Fee Rs. 2000 (Including Service tax).

Registration Fee: 100/-

For SC/ST – No Course Fee - Rs ,500 (To be paid as Caution Deposit , Refundable after Successful Completion of the Course).

Eligibility: Any Degree with Basic Computer Knowledge

Age Limit: 20 to 30 years

Intake: No. of Seats 10

How to Apply: candidates should report at NIELIT Aurangabad at 10.00 AM on 27/06/2016

Test/Interview/Test & Interview:	27/06/2016
Commencement of classes:	28/06/2016

Course Timings: Any 5 days in week(9.30-6.00pm) with 1/2 hrs. lunch break, Other than National Holidays as decided by the course coordinator

Total Hours: Lecture : 80 days x1hour/day + Hands on: 80 days x7 hours/day (through" EARN WHILE YOU LEARN SCHEME'')

How to reach : NIELIT Aurangabad is located in the Dr.BAMU CAMPUS next to university network Information centre .

Contact person: Mr. Lakshman K, Scientist "C",

*Honorarium - Students selected for the program will be paid honorarium based on the hands on hours completed per month, in different departments of NIELIT Aurangabad. At present rate of honorarium is 100 Rs for 5hrs of hands on Practicals,Rs.200/- for 7 hrs or more of hands on Practical's

Discontinuing course: No fee under any circumstance shall be refunded * subjected to rules and regulation of NIELIT Aurangabad

RULES AND REGULATIONS FOR STUDENTS UNDERGOING TRAINING PROGRAMS (Non-formal Courses) AT NIELIT, AURANGABAD

Students undergoing training programs at NIELIT, Aurangabad are required to observe the following rules during their period of stay at this centre.

GENRAL

- i. They shall attend the classes regularly as per the timetable given and attend all the examinations and complete all the assignments given.
- ii. They will be permitted to enter NIELIT, AURANGABAD premises on Holidays only when permitted by their course/group coordinator
- iii. They will not be permitted to take any property out of the Centre without prior written permission from the concerned course/group coordinator and they will report all such items being taken out at the security gate.
- iv. They will not be permitted to carry with them any electronic equipment or items such as floppy, CD, Camera, Iron box, radio, tape recorder, PC, Mobile phone with camera etc. inside the campus without prior written permission from the course coordinator concerned. Photography inside the campus is strictly prohibited.
- v. They will not use any Centre facilities until they have been given prior authorization for such use by the concerned course/group coordinator
- vi. They will be liable for all losses, damages etc. caused to NIELIT, Aurangabad property by them. NIELIT will be the sole authority to decide whether they were the cause or not.
- vii. Loss or damage of any item issued to / being used by them including the furniture shall be reported immediately.
- viii. They shall not violate any rules and regulations of their institution for doing their project at NIELIT, Aurangabad.
- ix. NIELIT reserves the right to terminate any facilities extended to them at its own discretion without assigning any reason whatsoever.
- x. They shall take prior leave sanction or in cases of emergency apply for leave addressed to course coordinator on return.
- xi. They shall strictly follow the canteen timings allotted to them
- **xii.** They should exhibit decent behavior so as not to create any disturbance to other staff and students.

EARN WHILE YOU LEARN SCHEME

Earn While You Learn Scheme is an opportunity for a student to secure first hand and practical work experience under the guidance of a qualified and experienced Supervisor/Mentor. It also aims at active participation in the learning process through putting into practice the knowledge acquired in the classrooms. This program will help the trainee students to gain experience, add value to students' resume, develop contacts, focus on a career direction. They will gain specialized inputs on subjects along with theoretical knowledge and the experience will add value to the student's resume.

Objectives:

To enhance skill &knowledge of students by providing hands on experience to face real world challenges in future employment.

To enable meritorious and needy students to earn a reasonable amount every month to meet their expenses.

To exploit the immense potential of students as a valuable human resource.

To create excellent work culture in students.

To achieve better work efficiency at a lesser cost.

Code of Conduct for Non formal Program Course Students to undergo "Earn While You Learn Scheme" at NIELIT, Aurangabad

The Student joined under "**Earn While You Learn Scheme**" of the NIELIT, Aurangabad shall observe the following Code of Conduct, which shall include but not be limited to, the following:

- i. The Student shall follow the rules and regulations, which are in general applicable to employees of the NIELIT, Aurangabad .
- ii. The Student shall follow the confidentiality protocol of the NIELIT, Aurangabad and shall not reveal to any person or organization confidential information relating to the NIELIT, Aurangabad, its work and policies.
- iii. The Student shall not take any information from any department/Lab/section either as hard or soft copy unless it is authorized him to do so by the head of department/Lab/section.
- iv. The Student shall not claim any intellectual property right, of work done at the NIELIT, Aurangabad and has to strictly maintain the confidentiality of NIELIT, Aurangabad 's intellectual property. Any violation/infringement will be viewed adversely against the Student and may lead to the termination from the course.
- v. The students concerned shall have no claim whatsoever on the results of the project work. The NIELIT, Aurangabad retains all intellectual property rights in patents, designs, software copyright (source code) and publications, if any, that may be generated during the course of project work.

- vi. Students may, with the prior permission of the NIELIT, Aurangabad, present their work to academic bodies and at seminars/conferences. However, even for this purpose information that is confidential to the NIELIT, Aurangabad cannot be revealed under any circumstances.
- vii. Any papers and documents written and/or published by the Student should carry the caveat that the views are the personal views of the Student and do not represent or reflect the views of the NIELIT, Aurangabad .
- viii. Students will follow the advice given to them by the NIELIT, Aurangabad regarding representations to third parties.
- ix. In general, Student may not interact with or represent the NIELIT, Aurangabad vis-àvis third parties. However, some Students may specifically be authorized to interact with third parties on behalf of the NIELIT, Aurangabad depending on the nature of their roles and responsibilities.
- x. No Student shall interact with or represent the NIELIT, Aurangabad to the media (print and electronic).
- xi. Students will conduct themselves professionally in their relationship with the NIELIT, Aurangabad and the public in general.
- xii. Student s are required to be present at the NIELIT, Aurangabad premises from 09.30 am to 06.00 pm, unless otherwise permitted by the Supervisor/Mentor/Course Coordinator/Group Head in writing.
- xiii. The Student has to make his/her own accommodation arrangement during the program.
- xiv. Library facility at the NIELIT, Aurangabad is limited to referencing only; borrowing of books/journals is not extended to the students of Non formal programs. However Xerox copies may be obtained from the Library on payment of necessary charges.

Termination of Non formal Program Course Students undergoing "Earn While You Learn" Scheme at NIELIT, Aurangabad

- (i) The NIELIT, Aurangabad has the right to terminate the **"Earn While You Learn" Scheme** to a student at any time without assigning any reasons whatsoever it may me and with immediate effect.
- (ii) If the Student decides to disengage from the NIELIT, Aurangabad, he should provide 2 weeks' prior notice.
- (iii) Upon termination, the Student must hand over to the NIELIT, Aurangabad, any papers, equipment or other assets which might have been given to the Student by the NIELIT, Aurangabad in course of his project work with the NIELIT, Aurangabad. This will include any badges or ID Cards which may have been issued to the Student.
- (iv) The Competent Authority may initiate appropriate action against erring Student and decision of the Competent Authority would be final and binding on the Student.

Course Syllabus:

ITDM001- Internet security and Data base Management

1. Basics on Computer Course and Data Management

- 1. Knowing computer & Basic Concepts
- 2. Operating Computer using GUI Based Operating System
- 3. Understanding Word Processing
- 4. Using Spread Sheet
- 5. Introduction to Internet, WWW and web browsers
- 6. Communications and Collaboration
- 7. Making small presentation
- 8. Financial Literacy for banking Scheme and Applications
- 9. Presentations
- 10. Database Management Systems
- 11. PC Maintenance & Troubleshooting
- 12. Networking and Troubleshooting
- 13. Latest trends in IECT & e-Governance
- 14. Application of Digital Financial Services
- 15. Soft skills

2. Information Security Awareness and concept

2.1 Introduction to Information Security

- 1. What is Information Security?
- 2. Basic Principles of Confidentiality, Integrity and Availability
- 3. Policies, Procedures and Guidelines
- 4. Administrative and Technical Measures
- 5. Current Trends in information Security

2.2 Password Security

- 1. Types of Password
- 2. Use of unique password
- 3. Use of long password
- 4. Password Managers
- 5. Password Checker
- 6. Single Sign-On

2.3 Email and Web Security

- 1. What is email SPAM?
- 2. Email Clients
- 3. Email in Public Computers
- 4. Secure web browser
- 5. Surfing in Public Computers

2.4 Physical Security

- 1. Key logger
- 2. Access control
- 3. Detection & Identification
- 4. Tips to Physical Security

2.5 Parental Control

- 1. Content Filtering
- 2. Blocking Websites
- 3. Parental control in Web Browsers
- 4. Parental control in Windows

2.6 Security Auditing

- 1. Hardening
- 2. Software Updates and Patches
- 3. OS Auditing

2.7 Social Networking Security

- 1. Social Networking
- 2. Privacy and security settings
- 3. Personal info management
- 4. Identity Theft

2.8 Cyber Security

- 1. Cyber Law
- 2. Cyber Crimes
- 3. Cyber Security