



IDB-BISEW IT Scholarship Programme

Enlistment Reference Document

Version: 09/2018

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A. What this document is about

This document contains the basic requirements and conditions that must be met by the prospective training service provider (TSP) in order to qualify for *enlistment* in the IDB-BISEW IT Scholarship Programme. Please note the following:

- a. Enlistment can only occur after a successful on-site inspection of the prospective training service provider is carried out by the Project Authority.
- b. All the given requirements and conditions shall have to be complied with before the on-site inspection for enlistment can take place.

B. Enlistment Process At A Glance

The enlistment process consists of the following steps:

- a. Applying TSP shall register for an account at the enlistment website by providing a valid email. An activation link shall be sent to the email address provided. After clicking on the link, the TSP's account shall be activated;
- b. Logging into its account, the TSP shall enter all necessary information in the given online forms;
- c. After completing the above-mentioned steps, the TSP shall print out two hard-copies of the enlistment application. The Business Contact shall affix his/her signature and company seal on both the hard-copies and submit these along with other required documents to the Project Authority;
- d. After proper review, if the Project Authority finds the submitted documents and information in order then an on-site inspection of the TSP may be carried out by the Project Authority/Project Consultant;
- e. In the event that the TSP is found to be fully compliant with programme requirements then a letter of enlistment shall be issued to the TSP confirming its enlistment in the IT Scholarship Programme. **TSPs should note that enlistment in the IDB-BISEW IT Scholarship Programme in no way guarantees the award of training contract to a TSP by IDB-BISEW.**

C. Qualified Instructors Required AFTER Enlistment

After enlistment, TSPs shall be required to make available instructors who are qualified as per IDB-BISEW's requirements. The instructors should have two years of professional experience and, depending on the training course, must possess requisite vendor certifications (for details see the section Requirements for Instructors, Hardware and Software in this document). Applying TSPs offering duly qualified instructors for more than one course shall be given preference.

D. Who can be the Business Contact (BC) on behalf of the TSP?

For the purpose of the IDB-BISEW IT Scholarship Project, the Business Contact is the person who is the owner/director of the PTSP and shall be considered as the legal representative of the PTSP by the Project Authority. In course of completing the enlistment process, the Project Authority shall communicate and interact with the Business Contact only. Only the Business Contact may sign on the printed copy of the Enlistment Application on behalf of the TSP. The proposed Business Contact must fulfil the following criteria:

- He/she must be the proprietor/partner or shareholding director (preferably CEO or MD) of the TSP
- He/she must be officially and legally empowered to enter into a binding agreement with IDB- BISEW on behalf of the TSP;
- He/she shall have the discretion and the knowledge required for directing, guiding and assisting the TSP so that the TSP is able to fulfil its responsibilities and tasks as per the standards and requirements of the IT Scholarship Programme;

E. Requirements for enlistment

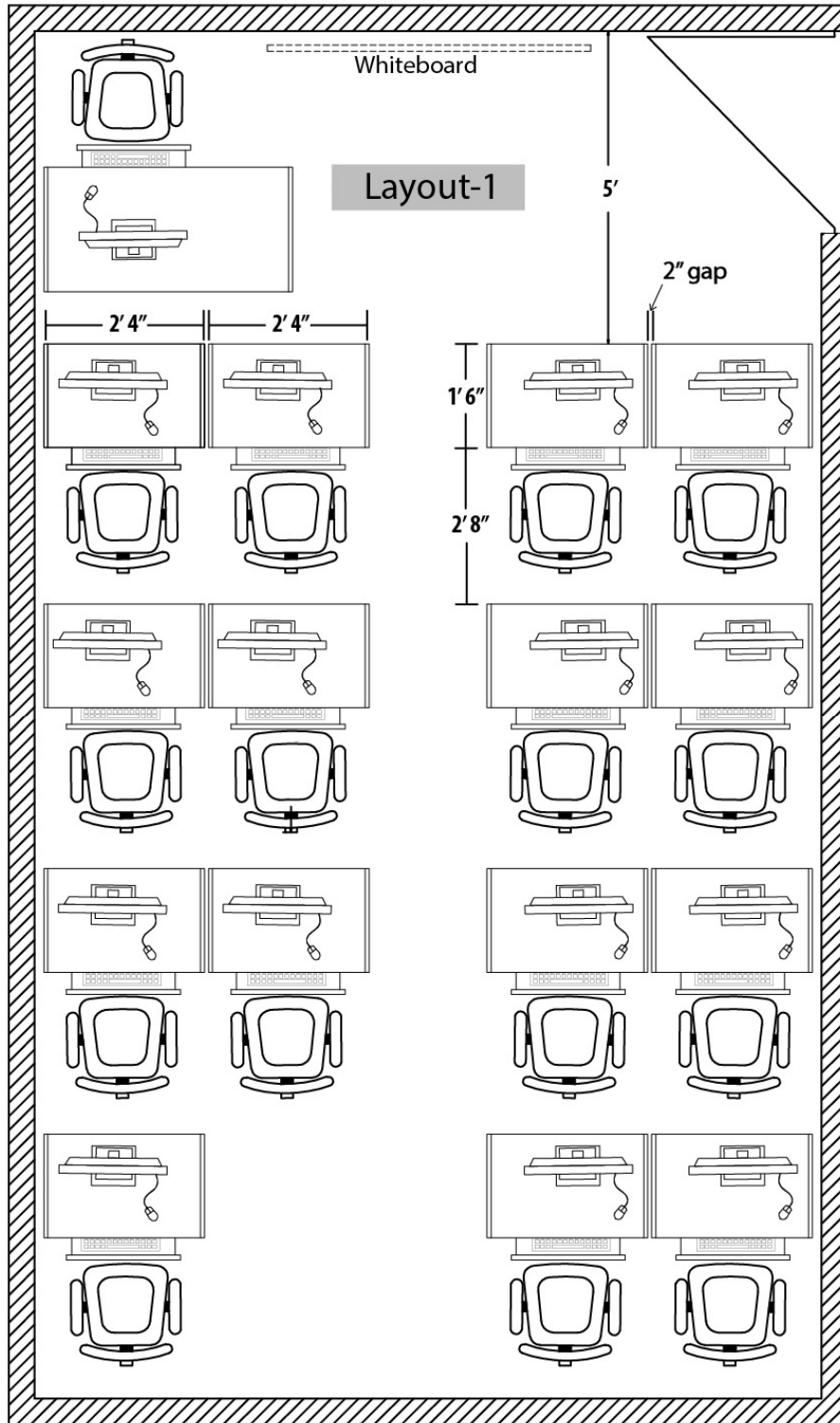
a. Legal and organizational requirements for TSPs applying for enlistment

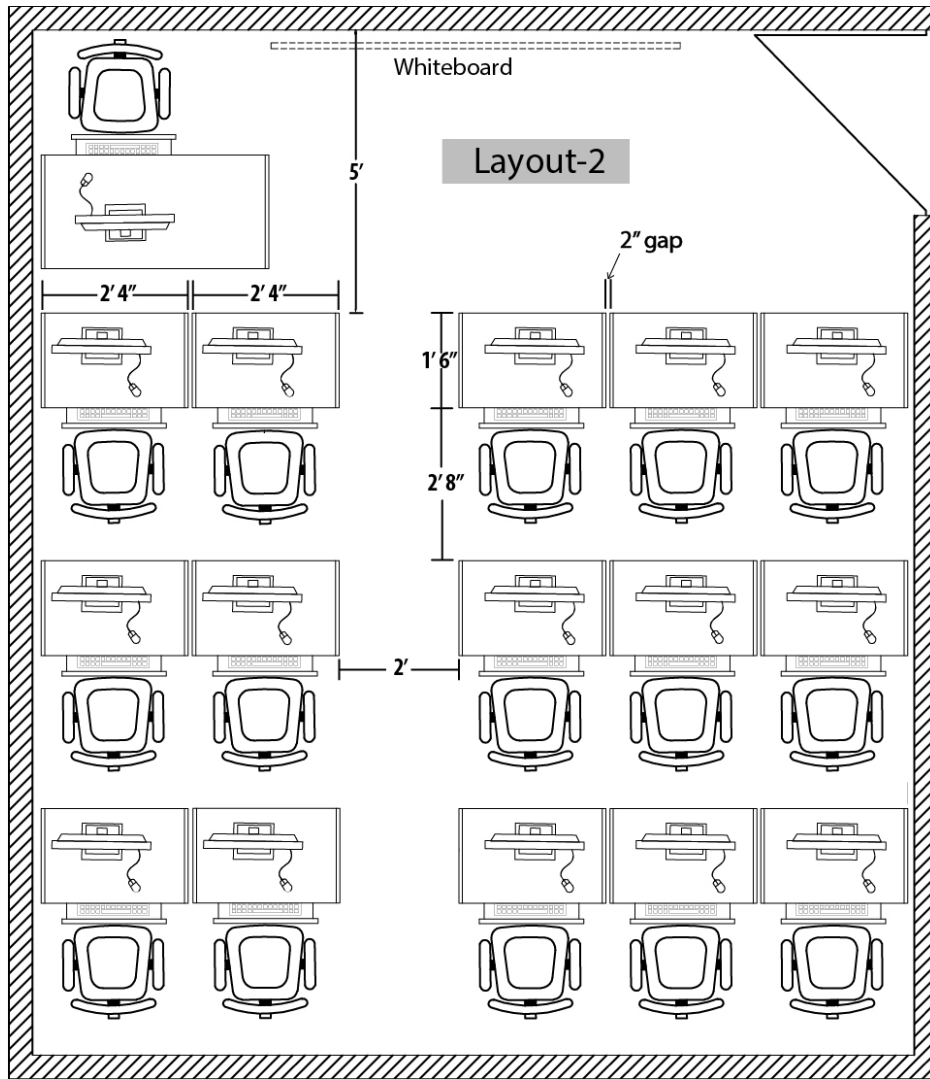
1. TSP must have a Trade License which has been valid for at least two years. The “type of business” in the Trade License must be “computer training”;
2. If the firm is a sole-proprietorship concern:
 - (i) Valid Trade License
 - (ii) Updated TIN certificate
 - (iii) Audited accounts of last two years
3. If the firm is a partnership concern:
 - (i) Valid Trade License
 - (ii) Updated TIN certificate of the company (personal TIN certificate not acceptable)
 - (iii) Audited accounts of last two years
 - (iv) Attested copy of registered partnership deed
 - (v) Partnership resolution stating the name of the partner who is authorized to handle all affairs related to IDB-BISEW
4. If the firm is a private limited company:
 - (i) Valid Trade License
 - (ii) Updated TIN certificate of the company (personal TIN certificate not acceptable)
 - (iii) Audited accounts of last two years
 - (iv) Incorporation certificate
 - (v) Memorandum and Articles of Association duly signed by the directors of the firm
 - (vi) Updated Form-XII
 - (vii) Resolution of the Board of Directors
5. must be in *continuous operation* for the past two years. The TSP shall have to furnish suitable documentary evidence to support its claim of being in IT training business for the past two years. These documents may include:
 - (i) rental lease agreement of the training centre
 - (ii) other documents as required by IDB-BISEW
6. must have two full-time instructors who have been serving in the applying TSP for at least one year;
7. must have a person designated as Centre Manager at its centre who shall look after all the training needs of IDB-BISEW batches (if awarded) and communicate with the Project Authority for routine issues. The eligibility criteria for the Centre Manager are as follows:

- (i) At least 8 years of experience in managerial/administrative role;
 - (ii) Minimum graduate;
 - (iii) Minimum 35 years of age; and
 - (iv) PA to certify the suitability of the proposed Centre Manager before accepting him/her for the position. If subsequently his/her performance is found to be unsatisfactory, an immediate replacement must take place;
 - (v) A backup person must be available at the centre, who must be capable of carrying out designated Centre Manager's role during his/her absence. This should be viewed as a stop-gap measure and frequent absence of Centre Manager will not be entertained;
8. satisfy infrastructural and technical requirements given below and comply with other prerequisites of the project as given in the section Requirements for Instructors, Hardware and Software in this document.

b. Infrastructural and technical requirements

- 1. Lab room specifications
 - (i) TSP must have at least two lab rooms that satisfy IT Scholarship Programme's requirements
 - (ii) Lab room shape has to be either square or rectangular
 - (iii) Column(s) must be flush with wall
 - (iv) Lab room size shall be clear 280 sq ft minimum
 - (v) Lab room walls must be painted white/off-white
 - (vi) Windows in the Lab room are optional. Windows, if any, must have white window blinds
 - (vii) Lab room must be soundproof
 - (viii) Concealed surface wiring. electrical points for computers, projector, and A/C
 - (ix) Mandatory ceiling fans or wall mounted fans
 - (x) Neatly dressed network & power cables
 - (xi) The lab should be clean overall and neatly maintained
- 2. Lab room layout options and furniture (*see next page*)





3. Lab Furniture and Seating Layout

- (i) Whiteboard on the wall
- (ii) Minimum table size: 18-inch x 28-inch per trainee
- (iii) Computer table must have a keyboard tray
- (iv) Minimum gap between two tables (side-by-side): 2 inches
- (v) Minimum gap between two tables (front-to-back): 32 inches (2' 8")
- (vi) Minimum 5 feet gap between the wall to the first table
- (vii) Minimum space (passage) between two rows: 2 feet

4. Other Requirements for Lab and the Training Centre

(i) Uninterruptable Power Supply (UPS)

- All monitors and CPUs, and other devices (e.g., Multimedia Projector, network devices, & peripherals, etc.) within the lab must have full UPS support.
- The UPS support should have enough capacity to maintain the computers and other devices in operation until the electric power generator takes over;

- (ii) **Electric Power Generator:**
 - Electric generator support for all PCs/monitors and also for sufficient number of fans and lights in the lab must be available;
 - The noise level of the running generator should be low enough so that the lesson delivery in the lab is not disturbed during power outages;
- (iii) **Multimedia Projector**
 - All classes sessions MUST be supported by a multimedia projector and screen;
 - Projector must be ceiling mounted and supported by UPS;
- (iv) **Air-conditioner:**

3-Tons capacity air-conditioner needs to be present in each lab;
- (v) **Fan:**

Fan(s) are also mandatory for the lab in order to keep the room at a comfortable temperature during power cuts and assist in air-conditioning during normal hours. Fan(s) may be ceiling or wall mounted.
- (vi) **Drinking Water:**

Centre must have an adequate supply of drinking water and accessible for the trainees at all hours;
- (vii) **Toilet Facilities for Male and Female:**

Must have separate toilet facilities for male and female trainees;
- (viii) **Maintenance of Toilet:**

The management must ensure that the toilet facilities are always kept clean, hygienic and in usable condition with an adequate supply of water;
- (ix) **Cabling**

Cabling that is untidy and hanging loose shall not be acceptable. Structured & neatly arranged and secured cabling is required in the lab related to:

 - Any electric powered device or conductor
 - Networking devices and LAN components
 - PC & its peripherals
- (x) **Switching/changing of the Lab and Trainees' computers**

Approved Lab(s) and computers must be dedicated for IDB-BISEW training and cannot be changed or used for any other purpose without prior approval of Project Authority.

Requirements for Instructors, Hardware and Software

Course: Architectural and Civil CAD (ACAD)

Mod.	Contents	Instructor's Requirements	Lab Requirement (Hardware)	Software Requirements
1	Computer Fundamentals	At least two (2) years of teaching experience on MS-Office	Number of PCs: 16 (Sixteen) CPU/Processor: Intel core i5 3 GHz or higher RAM: 8 GB of free system RAM should remain available for use Video sub-system: 2 GB (or higher) Video Memory on external Video Adapter Monitor: 19" minimum Hard Disk: Ten (10) GB or more of free hard-disk space in one partition (in addition to the disk space consumed by the requisite OS and software). Additional storage space for data or working files on network share is also required. DVD-ROM: DVD-ROM in all PCs Networking/Adapter: 10/100 Mbps network card connected to LAN Instructional Display: Multimedia Projector Power Conditioning: Full UPS and generator support for all PCs and servers (including monitors & projector) is a critical requirement.	Microsoft Office 2016 (OS: Windows 10 Professional)
2	Designing, Modelling & Drafting with AutoCAD	Graduate in Civil Engineer/ Architect passed from a recognized university. Minimum of two (2) years professional or teaching experience in AutoCAD and related tools		Autodesk AutoCAD 2016
3	3D Modelling & Animation with Autodesk 3DS Max	Graduate in Civil Engineer/Architect passed from a recognized university. Must have specialized training on 3DS Max. Minimum of two (2) years of professional/teaching experience in 3DS Max.		Autodesk 3DS Max 2016 or 2017
4	Engineering, Modelling and Drafting with Revit Architecture	Graduate in Civil Engineer/Architect passed from a recognized university. Must have undergone specialized training on AutoDesk Revit Architecture. Minimum of two (2) year practical/teaching experience with Revit Architecture.		Autodesk Revit Architecture 2014
5	Enhancing CAD Drawings with Adobe Photoshop	Graduate from a recognized university. Must have training on Adobe Photoshop. Minimum of two (2) years of professional/teaching experience with Adobe Photoshop.		Adobe Photoshop CC 2015
6	Implementing Project Management Principles and Practices with Microsoft Project	Graduate in Civil Engineer/Architect passed from a recognized university. Minimum of two (2) years of professional or teaching experience in PPM and MS-Project		MS Project 2013
7	Practical Project & Portfolio Development	All of the above		All of the above

Note: Version(s) of Software may be changed during the course.

Course: Graphics, Animation and Video Editing (GAVE)

Mod #	Module Name	Instructor's Requirements	Hardware Requirements	Software Requirements
1	Computer Fundamentals	At least two (2) years of teaching experience on MS-Office	CPU/Processor: Intel core i5, 3 GHz or higher	Microsoft Office 2016 (OS: Windows 10 Professional)
2	Drawing & Illustration	<ul style="list-style-type: none"> Must be a Graduate and must have training in Adobe Illustrator. Must possess: <ul style="list-style-type: none"> at least one (1) year of experience as a trainer of Graphics Design or Multimedia course including Adobe Illustrator AND at least one (1) year of professional experience with Adobe Illustrator; OR at least two (2) years of experience as a trainer of Graphics Design or Multimedia course including Adobe Illustrator. 	RAM: 8 GB of free system RAM should remain available for use (after sharing with the video subsystem, if sharing is at all used) Video sub-system: 2 GB (or higher) Video Memory on the Video Adapter (Separate Graphics Card). Monitor: 19" minimum Hard Disk: Ten (10) GB or more of FREE hard-disk space in one partition (in addition to the disk space consumed by the requisite OS and software). Additional storage space for data or working files on network share also required	Adobe Illustrator CC 2017
3	Photo Editing and Texturing	<ul style="list-style-type: none"> Must be a Graduate and must have training in Adobe Photoshop. Must possess: <ul style="list-style-type: none"> at least one (1) year of experience as a trainer of Graphics Design or Multimedia course including Adobe Photoshop AND at least one (1) year of professional experience with Adobe Photoshop; OR at least two (2) years of experience as a trainer of Graphics Design or Multimedia course including Adobe Photoshop. 	CD-ROM / DVD-ROM: In all PCs Speaker Headset: In all PCs Networking/Adapter: 10/100 Mbps network card connected to LAN	Adobe Photoshop CC 2017
4	Fundamentals of 2D Animation & Interactivity	<ul style="list-style-type: none"> Must be a Graduate and must have training in Macromedia/Adobe Flash/Adobe Animate Must possess: <ul style="list-style-type: none"> at least one (1) year of experience as a trainer of Multimedia course including Macromedia/Adobe Flash/Adobe Animate AND at least one (1) year of professional experience with Macromedia/Adobe Flash; OR at least two (2) years of experience as a trainer of Multimedia course including Macromedia/Adobe Flash. 		Adobe Animate CC 2017

Mod #	Module Name	Instructor's Requirements	Hardware Requirements	Software Requirements
5	Digital Video Editing	<ul style="list-style-type: none"> Must be a Graduate and must have training in Adobe Premiere & knowledge in Storyboarding. <p>Must possess:</p> <ul style="list-style-type: none"> at least one (1) year of experience as a trainer of Multimedia course including Adobe Premiere AND at least one (1) year of professional experience with Adobe Premiere; OR at least two (2) years of experience as a trainer of Multimedia course including Adobe Premiere. 	<p>Instructional Display: Multimedia Projector</p> <p>Power Conditioning: Full UPS and generator support for all PCs and servers (including monitors & projector) is a critical requirement</p>	Adobe Premiere Pro CC 2017
6	3D Modelling, Texturing and Animation	<ul style="list-style-type: none"> Must be a Graduate and must have training in Discreet/Autodesk 3DS Max. <p>Must possess:</p> <ul style="list-style-type: none"> at least two (2) years of experience as a trainer of Multimedia/3D/Special Effects course including Discreet/Autodesk 3DS Max AND at least one (1) year of professional experience with Discreet/Autodesk 3DS Max; OR at least three (3) years of experience as a trainer of Multimedia course including Discreet/Autodesk 3DS Max. 		Autodesk 3DS Max 2016 or 2017
7	Post Production & Composition	<ul style="list-style-type: none"> Must be a Graduate and must have training in Adobe After Effects. <p>Must possess:</p> <ul style="list-style-type: none"> at least one (1) year of experience as a trainer of Multimedia/Special Effects course including Adobe After Effects AND at least one (1) year of professional experience with Adobe After Effects; OR at least two (2) years of experience as a trainer of Multimedia course including Adobe After Effects. 		Adobe After Effects CC 2017
8	Practical Project & Portfolio Development	All of the above		All of the above

Note: Version(s) of Software may be changed during the course.

Course: Enterprise Systems Analysis & Design with C#.NET (ESAD-C#.NET)

Mod.	Module Name	Instructor's Requirements	Hardware Requirement	Software Requirement
1	Computer Fundamentals	At least two (2) years of teaching experience on MS-Office	<p>Lab Workstations: 16 PC, Core i5 (6th generation), 3 GHz or higher, 4 MB L2/L3 cache or higher, or equivalent, 8GB of free RAM, DVD-ROM, 200 GB or more of free OS partition, 18.5" Monitor and 128 MB video Memory, Microsoft DirectX 9 graphics device with WDDM driver should be capable of displaying at least 1366 x 768 pixel resolution, Mother Board Must be supported Client Hyper-V in 32 bit colour</p> <p>Servers: At least Core i5 (6th generation), 3.4 GHz, 4 MB L2/L3 cache or higher, or equivalent, 8GB of free RAM, DVD-ROM, 200 GB or more of free OS partition, 19" Monitor and 128 MB video Memory, Microsoft DirectX 9 graphics device with WDDM driver should be capable of displaying at least 1366 x 768 pixel resolution, Mother Board Must be supported Client Hyper-V in 32 bit colour</p> <p>Power Conditioning: Full UPS and generator support for all PCs and servers (including monitors & projector) is a critical requirement;</p>	<p>Windows 10 Pro, SQL Server 2016 Enterprise Edition, Visual Studio 2017 Professional, Microsoft Visio 2016 Professional, MS Office 2016 Professional, SQL Server Management Studio 2016 Enterprise, Internet Explorer 11.0 or above, IIS 10 or above</p>
2	Design and implement databases with MS SQL Server 2016 EE	At least two (2) years of professional experience on MS-SQL Server 2016 ; or One year of professional experience in software development using MS-SQL Server 2016 and one year of teaching experience on MS-SQL Server 2016.		
3	Programming with C# and .Net 4.6.1	<p>MCSD: App Builder certified (Exam codes: 70-480, 70-486, 70-487) instructor with two (2) years' experience in software development (Desktop, Web, Store Apps and Windows Mobile) using C# and WPF and .NET 4.5, MSSQL 2016 and Visual Studio 2017</p> <p>or</p> <p>MCSD: App Builder certified (Exam codes: 70-480, 70-486, 70-487) with one year of experience in software development (Desktop, Web, Store Apps and Windows Mobile) using C# and WPF and .NET 4.5, MSSQL 2016 and Visual Studio 2017 and one year of teaching experience on the above</p>		
4	OOSAD with UML using MS Visio and MS Visual Studio	<p>Graduation (4 years programme) in CSE (or equivalent or post-graduate diploma) / IDB-BISEW Graduate on related course with at least two (2) years of professional experience; or</p> <p>Graduation (4 years programme) in CSE (or equivalent or post-graduate diploma) / IDB-BISEW Graduate on related course with one year of experience in software development using UML and one year of teaching experience on UML.</p>		

Mod.	Module Name	Instructor's Requirements	Hardware Requirement	Software Requirement
5	Programming in HTML5 with JavaScript & CSS3	<p>MCSO: App Builder certified (Exam codes: 70-480, 70-486, 70-487) instructor with two (2) years' experience in software development with HTML, CSS, JS, XML or developing HTML5, CSS, JS, NodeJS, Express.JS, Web Socket, Web Worker, SignalR, iQuery, XML-based applications, Reporting & Version Controlling; or</p> <p>MCSO: App Builder certified (Exam codes: 70-480, 70-486, 70-487) instructor one year of experience in software development using HTML, CSS, JS, XML or developing HTML5, CSS, JS, NodeJS, Express.JS, Web Socket, Web Worker, SignalR, iQuery, XML-based applications, Reporting & Version Controlling and one year of teaching experience on the above.</p>	<p>Network & Internet: All PCs should be connected in a network environment (LAN) with the required servers, Internet access (5 Mbps) in all PCs in the lab;</p> <p>Instructional Display: Multimedia Projector.</p>	
6	Introduction to XML & Reporting			
7	Web Application Development with ASP.NET Web Form			
8	Developing ASP.NET MVC 5 and ASP.NET Core Web Applications			
9	Developing Web APIs, Windows Azure and Web Services			
10	Advanced Web Application Development with AngularJS and SignalR			
11	Final Course Project	All of above		

Note: Version(s) of Software may be changed during the course.

Course: Database Design and Development (DDD)

#	Module	Instructor's Requirements	Lab Requirements (Hardware)	Software Requirements
1	Computer Fundamentals	At least two (2) years of teaching experience on MS-Office	<p>Lab Workstations: 16 PC, Core i5 (6th generation), 3 GHz or higher, 8 GB of free RAM, DVD-ROM, 50 GB or more of free hard-disk space in one partition, 18.5" Monitor and 128 MB video Memory should be capable of displaying at least 1024x768 resolution in 32-bit colour</p> <p>Servers: Same as above configuration</p> <p>Power Conditioning: Full UPS and generator support for all PCs, monitors and servers (including projector) is a critical requirement;</p> <p>Network & Internet:All PCs should be connected in a network environment (LAN) with the required servers, Internet access (5 Mbps) in all PCs in the lab;</p> <p>Instructional Display: Multimedia Projector</p>	<p>MS Office 2016, Windows 10 Pro, Oracle 11g Database Server Rel 2 Enterprise Edition, Oracle 11g Developer Suite, Enterprise Edition, Oracle Application Express 5.0</p> <p><u>Deployment Note:</u> The Oracle DB server should run from a suitably configured server PC</p>
2	Programming Practices & Techniques with Database Fundamentals	Graduate; Must possess at least one-year teaching and one-year professional experience or two (2) years' professional experience as a software developer		
3	Oracle Database 11g: SQL	Graduate; OCP (Developer track in 9i/10g/11g) certified. Must possess at least one-year teaching and one-year professional experience or two (2) years' professional experience as a software developer		
4	Oracle 11g: Program with PL/SQL			
5	Oracle Forms Developer: Build Internet Applications			
6	Oracle Report Developer: Build Reports			
7	Oracle Database 11g: DBA	Graduate; OCP (Developer track in 9i/10g/11g) certified. Must possess at least one-year teaching and one-year professional experience or two (2) years' professional experience as a software developer		
8	Oracle Application Express	Graduate; OCP (Developer track in 9i/10g/11g) certified. Must possess at least one-year teaching and one-year professional experience or two (2) years' professional experience as a software developer		

Note: Version(s) of Software may be changed during the course.

Course: Enterprise Systems Analysis and Design with JEE (ESAD-JEE)

#	Module	Instructor's Requirements	Lab Requirements (Hardware)	Software Requirements
1	Computer Fundamentals	At least two (2) years of teaching experience on MS-Office	<p>Lab Workstations: 16 PC, Core i5 (6th generation), 3 GHz or higher, 8 GB of free RAM, DVD-ROM, 50 GB or more of free hard-disk space in one partition, 18.5" Monitor and 128 MB video Memory should be capable of displaying at least 1024x768 resolution in 32-bit colour</p> <p>Servers: Same as above configuration</p> <p>Power Conditioning: Full UPS and generator support for all PCs, monitors and servers (including projector) is a critical requirement;</p> <p>Network & Internet:All PCs should be connected in a network environment (LAN) with the required servers, Internet access (5 Mbps) in all PCs in the lab;</p> <p>Instructional Display: Multimedia Projector.</p>	<p>Windows 10 Pro, MS Office 2016, Dreamweaver CS3, Oracle 10g Enterprise Ed. JAVA 8 (JDK), Servlet API, Servlet and JSP Documentation, Java Web Services Developer, NetBeans IDE 8.1 or above, Apache Tomcat Webserver for Servlet & JSP, Microsoft Office Visio 2010 and Android Studio</p>
2	Web Publishing	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer. Must satisfy mandatory experience requirements with structured programming, HTML5, CSS3, JavaScript and Bootstrap		
3	Database Development using Oracle 11g	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer Must satisfy mandatory experience requirements with Oracle and Oracle-based database application development		
4	Object Oriented Programming using JAVA	Graduate; OCAJP certified instructor with two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer.		
5	Software Development using JAVA and XML	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer OCAJP certified instructor satisfying mandatory experience requirements with Core Java, Swing, JDBC, NetBeans/Eclipse, and XML		
6	O-O System Analysis and Design using UML	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer satisfying mandatory experience requirements with UML.		

#	Module	Instructor's Requirements	Lab Requirements (Hardware)	Software Requirements
7	Server-side Programming using Servlets, JSP, JSTL, Hibernate, PrimeFaces, Angular JS	Graduate; Two (2) year professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer. OCAJP certified instructor satisfying mandatory experience requirements with JSP, Hibernate, JSF, JSTL, PrimeFaces		
8	Spring, Jasper Reports	Graduate; Two (2) year professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer OCAJP certified instructor satisfying mandatory experience requirements with Spring, Jasper Report		
9	Mobile Application Development with Android	Graduate; Two (2) year professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer with Android apps.		

Note: Version(s) of Software may be changed during the course.

Course: Networking Technologies (NT)

Module.	Name of Module	Instructor's Requirement	Lab Requirement (Hardware)	Lab Requirement (Software)
1	Computer Fundamentals	At least two (2) years of teaching experience on MS-Office	PCs with a minimum configuration of Core i5 (6 th generation) or higher (64-bit compatible, Hyper-V Supported) or Equivalent with 3 GHz or higher along with the following components: 16 GB or higher RAM, 100 GB System Partition, NIC cards, RJ45 connectors, UTP/STP cables, HUB/Switch, at least 5 wireless NIC card, crimping tool, cable tester. Monitor: 18.5 " minimum; Power Conditioning: Full UPS and generator support for all PCs, monitors and servers (including projector) is a critical requirement; Network & Internet: All PCs should be connected in a network environment (LAN) with the required servers, Internet access (5 Mbps) in all PCs in the lab; Instructional Display: Multimedia Projector	MS-Office 2016, Windows 10 Professional, Windows Server 2012 Release 2, Microsoft Exchange 2013, Red Hat Enterprise Linux 7
2	Hardware Fundamentals	Minimum two (2) years of teaching experience in A+ or in hardware troubleshooting. A+ Certification is preferable. A hardware support technician is required in the lab		
3	Data Communication Systems	Minimum two (2) years of teaching experience in network and data communications or in two years' experience in technical support in a professional network environment. Network+ certification is preferable. A hardware support technician is required in the lab		
4	Administering and Configuring Microsoft Windows 10	MCSA with two years' professional experience in network administration & troubleshooting or one-year experience in teaching MCSE/ MCSA courses in addition to one-year professional experience in network administration & troubleshooting. MCSE/ MCSA with MCT is preferable. A hardware support technician is required in the lab.		
5	Installing and Configuring Windows Server 2012			
6	Administering and Managing Windows Server 2012			
7	Configuring Advanced Windows Server 2012 Services			
8	Installing & Configuring Microsoft Exchange Server 2013			
9	Red Hat Enterprise Linux System Administration I	RHCE certified/trained instructor with two (2) years of teaching experience in Linux network administration, or, two years of professional experience in Linux environment. A hardware support technician is required in the lab		
10	Red Hat Enterprise Linux System Administration II			
11	Red Hat Enterprise Linux System Administration III			

Note: Version(s) of Software may be changed during the course.

Course: Web Application Development with PHP and Frameworks (WDPF)

#	Module	Instructor's Requirements	Lab Requirements (Hardware)	Software Requirements
1	Computer Fundamentals	At least two (2) years of teaching experience on MS-Office	<p>Lab Workstations: 16 PC, Core i5 (6th generation), 3 GHz or higher, 8 GB of free RAM, DVD-ROM, 50 GB or more of free hard-disk space in one partition, 18.5" Monitor and 128 MB video Memory should be capable of displaying at least 1024x768 resolution in 32-bit colour</p> <p>Servers: Same as above configuration</p> <p>Power Conditioning: Full UPS and generator support for all PCs, monitors and servers (including projector) is a critical requirement;</p> <p>Network & Internet:All PCs should be connected in a network environment (LAN) with the required servers, Internet access (5 Mbps) in all PCs in the lab;</p> <p>Instructional Display: Multimedia Projector,</p>	<p>Windows 10 Pro, MS Office 2016, Adobe Photoshop CS3, Dreamweaver CS3, MySQL 5.2.3 and MySQL GUI Tools 5.0, xampp1.6, WordPress, CodeIgniter 2+, JQuery-1.6.4.min.js, ReactJS, Laravel, Magento, Angular JS</p>
2	Web Publishing	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer with Structured Programming, HTML5, and JavaScript		
3	CSS3, Bootstrap & Photoshop	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer with Adobe Photoshop and CSS3, Bootstrap		
4	Database Driven Web Application using PHP, MySQL	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer in dynamic website design & development involving, PHP and MySQL		
5	Application development using Magento, AngularJS & jQuery	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer. Must possess at least one year's teaching and one year of professional experience or two years' experience in Magento, AngularJS & jQuery		
6	WordPress & Theme development, Plugins & Woo commerce	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer in training and one-year professional WordPress, plugins, theme development.		

7	CodeIgniter, Laravel	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer in dynamic website design & development using CodeIgniter, Laravel		
8	ReactJs, XML	Graduate; Two (2) years professional experience as a software developer or at least one-year experience in training and one-year professional experience as a software developer using XML and ReactJS.		

Note: Version(s) of Software may be changed during the course.