



THE CITY OF NEW YORK  
 DEPARTMENT OF CITYWIDE  
 ADMINISTRATIVE SERVICES  
 APPLICATIONS CENTER  
 18 WASHINGTON STREET  
 NEW YORK, NY 10004

<b>REQUIRED FORMS</b>
APPLICATION FORM EDUCATION AND EXPERIENCE TEST PAPER FOREIGN EDUCATION FACT SHEET (IF APPLICABLE) SPECIAL INSERT

MICHAEL R. BLOOMBERG  
 Mayor

MARTHA K. HIRST  
 Commissioner

**NOTICE  
 OF  
 EXAMINATION**

**COMPUTER PROGRAMMER ANALYST**  
**Exam. No. 4045**

**WHEN TO APPLY:** From: March 2, 2005      **APPLICATION FEE: \$40.00**  
 To: March 22, 2005      *Payable only by money order to D.C.A.S. (EXAMS)*

**WHAT THE JOB INVOLVES:** Computer Programmer Analysts, under general supervision, with some latitude for independent or unreviewed action or decision, perform work in the design, development, implementation, maintenance, and enhancement of database management systems, operating systems, data communication systems, and/or computer applications; may supervise work in the development of computer programs; and perform related work.

(This is a brief description of what you might do in this position and does not include all the duties of this position.)

**THE SALARY:** The current minimum salary is \$36,144 per annum. This rate is subject to change. There are two assignment levels within this class of positions. Appointments to the higher assignment level(s) are made at the discretion of the agency.

**HOW TO APPLY:** If you believe that you meet the requirements in the "How to Qualify" section, refer to the "Required Forms" section below for the form(s) that you must fill out. Return all completed form(s) and the application fee to DCAS Applications Section, 1 Centre Street, 14th floor, New York, NY 10007 **by mail only**. Applications will not be accepted in person.

**HOW TO QUALIFY:**

**Education and Experience Requirements:** By the last day of the Application Period you must have:

- (1) A baccalaureate degree from an accredited college, including or supplemented by twenty-four (24) semester credits in computer science or a related computer field; or
- (2) A four year high school diploma or its educational equivalent plus (3) years of satisfactory full-time computer programming experience; or
- (3) A satisfactory combination of education and experience that is equivalent to (1) or (2) above. College education may be substituted for up to one year of the experience required in (2) above on the basis that sixty (60) semester credits from an accredited college is equated to one year of experience. In addition, twenty-four (24) credits from an accredited college or graduate school in computer science or a related computer field, or a certificate of at least 625 hours in computer programming from an accredited technical school (post high school) may be substituted for one year of experience. However, all candidates who attempt to qualify under option (3) must have at least a four year high school diploma or its educational equivalent and at least (1) year of satisfactory full-time computer programming experience. To receive credit, all college credits in computer science or a related computer field and/or the certificate in computer programming must be listed in Section A.2 on page 2 of the Education and Experience Test Paper.

Some examples of unacceptable experience are: End users of a computer system, program or software package; experience in the areas of end user computer technical support, computer operations, data entry/data retrieval, quality assurance (QA); end user hardware installation; end user help desk; teaching, telecommunications, experience in Microsoft Office Suite/Back Office products.

**READ CAREFULLY AND SAVE FOR FUTURE REFERENCE**

You are responsible for determining whether or not you meet the qualification requirements for this examination prior to submitting your application. If you are marked "Not Qualified," your application fee will not be refunded and your test paper(s) will not be rated.

**Residency:** City residency is not required for this position.

**English Requirement:** Candidates must be able to understand and be understood in English.

**Proof of Identity:** Under the Immigration Reform and Control Act of 1986, you must be able to prove your identity and your right to obtain employment in the United States prior to employment with the City of New York.

**REQUIRED FORM(S):**

- 1. Application for Examination:** Make sure that you follow all instructions included with your application form, including payment of fee. Save a copy of the instructions for future reference.
- 2. Education and Experience Test Paper:** Write your social security number, the examination title and number in the box at the top right side of the cover page. Fill out Sections A.1, A.2, A.3, A.4, A.5, A.6, B, and C. **This form must be filled out completely and in detail for you to receive your proper rating.** Keep a copy of your completed Education and Experience Test Paper for your records.
- 3. Foreign Education Fact Sheet (Required only if you need credit for your foreign education to meet the education and experience requirements):** If you were educated outside the United States, you must have your foreign education evaluated to determine its equivalence to education obtained in the United States. The services that are approved to make this evaluation are listed on the Foreign Education Fact Sheet included with your application packet. When you contact the evaluation service, ask for a "**document-by-document**" (**general**) evaluation of your foreign education. If you can meet the qualification requirements **only** by having completed the undergraduate or graduate credits specified in the "How to Qualify" section, you must request a "**course-by-course**" evaluation (including a "document-by-document" evaluation) of your foreign education. You must have one of these services submit its evaluation of your foreign education directly to the Department of Citywide Administrative Services no later than eight weeks from the last date for applying for this examination.
- 4. Special Insert for Selective Certification and Professional Certifications:** Write your social security number on the line at the center of Page 1 of the Special Insert.

**Part I: Selective Certification:** In each selective certification section, check the appropriate box indicating whether or not you wish to apply for that particular selective certification. If you wish to apply for selective certification, complete all information requested in that section.

**Part II: Professional Certification:** Follow the instructions to request credit for professional certification(s). **In order to receive equivalent experience credit for any professional certification you claim, you must attach a copy of your certificate.**

**THE TEST:** Your score will be determined by an education and experience test. You will receive a score of 70 points for meeting the education and experience requirements listed on Page 1. After these requirements are met, you will receive credit up to a maximum of 100 points on the following basis:

**Additional Credit:**

For full-time satisfactory experience between **January 5, 1998 and March 22, 2005** in computer programming, you will receive an additional:

- 10 points for at least 5 months but less than 1 year of experience; or
- 20 points for at least 1 year but less than 3 years of experience; or
- 30 points for at least 3 years of experience.

For full-time satisfactory experience of at least 1 year between **January 5, 1995 and January 4, 1998** in computer programming, you will receive an additional 5 points.

**A single professional certification** can be equated to either 12 months or 18 months of experience for additional credit. Part II of the Special Insert contains instructions for requesting additional credit for a professional certification, as well as a list of the acceptable professional certifications. **You may receive additional credit at either the 12 month or 18 month rate for ONE professional certification ONLY. In order to receive equivalent experience credit for any professional certification you claim, you must attach a copy of your certificate.**

Some examples of unacceptable experience are: End users of a computer system, program or software package; experience in the areas of end user computer technical support, computer operations; data entry/data retrieval, quality assurance (QA); end user hardware installation; end user help desk; teaching, telecommunications, experience in Microsoft Office Suite/Back Office products.

You will receive a maximum of one year of experience credit for each year you worked. If you have any of the above experience on a part-time basis, it will be credited according to the equivalent percent of full-time experience. Experience used to meet the minimum requirements cannot be used to gain additional credit.

Education and experience must be obtained by **the last day of the application period.**

**THE TEST RESULTS:** If you pass the education and experience test, your name will be placed in score order on an eligible list and you will be given a list number. You will be notified by mail of your test results. If you meet all requirements and conditions, you will be considered for appointment when your name is reached on the eligible list.

**ADDITIONAL INFORMATION:**

**Investigation:** All eligibles must pass a background investigation by the Department of Investigation.

**Selective Certification for Special Experience:** If you have 12 months of acceptable experience or professional certification(s) in Browser-Based Applications Development, Non-Browser-Based Applications Development, Mainframe Programming (Applications), Mainframe Programming (Systems), Database Administration (Unix), Database Administration (Windows), Database Administration (Mainframe), Novell-Based LAN Administration, Windows Server-Based LAN Administration, WAN Services, UNIX Administration, Security Administration or Synon Case Tool, you may be considered for appointment to positions requiring these types of experience or certifications through a process called Selective Certification. If you qualify for Selective Certification, you may be given preferred consideration for positions requiring these types of experience. To indicate your interest in Selective Certification, you must complete the applicable section(s) in **Part I of the Special Insert.** The acceptable professional certifications are listed in **Part II of the Special Insert.**

**Application Receipt:** You will be mailed a receipt within three months of the last date of the application period. If you do not receive this item, write to this agency, Attention: Examining Service Section, 1 Centre Street, 14th floor, New York, NY 10007 to request verification that your application was received. Include your social security number and the examination number and title in your request.

**List Termination:** The eligible list resulting from this examination will be terminated one year from the date it is established, unless extended by the Commissioner.

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The General Examination Regulations of the Department of Citywide Administrative Services apply to this examination and are part of this Notice of Examination. They are posted and copies are available in the Applications Center of the Division of Citywide Personnel Services, 18 Washington Street, NY, NY.

The City of New York is an Equal Opportunity Employer.  
Title Code No. 13651; Computer Programmer Analyst Occupational Group

**For information about other exams. and your exam. or list status, call 212-669-1357.  
Internet: [nyc.gov/html/dcas](http://nyc.gov/html/dcas)**

**COMPUTER PROGRAMMER ANALYST  
EXAMINATION NO. 4045  
SPECIAL INSERT**

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**SOCIAL SECURITY NUMBER**

**Part 1: This special insert must be completed and submitted with your application for this examination.**

All information provided must be verifiable. Please answer the questions carefully and provide all requested information. Any false or inaccurate entries may result in your disqualification. Be sure to write in your social security number above. Do **not** write your name anywhere on this form.

**SELECTIVE CERTIFICATION:**

If you wish to be considered for selective certification, you must complete the sections below which apply to you.

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**Section A.1 Selective Certification for Browser-Based Applications Development:**

Do you wish to apply for selective certification for **Browser-Based Applications Development**?

Yes  No

**Definition of Browser-Based Applications Development experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of Browser-based computer applications in a Web-based environment. Examples include, but are not limited to: HTML, XML, JavaScript, Perl, Macromedia Cold Fusion and Flash, Microsoft ASP.Net, Microsoft Visual Studio.Net, .Net Framework, ASP Web Services, C#, Filenet Development tools, Unisys Cool-Ice, Oracle Forms, Oracle Development Suite, Crystal, Oracle PL-SQL, Oracle Application Server, Oracle Developer Suite, Java, JSP.

Do you have 12 months of **Browser-Based Applications Development** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1       Box 2       Box 3       Box 4       Box 5       Box 6

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**Section A.2 Selective Certification for Non-Browser-Based Applications Development:**

Do you wish to apply for selective certification for **Non-Browser-Based Applications Development**?

Yes  No

**Definition of Non-Browser-Based Applications Development experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of Non-Browser-based computer applications in a client server environment. Examples include, but are not limited to: Microsoft Visual Basic and Visual Basic .Net, Microsoft Visual Studio.Net, .Net Framework, Foxpro and Visual Foxpro, Access, Recital, C++, Powerbuilder, Delphi.

Do you have 12 months of **Non-Browser-Based Applications Development** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1       Box 2       Box 3       Box 4       Box 5       Box 6

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**Section A.3 Selective Certification for Mainframe Programming (Applications):**

Do you wish to apply for selective certification for **Mainframe Programming (Applications)**?

Yes  No

**Definition of Mainframe Programming (Applications) experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of applications in an IBM OS/390 or Unisys OS 1100 Exec environment. Examples include, but are not limited to: CICS, COBOL, DB-2, NATURAL, ADABAS, SPUFI, QMF, DBMS 1100.

Do you have 12 months of **Mainframe Programming (Applications)** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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**Section A.4 Selective Certification for Mainframe Programming (Systems):**

Do you wish to apply for selective certification for **Mainframe Programming (Systems)**?

Yes  No

**Definition of Mainframe Programming (Systems) experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of systems in an IBM OS/390 or Unisys OS 1100 Exec environment which supports application developers. Examples include, but are not limited to: OS/390, OS 1100 Exec, ZOS, VM/ESA, ZVM, Linux, SMS, Mapper, CICS, DB-2, DBMS 1100, ADABAS, DASD, DFSMS, DFHSM, VTAM, SNA.

Do you have 12 months of **Mainframe Programming (Systems)** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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**Section A.5 Selective Certification for Database Administration (Unix):**

Do you wish to apply for selective certification for **Database Administration (Unix)**?

Yes  No

**Definition of Database Administration (Unix) experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of database management systems in a Unix environment. Examples include, but are not limited to: Oracle 8i, Informix, and DB-2.

Do you have 12 months of **Database Administration (Unix)** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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Section A.6: **Selective Certification for Database Administration (Windows):**

Do you wish to apply for selective certification for **Database Administration (Windows)**:

Yes  No

**Definition of Database Administration (Windows) experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of database systems in a Windows environment. Examples include, but are not limited to: Oracle 8i, MS SQL, Informix, and DB-2.

Do you have 12 months of **Database Administration (Windows)** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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Section A.7: **Selective Certification for Database Administration (Mainframe):**

Do you wish to apply for selective certification for **Database Administration (Mainframe)**:

Yes  No

**Definition of Database Administration (Mainframe) experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of database management systems in an IBM OS/390 or Unisys OS 1100 Exec environment. Examples include, but are not limited to: Oracle 8i, DB-2, ADABAS, DBMS 1100.

Do you have 12 months of **Database Administration (Mainframe)** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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Section A.8: **Selective Certification for Novell-Based LAN Administration Services:**

Do you wish to apply for selective certification for **Novell-Based LAN Administration Services**?

Yes  No

**Definition of Novell-Based LAN Administration Services experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of robust and secure Novell 5 (and above) Local Area Network (LAN) environments. Examples include, but are not limited to: Netware 5 (and above), GroupWise.

Do you have 12 months of **Novell-Based LAN Administration Services** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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**Section A.9: Selective Certification for Windows Server-Based LAN Administration Services:**

Do you wish to apply for selective certification for **Windows Server-Based LAN Administration Services**?

Yes  No

**Definition of Windows Server-Based LAN Administration Services experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of robust and secure production Windows 2000 (and above) Local Area Network (LAN) environments. Examples include, but are not limited to: Windows 2000 Server (and above), Citrix Server Systems.

Do you have 12 months of **Windows Server-Based LAN Administration Services** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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**Section A.10: Selective Certification for WAN Services:**

Do you wish to apply for selective certification for **WAN Services**?

Yes  No

**Definition of WAN Services experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of robust and secure Wide Area Network (WAN) environments. Examples include, but are not limited to: TCP/IP, ATM, 802.11 wireless, 802.Q VLAN, SNMP, IP Telephony, OSPF, IPSEC, SSH, SSL, DNS, and HTTP protocols; IP Subnetting, IP Routing, TCP/IP traffic analysis, Log analysis, Vulnerability analysis, Penetration testing, Network Forensics and Network programming/scripting; HP OpenView, Tivoli Netview, NAI Sniffer, TCPdump, Ethereal, Snort NIDS, PureSecure, MRTG, Check Point Firewall, IPTables Firewall, VelociRaptor Application Firewalls, Nessus, Nmap, THC, FireWalk, Syslog, SARA, SAINT, Whisker CGI scanner, LogWatch, LogSurfer, Hping2, Dsniff, John the Ripper, Sam Spade, Tripwire, L0phtCrack, LSOFF, Honeyd, LaBrea, Fragroute, TCT, EnCase, McAfee; Layer 2 switching, Layer 3 switching, routers, fiber optic switches, content switches, hardware load balancers, and VPN concentrators.

Do you have 12 months of **WAN Services** experience as described above?

Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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**Section A.11: Selective Certification for Unix Administration:**

Do you wish to apply for selective certification for **Unix Administration**?

Yes  No

**Definition of Unix Administration experience:** At least 12 months experience in design, development, implementation, maintenance and enhancement of robust and secure UNIX environments. Examples include, but are not limited to: Solaris 8 (and above), AIX, Linux, Apache webserver, Tomcat, Websphere, Bind, Sendmail; SAN Architecture concepts, Veritas SAN/Volume Manager, Storage Arrays, SAN hardware and software, Cluster Architecture, Veritas Cluster; Veritas Netbackup, shell language (Korn, Bourne, C), C++, and Perl.

Do you have 12 months of **Unix Administration** experience as described above?  Yes  No

If yes, how much? \_\_\_\_\_ / \_\_\_\_\_ From \_\_\_\_\_ / \_\_\_\_\_ To \_\_\_\_\_ / \_\_\_\_\_  
Year(s)/Month(s) Month/Year Month/Year

Check each box which corresponds to the box(es) on the Education and Experience Test Paper that qualifies you for this selective certification:

Box 1  Box 2  Box 3  Box 4  Box 5  Box 6

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**A. After the minimum requirements are met, the following industry-standard documented professional certifications will equate, for exam scoring purposes, to 18 months of experience:**

**BROWSER-BASEDAPPLICATIONS DEVELOPMENT TECHNOLOGIES:**

- \_\_\_\_\_ Actuate Certified Professional Developer (Version 7)
- \_\_\_\_\_ BEA 8.1 Certified Administrator-System Administration
- \_\_\_\_\_ BEA 8.1 Certified Architect-Enterprise Architect
- \_\_\_\_\_ BEA 8.1 Certified Developer-Build Solutions
- \_\_\_\_\_ BEA 8.1 Certified Developer-Portal Solutions
- \_\_\_\_\_ BEA 8.1 Certified Developer-Integration Solutions
- \_\_\_\_\_ Certified ColdFusion MX Developer
- \_\_\_\_\_ Cognos Access Manager
- \_\_\_\_\_ Cognos Consolidated Product Professional
- \_\_\_\_\_ Cognos DecisionStream
- \_\_\_\_\_ Cognos Impromptu Product Professional
- \_\_\_\_\_ Cognos Metrics Manager Product Professional
- \_\_\_\_\_ Cognos PowerPlay Product Professional
- \_\_\_\_\_ Cognos Planning Analyst Product Professional
- \_\_\_\_\_ Cognos Planning Contributor Product Professional
- \_\_\_\_\_ Cognos ReportNet Product Professional-Administration Track
- \_\_\_\_\_ Cognos ReportNet Product Professional-Modeling Track
- \_\_\_\_\_ Cognos ReportNet Product Professional-Reporting Track
- \_\_\_\_\_ Cognos Upfront Product Professional
- \_\_\_\_\_ Cognos Visualizer Product Professional
- \_\_\_\_\_ IBM Certified Advanced System Administrator-WebSphere Application Server for V5.0
- \_\_\_\_\_ IBM Certified Advanced System Administrator-WebSphere Application Server for Z/OS V5.0
- \_\_\_\_\_ IBM Certified Enterprise Developer-WebSphere Studio V5.0
- \_\_\_\_\_ IBM Certified Lotus Notes R5 Application Developer
- \_\_\_\_\_ IBM Certified Solutions Designer-WebSphere MQ V5.3
- \_\_\_\_\_ IBM Certified Solutions Developer-WebSphere MQ V5.3
- \_\_\_\_\_ IBM Certified Solutions Developer-WebSphere Studio V5.0
- \_\_\_\_\_ IBM Certified Solutions Developer-Web Services Development with WebSphere Studio V5.1
- \_\_\_\_\_ IBM Certified Specialist-WebSphere MQ Integrator
- \_\_\_\_\_ IBM Certified System Administrator-WebSphere Application Server V5.0
- \_\_\_\_\_ IBM Certified System Administrator-WebSphere MQ V5.3
- \_\_\_\_\_ Interwoven Certification
- \_\_\_\_\_ Oracle 9i Forms Developer Certified Professional
- \_\_\_\_\_ Peoplesoft Certified Developer
- \_\_\_\_\_ Siebel Certified Application Developer
- \_\_\_\_\_ Siebel Certified Business Analyst
- \_\_\_\_\_ Siebel Certified Consultant/Siebel Certified Instructor
- \_\_\_\_\_ Siebel Certified Data Warehouse Developer
- \_\_\_\_\_ Siebel Certified Master Analytics Consultant
- \_\_\_\_\_ Siebel Certified Server Architect
- \_\_\_\_\_ Sun Certified Business Component Developer for Java 2 Platform, Enterprise Edition 1.3
- \_\_\_\_\_ Sun Certified Developer for Java 2 Platform
- \_\_\_\_\_ Sun Certified Developer for Java Web Services
- \_\_\_\_\_ Sun Certified Enterprise Architect for J2EE (Enterprise Edition) Technology
- \_\_\_\_\_ Sun Certified Mobile Applications Developer for the Java 2 Platform Micro Edition
- \_\_\_\_\_ Sun Certified Web Component Developer for J2EE (Enterprise Edition) Platform

**NON-BROWSER-BASEDAPPLICATIONS DEVELOPMENT TECHNOLOGIES:**

- \_\_\_\_\_ Microsoft Certified Applications Developer for .Net (MCAD)
- \_\_\_\_\_ Microsoft Certified Solutions Developer for .Net (MCSA)
- \_\_\_\_\_ Microsoft Certified Solutions Developer for Visual Studio 6.0 (MCSA)
- \_\_\_\_\_ Sybase Powerbuilder V8 Associate
- \_\_\_\_\_ Sybase Powerbuilder V7 Professional
- \_\_\_\_\_ Sybase Powerbuilder V9 Professional

**MAINFRAME PROGRAMMING (APPLICATIONS):**

- \_\_\_\_\_ IBM Certified Application Developer-DB2 Universal Database v8.1 Family
- \_\_\_\_\_ IBM Certified Solutions Expert-DB2 UDB v7.1 Family Application Development

**MAINFRAME PROGRAMMING (SYSTEMS):**

- \_\_\_\_\_ IBM Certified Solutions Designer-CICS Enablement for E-Business

**DATABASE ADMINISTRATION (UNIX):**

- \_\_\_\_\_ IBM Certified Advanced Database Administrator-DB2 (Universal Database) v8.1 for Linux, Unix, and Windows.
- \_\_\_\_\_ IBM Certified Database Administrator-DB2 UDB (Universal Database) v8.1 for Linux, Unix, and Windows.
- \_\_\_\_\_ IBM Certified Solutions Designer-DB2 Business Intelligence V8
- \_\_\_\_\_ IBM Certified Solutions Expert-DB2 Content Manager OnDemand iSeries
- \_\_\_\_\_ IBM Certified Solutions Expert-DB2 Content Manager OnDemand Multiplatform
- \_\_\_\_\_ IBM Certified Solutions Expert DB2 UDB (Universal Database) V7.1 Database Administration for Unix, Windows, and OS/2
- \_\_\_\_\_ IBM Certified Solutions Expert–Informix Dynamic Server v.7 System Administrator
- \_\_\_\_\_ IBM Certified Solutions Expert–Informix Dynamic Server v.9 System Administrator
- \_\_\_\_\_ Oracle 8i Certified Professional Database Administrator
- \_\_\_\_\_ Oracle 9i DBA Oracle Certified Professional (OCP)
- \_\_\_\_\_ Oracle 9i Database Administrator Certified Master

**DATABASE ADMINISTRATION (WINDOWS):**

- \_\_\_\_\_ IBM Certified Advanced Database Administrator-DB2 Universal Database v8.1 for Linux, Unix, and Windows.
- \_\_\_\_\_ IBM Certified Database Administrator-DB2 UDB (Universal Database) v8.1 for Linux, Unix, and Windows.
- \_\_\_\_\_ IBM Certified Solutions Designer-DB2 Business Intelligence V8
- \_\_\_\_\_ IBM Certified Solutions Expert-DB2 Content Manager OnDemand iSeries
- \_\_\_\_\_ IBM Certified Solutions Expert-DB2 Content Manager OnDemand Multiplatform
- \_\_\_\_\_ IBM Certified Solutions Expert DB2 UDB (Universal Database) V7.1 Database Administration for Unix, Windows, and OS/2
- \_\_\_\_\_ IBM Certified Solutions Expert–Informix Dynamic Server v.7 System Administrator
- \_\_\_\_\_ IBM Certified Solutions Expert–Informix Dynamic Server v.9 System Administrator
- \_\_\_\_\_ Microsoft Certified Database Administrator (MCDBA)
- \_\_\_\_\_ Oracle 8i Certified Professional Database Administrator
- \_\_\_\_\_ Oracle 9i DBA Oracle Certified Professional (OCP)
- \_\_\_\_\_ Oracle 9i Database Administrator Certified Master

**DATABASE ADMINISTRATION (MAINFRAME):**

- \_\_\_\_\_ IBM Certified Advanced Database Administrator-DB2 Universal Database v8.1 for Linux, Unix, and Windows.
- \_\_\_\_\_ IBM Certified Database Administrator-DB2 UDB (Universal Database) v8.1 for Linux, Unix, and Windows.
- \_\_\_\_\_ IBM Certified Solutions Designer-DB2 Business Intelligence V8
- \_\_\_\_\_ IBM Certified Solutions Expert-DB2 Content Manager OnDemand iSeries
- \_\_\_\_\_ IBM Certified Solutions Expert-DB2 Content Manager OnDemand Multiplatform
- \_\_\_\_\_ IBM Certified Solutions Expert DB2 UDB (Universal Database) V7.1 Database Administration for OS/390 Z/OS.
- \_\_\_\_\_ IBM Certified Solutions Expert DB2 UDB (Universal Database) V7.1 Database Administration for Unix, Windows, and OS/2
- \_\_\_\_\_ IBM Certified Solutions Expert–Informix Dynamic Server v.7 System Administrator
- \_\_\_\_\_ IBM Certified Solutions Expert–Informix Dynamic Server v.9 System Administrator
- \_\_\_\_\_ Oracle 8i Certified Professional Database Administrator
- \_\_\_\_\_ Oracle 9i DBA Oracle Certified Professional (OCP)
- \_\_\_\_\_ Oracle 9i Database Administrator Certified Master

**NOVELL-BASED LAN ADMINISTRATION SERVICES:**

- \_\_\_\_\_ Novell Certified Network Administrator (CNA) 5.0
- \_\_\_\_\_ Novell Certified Network Administrator (CNA) 6.0
- \_\_\_\_\_ Novell Certified Network Engineer (CNE) 5.0
- \_\_\_\_\_ Novell Certified Network Engineer (CNE) 6.0
- \_\_\_\_\_ Novell Certified Linux Engineer (CLE)
- \_\_\_\_\_ Novell Master Certified Network Engineer (CNE) 5.0
- \_\_\_\_\_ Novell Master Certified Network Engineer (CNE) 6.0

**WINDOWS SERVER-BASED LAN ADMINISTRATION SERVICES:**

- \_\_\_\_\_ Citrix Certified Administrator (CCA)
- \_\_\_\_\_ Citrix Certified Enterprise Administrator (CCEA)
- \_\_\_\_\_ Citrix Certified Integration Architect (CCIA)
- \_\_\_\_\_ GIAC Certified Windows Security Administrator (GCWN)









\_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)-Alteon  
 \_\_\_\_\_ Nortel Networks Certified support Specialist (NNCSS)-Baystack/Business Policy Switch (BPS)  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)-CallPilot Rls 2.0  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)-Communication Server (CS) 1000  
 \_\_\_\_\_ Rls 4.0 Database Administrator  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)-Communication Server (CS) 1000 Rls 4.0  
 \_\_\_\_\_ Installation and Maintenance  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)-Contivity VPN Switch  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)-MPS 500 Installation and Maintenance  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)- MPS 500 Technical Support  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)-MPS Application Developer  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS) –MPS Application Developer-Speech  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Meridian SL-100 Maintenance  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–OPtera Metro 3000  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–OPtera Metro 5000  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Passport 7000/15000  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Passport 8600 Routing Switch  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–MPS 100 Application Developer  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–MPS Installation and Maintenance  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–MPS 100 Technical Support  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Call Center Server  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Call Center Server 5.0  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Call Center Server 5.0 App  
 \_\_\_\_\_ Developer  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Call Center Server Installation  
 \_\_\_\_\_ and Maintenance  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Call Center Server TAPI/Agent  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Call Center Server TAPI/Agent  
 \_\_\_\_\_ Install and Maintain  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Express Call Center  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Express Call Center Installation  
 \_\_\_\_\_ and Maintenance  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–Symposium Web Center Portal  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–VoIP Multimedia Communication Server  
 \_\_\_\_\_ (MCS) 5100 2.0  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–VoIP Multimedia Communication Server  
 \_\_\_\_\_ (MCS) 5100 3.0  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–VoIP Succession 1000/1000M Rls. 3.0 DB  
 \_\_\_\_\_ Administrator  
 \_\_\_\_\_ Nortel Networks Certified Support Specialist (NNCSS)–VoIP Succession 1000/1000M Rls. 3.0  
 \_\_\_\_\_ Installation and Maintenance

**Security Administration**

\_\_\_\_\_ Check Point Certified Security Principles Associate (CCSPA)  
 \_\_\_\_\_ GIAC Information Security Fundamentals (GISF)