

Computer and Information Sciences
Verifications of Completion
2009-2010

<p style="text-align: center;">IBM iSeries 400 Server Operations</p> <p>VERIFICATION OF COMPLETION</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Required Courses</u></th> <th style="text-align: right;"><u>Units</u></th> </tr> </thead> <tbody> <tr> <td>CIS 103 Computer Programming Logic</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td>CIS 141 iSeries 400 Operations</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CIS 141A Operations Navigator Control Language</td> <td style="text-align: right;">1.5</td> </tr> <tr> <td>CIS 240 Programming</td> <td style="text-align: right;">3</td> </tr> <tr> <td style="border-top: 1px solid black;">Total Verification Requirements</td> <td style="text-align: right; border-top: 1px solid black;">11</td> </tr> </tbody> </table> <p>A verification of completion in the IBM iSeries 400 Operations Verification of Completion will be granted by the division upon completion of 11 units.</p>	<u>Required Courses</u>	<u>Units</u>	CIS 103 Computer Programming Logic	3.5	CIS 141 iSeries 400 Operations	3	CIS 141A Operations Navigator Control Language	1.5	CIS 240 Programming	3	Total Verification Requirements	11	<p style="text-align: center;">A+ Certification Preparation</p> <p>VERIFICATION OF COMPLETION</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Required Courses</u></th> <th style="text-align: right;"><u>Units</u></th> </tr> </thead> <tbody> <tr> <td>CIS 58A PC Operating Systems A+ Certification</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td>CIS 58B PC Core Hardware A+ Certification</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td style="border-top: 1px solid black;">Total Verification Requirements</td> <td style="text-align: right; border-top: 1px solid black;">7</td> </tr> </tbody> </table> <p>A verification of completion in the A+ Certification Preparation Verification will be granted by the division upon completion of 7 units.</p>	<u>Required Courses</u>	<u>Units</u>	CIS 58A PC Operating Systems A+ Certification	3.5	CIS 58B PC Core Hardware A+ Certification	3.5	Total Verification Requirements	7				
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<p style="text-align: center;">Database Application Development For Microsoft Access</p> <p>VERIFICATION OF COMPLETION</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Required Courses</u></th> <th style="text-align: right;"><u>Units</u></th> </tr> </thead> <tbody> <tr> <td>CIS 80 Programming in Access Computer Programming</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td>CIS 103 Logic</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td>CIS 155 Microsoft Access Visual Basic.NET</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td>CIS 186 Programming</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td style="border-top: 1px solid black;">Total Verification Requirements</td> <td style="text-align: right; border-top: 1px solid black;">14</td> </tr> </tbody> </table> <p>Note: CIS 103 can be replaced by CIS 180 or CIS 182 with the approval of the verification advisor.</p> <p>A verification of completion in the Database Application Development for Microsoft Access Verification will be granted by the division upon completion of 14 units.</p>	<u>Required Courses</u>	<u>Units</u>	CIS 80 Programming in Access Computer Programming	3.5	CIS 103 Logic	3.5	CIS 155 Microsoft Access Visual Basic.NET	3.5	CIS 186 Programming	3.5	Total Verification Requirements	14	<p style="text-align: center;">Software Development in C++/Visual C#</p> <p>VERIFICATION OF COMPLETION</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Required Courses</u></th> <th style="text-align: right;"><u>Units</u></th> </tr> </thead> <tbody> <tr> <td>CIS 103 Computer Programming Logic</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td>CIS 180 Programming in C/C++ Object-Oriented</td> <td style="text-align: right;">3.5</td> </tr> <tr> <td>CIS 280 Programming in C++ Windows Programming with</td> <td style="text-align: right;">3</td> </tr> <tr> <td>CIS 281 Visual C#.NET</td> <td style="text-align: right;">3</td> </tr> <tr> <td style="border-top: 1px solid black;">Total Verification Requirements</td> <td style="text-align: right; border-top: 1px solid black;">13</td> </tr> </tbody> </table> <p>CIS 103 may be replaced by CIS 182 with the approval of the department or requirement may be met by successfully submitting a Requisite Clearance Request form or Requisite Challenge Waiver form.</p> <p>A verification of completion in Software Development in C++/Visual C# will be granted by the division upon completion of 13 units.</p>	<u>Required Courses</u>	<u>Units</u>	CIS 103 Computer Programming Logic	3.5	CIS 180 Programming in C/C++ Object-Oriented	3.5	CIS 280 Programming in C++ Windows Programming with	3	CIS 281 Visual C#.NET	3	Total Verification Requirements	13
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Cyber Security

VERIFICATION OF COMPLETION

Required Courses		Units
CIS 70A	Network Fundamentals	3.5
CIS 70K	Wireless Network Network Security	3
CIS 70L	Fundamentals	3.5
CIS 72B	Special Topics in Security	3.5
CIS 213H	Microsoft Windows Security	3.5
Total Verification Requirements		17

A verification of completion in the Cyber Security Verification will be granted by the division upon completion of 17 units.

Software Development in Database Application

VERIFICATION OF COMPLETION

Required Courses		Units
CIS 103	Computer Programming Logic	3.5
CIS 186	Visual Basic.NET Programming	3.5
CIS 207	Database Design and SQL Database Programming in	3.5
CIS 221B	VB.NET	3
Total Verification Requirements		13.5

A verification of completion in the Software Development Database Application Verification of Completion will be granted by the division upon completion of 13.5 units.

Software Development in JAVA

VERIFICATION OF COMPLETION

Required Courses		Units
CIS 103	Computer Programming Logic	3.5
CIS 182	JAVA Programming Advanced Java	3.5
CIS 282	Programming Java Server Pages (JSP)	3.5
CIS 283A	Programming	3.5
Total Verification Requirements		14

The CIS 103 requirement may be met by successfully submitting a Requisite Clearance form or a Requisite challenge and wavier form.

A verification of completion in the Software Development in JAVA will be granted by the division upon completion of 14 units.

Microsoft Systems Administrator

VERIFICATION OF COMPLETION

Required Courses		Units
CIS 212	Introduction to Microsoft Windows Administration	3.5
CIS 213A	Windows Active Directory Administration	3.5
or		
CIS 213J	Implementing a Windows 2003 Active Directory	(3.5)
CIS 213B	Implementing a Windows 2000 Network Infrastructure	3.5
or		
CIS 213I	Implementing a Windows 2003 Network Infrastructure	(3.5)
CIS 213F	Windows 2003 Server Administration	3.5
CIS 213K	Designing A Windows Active Directory and Network Infrastructure	3.5
Total Verification Requirements		17.5

A verification of completion in the Microsoft Systems Administrator Verification of Completion will be granted by the division upon completion of 17.5 units.

Linux Application Productivity

VERIFICATION OF COMPLETION

Required Courses		Units
CIS 85	Unix Productivity Tools	3.5
CIS 101	Introduction to CIS	3
CIS 214	Unix/Linux Fundamentals	3.5
Total Verification Requirements		10

A verification of completion in the Linux Application Productivity Verification will be granted by the division upon completion of 10 units.

Network Administrator

VERIFICATION OF COMPLETION

Required Courses		Units
CIS 70A	Network Fundamentals	3.5
CIS 70B	LAN	3.5
CIS 70D	TCP/IP	1.5
CIS 70E	Switching / Routing	3.5
	Advanced Switching /	
CIS 70F	Routing	3.5
Total Verification Requirements		15.5

A verification of completion in the Network Administrator Verification of Completion will be granted by the division upon completion of 15.5 units.

Computer Information Systems Analyst

VERIFICATION OF COMPLETION

Required Courses		Units
	Computer Programming	
CIS 103	Logic	3.5
	Visual Basic.NET	
CIS 186	Programming	3.5
	Systems Analysis and	
CIS 201	Design	3
CIS 202A	Project Management for IT	3.5
CIS 202B	Microsoft Project	3.5
Total Verification Requirements		17

A verification of completion in the Computer Information Systems Analyst Verification will be granted by the division upon completion of 17 units.

Software Development in Visual Basic.NET

VERIFICATION OF COMPLETION

Required Courses		Units
	Computer Programming	
CIS 103	Logic	3.5
	Visual Basic.NET	
CIS 186	Programming	3.5
	Object-Oriented	
CIS 221A	Programming in VB.NET	3
	Database Programming in	
CIS 221B	VB.NET	3
Total Verification Requirements		13

CIS 103 may be replaced by CIS 180 or CIS 182 with the approval of the department, or the requirement may be met by successfully submitting a Requisite Clearance Request from or a Requisite Challenge & Waiver form.

A verification of completion in the Software Development in Visual Basic.NET will be granted by the division upon completion of 13 units.

Software Development in the Unix/Linux Environment

VERIFICATION OF COMPLETION

Required Courses		Units
	Computer Programming	
CIS 103	Logic	3.5
CIS 180	Programming in C/C++ Unix Programming in	3.5
CIS 181A	C/C++	3.5
CIS 214	Unix/Linux Fundamentals	3.5
Total Verification Requirements		14

A verification of completion in the Software Development in the Unix/Linux Environment Verification of Completion will be granted by the division upon completion of 14 units.

Unix Administration

VERIFICATION OF COMPLETION

Required Courses		Units
CIS 214	Unix/Linux Fundamentals	3.5
CIS 215B	Solaris Administration I	3.5
CIS 215C	Solaris Administration II	3.5
Total Verification Requirements		10.5

A verification of completion in the Unix Administration Verification of Completion will be granted by the division upon completion of 10.5 units.

Web Client Development

VERIFICATION OF COMPLETION

Required Courses		Units
	Computer Programming	
CIS 103	Logic	3.5
CIS 125	JavaScript for Programmer	1.5
CIS 160	Web Page Development	3.5
CIS 205	Programming in HTML	1.5
Total Verification Requirements		10

A verification of completion in the Web Client Development Verification of Completion will be granted by the division upon completion of 10 units.

Web Server Development

VERIFICATION OF COMPLETION

Required Courses		Units
	Computer Programming	
CIS 103	Logic	3.5
	Visual Basic.NET	
CIS 186	Programming	3.5
CIS 205	Programming in HTML	1.5
CIS 285A	ASP.NET Programming	3.5
Total Verification Requirements		12

A verification of completion in the Web Server Development Verification of Completion will be granted by the division upon completion of 12 units.