On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order are available through GSA Advantage!, a menu-driven database system. The Internet address for GSA Advantage! is: http://www.gsaadvantage.gov

WORLDWIDE FEDERAL SUPPLY SCHEDULE CONTRACT
SCHEDULE TITLE: GENERAL PURPOSE COMMERCIAL INFORMATION TECHNOLOGY EQUIPMENT, SOFTWARE, AND SERVICES
FSC GROUP: 70

CONTRACT NUMBER:
GS-35F-257BA

PERIOD COVERED BY CONTRACT:
March 7, 2014 through March 6, 2019

UMBC Training Centers LLC
6996 Columbia Gateway Drive
Suite 100
Columbia, MD 21046
(P) 443-692-6600
(F) 443-692-6602
www.umbctraining.com

Contractor’s Administration Source: crichards@umbctraining.com

General Services Administration
Management Services Center Acquisition Division
Modification #__, dated ___

Business Size: Large Business
DUNS: 19-835-0394

For more information on ordering from Federal Supply Schedules click on the FSS Schedules button at http://www.fss.gsa.gov.
GSA AWARDED TERMS AND CONDITIONS
UMBC TRAINING CENTERS LLC

1a. Table of awarded special item number(s) with appropriate cross-reference to item descriptions and awarded price(s).

SIN 132-50: Training Courses
SIN 132-51: Information Technology Professional Services

1b. Identification of the lowest priced model number and lowest unit price for that model for each special item number awarded in the contract.

Refer to Awarded Pricelist

2. Maximum order.

SIN 132-50: $25,000
SIN 132-51: $500,000

3. Minimum order.

$100.00

4. Geographic coverage (delivery area).

48 Contiguous States including Washington, DC, Alaska, Hawaii, and Puerto Rico

5. Point(s) of production (city, county, and State or foreign country).

Columbia, MD

6. Discount from list prices or statement of net price.

Refer to Awarded Pricelist

7. Quantity discounts.

1% discount on single orders between $100,000 - $250,000
2.5% discount on single orders greater than $250,000

8. Prompt payment terms.

0%, Net 30 Days

9a. Government purchase cards are accepted at or below the micro-purchase threshold

9b. Government purchase cards are NOT accepted above the micro-purchase threshold

10. Foreign items (list items by country of origin).

NOT APPLICABLE

11a. Time of delivery.

Determined at the Task Order Level

11b. Expedited Delivery.

Determined at the Task Order Level
11c. Overnight and 2-day delivery.
    Determined at the Task Order Level

11d. Urgent Requirements.
    Determined at the Task Order Level

12. F.O.B. point.
    Destination

13a. Ordering address.
    UMBC Training Centers LLC
    6996 Columbia Gateway Drive
    Suite 100
    Columbia, MD 21046
    P: 443-692-6600
    F: 443-692-6602

13b. Ordering procedures: Ordering activities shall use the ordering procedures described in Federal Acquisition Regulations 8.405 when placing an order or establishing a BPA for supplies or services. The ordering procedures, information on Blanket Purchase Agreements (BPA’s) and a sample BPA can also be found at the GSA/FSS Schedule Homepage (fss.gsa.gov/schedules).

14. Payment address.
    UMBC Training Centers LLC
    Attn: Accounts Receivable
    6996 Columbia Gateway Drive
    Suite 100
    Columbia, MD 21046
    P: 443-692-6600
    F: 443-692-6602

15. Warranty provision.
    NOT APPLICABLE

16. Export packing charges, if applicable.
    NOT APPLICABLE

17. Terms and conditions of Government purchase card acceptance (any thresholds above the micro-purchase level).
    ACCEPTED AT OR BELOW THE MICRO-PURCHASE THRESHOLD

18. Terms and conditions of rental, maintenance, and repair (if applicable).
    NOT APPLICABLE

19. Terms and conditions of installation (if applicable).
    NOT APPLICABLE

20. Terms and conditions of repair parts indicating date of parts price lists and any discounts from list prices (if applicable).
    NOT APPLICABLE

20a. Terms and conditions for any other services (if applicable).
    NOT APPLICABLE
21. List of service and distribution points (if applicable).

UMBC Training Centers LLC
6996 Columbia Gateway Drive
Suite 100
Columbia, MD 21046
P: 443-692-6600
F: 443-692-6602

22. List of participating dealers (if applicable).

NOT APPLICABLE

23. Preventive maintenance (if applicable).

NOT APPLICABLE

24a. Special attributes such as environmental attributes (e.g., recycled content, energy efficiency, and/or reduced pollutants).

NOT APPLICABLE

24b. If applicable, indicate that Section 508 compliance information is available on Electronic and Information Technology (EIT) supplies and services and show where full details can be found (e.g. contractor’s website or other location.) The EIT standards can be found at:

www.Section508.gov/

NOT APPLICABLE

25. Data Universal Number System (DUNS) number:

19-835-0394

26. Notification regarding registration in Central Contractor Registration (CCR) database.

CAGE Code 399N3, active in SAM
About UMBC Training Centers
UMBC Training Centers extends the academic excellence of UMBC to working professionals and organizations through the delivery of high quality professional, scientific and technical training. Core programs include:

- Information Technology
- Cybersecurity
- Engineering and Systems Engineering
- Program and Project Management
- Innovation and Organizational Effectiveness
- Leadership Development

Training can be delivered at one of Training Centers’ facilities, onsite or online. In addition to delivering training, as a Prometric and VUE testing center, Training Centers can deliver professional certification examinations for those students pursuing credentials such as the Project Management Professional (PMP) or Certified Ethical Hacker (CEH) certifications.

Programs can be customized to meet the specific needs of an organization.

About UMBC
The University of Maryland, Baltimore County (UMBC) is an Honors University in Maryland and is a member of the University System of Maryland. UMBC has been ranked the #1 “Up and Coming” National University by U.S. News and World Report for four years for its academic innovation and student services. UMBC serves over 13,000 students and conducts over $80M annually in research and training grants.
1. SCOPE
a. The Contractor shall provide training courses normally available to commercial customers, which will permit ordering activity users to make full, efficient use of general purpose commercial IT products. Training is restricted to training courses for those products within the scope of this solicitation.

b. The Contractor shall provide training at the Contractor's facility and/or at the ordering activity's location, as agreed to by the Contractor and the ordering activity.

2. ORDER
Written orders, EDI orders (GSA Advantage! and FACNET), credit card orders, and orders placed under blanket purchase agreements (BPAs) shall be the basis for the purchase of training courses in accordance with the terms of this contract. Orders shall include the student's name, course title, course date and time, and contracted dollar amount of the course.

3. TIME OF DELIVERY
The Contractor shall conduct training on the date (time, day, month, and year) agreed to by the Contractor and the ordering activity.

4. CANCELLATION AND RESCHEDULING
a. The ordering activity will notify the Contractor at least seventy-two (72) hours before the scheduled training date, if a student will be unable to attend. The Contractor will then permit the ordering activity to either cancel the order or reschedule the training at no additional charge. In the event the training class is rescheduled, the ordering activity will modify its original training order to specify the time and date of the rescheduled training class.

b. In the event the ordering activity fails to cancel or reschedule a training course within the time frame specified in paragraph a, above, the ordering activity will be liable for the contracted dollar amount of the training course. The Contractor agrees to permit the ordering activity to reschedule a student who fails to attend a training class within ninety (90) days from the original course date, at no additional charge.

c. The ordering activity reserves the right to substitute one student for another up to the first day of class.

d. In the event the Contractor is unable to conduct training on the date agreed to by the Contractor and the ordering activity, the Contractor must notify the ordering activity at least seventy-two (72) hours before the scheduled training date.

5. FOLLOW-UP SUPPORT
The Contractor agrees to provide each student with unlimited telephone support or online support for a period of one (1) year from the completion of the training course. During this period, the student may contact the Contractor's instructors for refresher assistance and answers to related course curriculum questions.

6. PRICE FOR TRAINING
The price that the ordering activity will be charged will be the ordering activity training price in effect at the time of order placement, or the ordering activity price in effect at the time the training course is conducted, whichever is less.

7. INVOICES AND PAYMENT
Invoices for training shall be submitted by the Contractor after ordering activity completion of the training course. Charges for training must be paid in arrears (31 U.S.C. 3324). PROMPT PAYMENT DISCOUNT, IF APPLICABLE, SHALL BE SHOWN ON THE INVOICE.

8. FORMAT AND CONTENT OF TRAINING

a. The Contractor shall provide written materials (i.e., manuals, handbooks, texts, etc.) normally provided with course offerings. Such documentation will become the property of the student upon completion of the training class.

b. **If applicable** For hands-on training courses, there must be a one-to-one assignment of IT equipment to students.

c. The Contractor shall provide each student with a Certificate of Training at the completion of each training course.

d. The Contractor shall provide the following information for each training course offered:
   (1) The course title and a brief description of the course content, to include the course format (e.g., lecture, discussion, hands-on training);
   (2) The length of the course;
   (3) Mandatory and desirable prerequisites for student enrollment;
   (4) The minimum and maximum number of students per class;
   (5) The locations where the course is offered;
   (6) Class schedules; and
   (7) Price (per student, per class (if applicable)).

e. For those courses conducted at the ordering activity’s location, instructor travel charges (if applicable), including mileage and daily living expenses (e.g., per diem charges) are governed by Pub. L. 99-234 and FAR Part 31.205-46, and are reimbursable by the ordering activity on orders placed under the Multiple Award Schedule, as applicable, in effect on the date(s) the travel is performed. Contractors cannot use GSA city pair contracts. The Industrial Funding Fee does NOT apply to travel and per diem charges.

f. For Online Training Courses, a copy of all training material must be available for electronic download by the students.

9. “NO CHARGE” TRAINING

The Contractor shall describe any training provided with equipment and/or software provided under this contract, free of charge, in the space provided below.

N/A

__________________________________________________________
__________________________________________________________
1. **SCOPE**
   a. The prices, terms and conditions stated under Special Item Number 132-51 Information Technology Professional Services apply exclusively to IT Professional Services within the scope of this Information Technology Schedule.
   b. The Contractor shall provide services at the Contractor’s facility and/or at the ordering activity location, as agreed to by the Contractor and the ordering activity.

2. **PERFORMANCE INCENTIVES**
   **I-FSS-60 Performance Incentives (April 2000)**
   a. Performance incentives may be agreed upon between the Contractor and the ordering activity on individual fixed price orders or Blanket Purchase Agreements under this contract.
   b. The ordering activity must establish a maximum performance incentive price for these services and/or total solutions on individual orders or Blanket Purchase Agreements.
   c. Incentives should be designed to relate results achieved by the contractor to specified targets. To the maximum extent practicable, ordering activities shall consider establishing incentives where performance is critical to the ordering activity’s mission and incentives are likely to motivate the contractor. Incentives shall be based on objectively measurable tasks.

3. **ORDER**
   a. Agencies may use written orders, EDI orders, blanket purchase agreements, individual purchase orders, or task orders for ordering services under this contract. Blanket Purchase Agreements shall not extend beyond the end of the contract period; all services and delivery shall be made and the contract terms and conditions shall continue in effect until the completion of the order. Orders for tasks which extend beyond the fiscal year for which funds are available shall include FAR 52.232-19 (Deviation – May 2003) Availability of Funds for the Next Fiscal Year. The purchase order shall specify the availability of funds and the period for which funds are available.
   b. All task orders are subject to the terms and conditions of the contract. In the event of conflict between a task order and the contract, the contract will take precedence.

4. **PERFORMANCE OF SERVICES**
   a. The Contractor shall commence performance of services on the date agreed to by the Contractor and the ordering activity.
   b. The Contractor agrees to render services only during normal working hours, unless otherwise agreed to by the Contractor and the ordering activity.
   c. The ordering activity should include the criteria for satisfactory completion for each task in the Statement of Work or Delivery Order. Services shall be completed in a good and workmanlike manner.
   d. Any Contractor travel required in the performance of IT Services must comply with the Federal Travel Regulation or Joint Travel Regulations, as applicable, in effect on the date(s) the travel is performed. Established Federal Government per diem rates will apply to all Contractor travel. Contractors cannot use GSA city pair contracts.

5. **STOP-WORK ORDER**
   **(FAR 52.242-15) (AUG 1989)**
   (a) The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this contract for a period of 90 days after the order is delivered to the Contractor, and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within
a period of 90 days after a stop-work is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either-

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if-

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon the claim submitted at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

6. INSPECTION OF SERVICES


7. RESPONSIBILITIES OF THE CONTRACTOR

The Contractor shall comply with all laws, ordinances, and regulations (Federal, State, City, or otherwise) covering work of this character. If the end product of a task order is software, then FAR 52.227-14 (Dec 2007) Rights in Data – General, may apply.

8. RESPONSIBILITIES OF THE ORDERING ACTIVITY

Subject to security regulations, the ordering activity shall permit Contractor access to all facilities necessary to perform the requisite IT Professional Services.

9. INDEPENDENT CONTRACTOR

All IT Professional Services performed by the Contractor under the terms of this contract shall be as an independent Contractor, and not as an agent or employee of the ordering activity.

10. ORGANIZATIONAL CONFLICTS OF INTEREST

a. Definitions.

“Contractor” means the person, firm, unincorporated association, joint venture, partnership, or corporation that is a party to this contract.
“Contractor and its affiliates” and “Contractor or its affiliates” refers to the Contractor, its chief executives, directors, officers, subsidiaries, affiliates, subcontractors at any tier, and consultants and any joint venture involving the Contractor, any entity into or with which the Contractor subsequently merges or affiliates, or any other successor or assignee of the Contractor.

An “Organizational conflict of interest” exists when the nature of the work to be performed under a proposed ordering activity contract, without some restriction on ordering activities by the Contractor and its affiliates, may either (i) result in an unfair competitive advantage to the Contractor or its affiliates or (ii) impair the Contractor’s or its affiliates’ objectivity in performing contract work.

b. To avoid an organizational or financial conflict of interest and to avoid prejudicing the best interests of the ordering activity, ordering activities may place restrictions on the Contractors, its affiliates, chief executives, directors, subsidiaries and subcontractors at any tier when placing orders against schedule contracts. Such restrictions shall be consistent with FAR 9.505 and shall be designed to avoid, neutralize, or mitigate organizational conflicts of interest that might otherwise exist in situations related to individual orders placed against the schedule contract. Examples of situations, which may require restrictions, are provided at FAR 9.508.

11. INVOICES

The Contractor, upon completion of the work ordered, shall submit invoices for IT Professional services. Progress payments may be authorized by the ordering activity on individual orders if appropriate. Progress payments shall be based upon completion of defined milestones or interim products. Invoices shall be submitted monthly for recurring services performed during the preceding month.

12. PAYMENTS

For firm-fixed price orders the ordering activity shall pay the Contractor, upon submission of proper invoices or vouchers, the prices stipulated in this contract for service rendered and accepted. Progress payments shall be made only when authorized by the order. For time-and-materials orders, the Payments under Time-and-Materials and Labor-Hour Contracts at FAR 52.212-4 (MAR 2009) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to time-and-materials orders placed under this contract. For labor-hour orders, the Payment under Time-and-Materials and Labor-Hour Contracts at FAR 52.212-4 (MAR 2009) (ALTERNATE I – OCT 2008) (DEVIATION I – FEB 2007) applies to labor-hour orders placed under this contract. 52.216-31(Feb 2007) Time-and-Materials/Labor-Hour Proposal Requirements—Commercial Item Acquisition As prescribed in 16.601(e)(3), insert the following provision:

(a) The Government contemplates award of a Time-and-Materials or Labor-Hour type of contract resulting from this solicitation.
(b) The offeror must specify fixed hourly rates in its offer that include wages, overhead, general and administrative expenses, and profit. The offeror must specify whether the fixed hourly rate for each labor category applies to labor performed by—

(1) The offeror;
(2) Subcontractors; and/or
(3) Divisions, subsidiaries, or affiliates of the offeror under a common control.

13. RESUMES

Resumes shall be provided to the GSA Contracting Officer or the user ordering activity upon request.

14. INCIDENTAL SUPPORT COSTS

Incidental support costs are available outside the scope of this contract. The costs will be negotiated separately with the ordering activity in accordance with the guidelines set forth in the FAR.
15. APPROVAL OF SUBCONTRACTS

The ordering activity may require that the Contractor receive, from the ordering activity's Contracting Officer, written consent before placing any subcontract for furnishing any of the work called for in a task order.

16. DESCRIPTION OF IT PROFESSIONAL SERVICES AND PRICING

a. The Contractor shall provide a description of each type of IT Service offered under Special Item Numbers 132-51 IT Professional Services should be presented in the same manner as the Contractor sells to its commercial and other ordering activity customers. If the Contractor is proposing hourly rates, a description of all corresponding commercial job titles (labor categories) for those individuals who will perform the service should be provided.

b. Pricing for all IT Professional Services shall be in accordance with the Contractor's customary commercial practices; e.g., hourly rates, monthly rates, term rates, and/or fixed prices, minimum general experience and minimum education.

The following is an example of the manner in which the description of a commercial job title should be presented:

**EXAMPLE:** Commercial Job Title: System Engineer

Minimum/General Experience: Three (3) years of technical experience which applies to systems analysis and design techniques for complex computer systems. Requires competence in all phases of systems analysis techniques, concepts and methods; also requires knowledge of available hardware, system software, input/output devices, structure and management practices.

Functional Responsibility: Guides users in formulating requirements, advises alternative approaches, conducts feasibility studies.

Minimum Education: Bachelor's Degree in Computer Science
PREAMBLE

UMBC Training Centers LLC provides commercial products and services to ordering activities. We are committed to promoting participation of small, small disadvantaged and women-owned small businesses in our contracts. We pledge to provide opportunities to the small business community through reselling opportunities, mentor-protégé programs, joint ventures, teaming arrangements, and subcontracting.

COMMITMENT

To actively seek and partner with small businesses.

To identify, qualify, mentor and develop small, small disadvantaged and women-owned small businesses by purchasing from these businesses whenever practical.

To develop and promote company policy initiatives that demonstrate our support for awarding contracts and subcontracts to small business concerns.

To undertake significant efforts to determine the potential of small, small disadvantaged and women-owned small business to supply products and services to our company.

To insure procurement opportunities are designed to permit the maximum possible participation of small, small disadvantaged, and women-owned small businesses.

To attend business opportunity workshops, minority business enterprise seminars, trade fairs, procurement conferences, etc., to identify and increase small businesses with whom to partner.

To publicize in our marketing publications our interest in meeting small businesses that may be interested in subcontracting opportunities.

We signify our commitment to work in partnership with small, small disadvantaged and women-owned small businesses to promote and increase their participation in ordering activity contracts. To accelerate potential opportunities please contact:

Carolyn Richards, Director of Operations

Phone: 443-692-6600

E-mail: crichards@umbctraining.com

Fax: 443-692-6602
(Insert Customer Name)

In the spirit of the Federal Acquisition Streamlining Act (ordering activity) and (Contractor) enter into a cooperative agreement to further reduce the administrative costs of acquiring commercial items from the General Services Administration (GSA) Federal Supply Schedule Contract(s) ____________________.

Federal Supply Schedule contract BPAs eliminate contracting and open market costs such as: search for sources; the development of technical documents, solicitations and the evaluation of offers. Teaming Arrangements are permitted with Federal Supply Schedule Contractors in accordance with Federal Acquisition Regulation (FAR) 9.6.

This BPA will further decrease costs, reduce paperwork, and save time by eliminating the need for repetitive, individual purchases from the schedule contract. The end result is to create a purchasing mechanism for the ordering activity that works better and costs less.

Signatures

________________________________________  ____________________________  
Ordering Activity  Date  Contractor  Date
Pursuant to GSA Federal Supply Schedule Contract Number(s)____________, Blanket Purchase
Agreements, the Contractor agrees to the following terms of a Blanket Purchase Agreement (BPA)
EXCLUSIVELY WITH (ordering activity):
(1) The following contract items can be ordered under this BPA. All orders placed against this BPA
are subject to the terms and conditions of the contract, except as noted below:

<table>
<thead>
<tr>
<th>MODEL NUMBER/PART NUMBER</th>
<th>*SPECIAL BPA DISCOUNT/PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>________________________</td>
<td>__________________________</td>
</tr>
<tr>
<td>________________________</td>
<td>__________________________</td>
</tr>
</tbody>
</table>

(2) Delivery:

<table>
<thead>
<tr>
<th>DESTINATION</th>
<th>DELIVERY SCHEDULES / DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>______________</td>
<td>_________________________</td>
</tr>
<tr>
<td>______________</td>
<td>_________________________</td>
</tr>
</tbody>
</table>

(3) The ordering activity estimates, but does not guarantee, that the volume of purchases through
this agreement will be _______________________.

(4) This BPA does not obligate any funds.

(5) This BPA expires on ______________ or at the end of the contract period, whichever is
earlier.

(6) The following office(s) is hereby authorized to place orders under this BPA:

<table>
<thead>
<tr>
<th>OFFICE</th>
<th>POINT OF CONTACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>______________</td>
<td>__________________</td>
</tr>
<tr>
<td>______________</td>
<td>__________________</td>
</tr>
</tbody>
</table>

(7) Orders will be placed against this BPA via Electronic Data Interchange (EDI), FAX, or paper.

(8) Unless otherwise agreed to, all deliveries under this BPA must be accompanied by delivery
tickets or sales slips that must contain the following information as a minimum:

(a) Name of Contractor;
(b) Contract Number;
(c) BPA Number;
(d) Model Number or National Stock Number (NSN);
(e) Purchase Order Number;
(f) Date of Purchase;
(g) Quantity, Unit Price, and Extension of Each Item (unit prices and extensions need not be
shown when incompatible with the use of automated systems; provided, that the invoice is
itemized to show the information); and
(h) Date of Shipment.

(9) The requirements of a proper invoice are specified in the Federal Supply Schedule contract.
Invoices will be submitted to the address specified within the purchase order transmission issued against
this BPA.

(10) The terms and conditions included in this BPA apply to all purchases made pursuant to it. In the
event of an inconsistency between the provisions of this BPA and the Contractor’s invoice, the provisions
of this BPA will take precedence.

*******************************************************************************************
Federal Supply Schedule Contractors may use “Contractor Team Arrangements” (see FAR 9.6) to provide solutions when responding to a ordering activity requirements.

These Team Arrangements can be included under a Blanket Purchase Agreement (BPA). BPAs are permitted under all Federal Supply Schedule contracts.

Orders under a Team Arrangement are subject to terms and conditions or the Federal Supply Schedule Contract.

Participation in a Team Arrangement is limited to Federal Supply Schedule Contractors.

Customers should refer to FAR 9.6 for specific details on Team Arrangements.

Here is a general outline on how it works:

• The customer identifies their requirements.
• Federal Supply Schedule Contractors may individually meet the customers needs, or -
• Federal Supply Schedule Contractors may individually submit a Schedules “Team Solution” to meet the customer’s requirement.
• Customers make a best value selection.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Description</th>
<th>Course Length</th>
<th>Prerequisites</th>
<th>Course Schedule and Location</th>
<th>Min/Max # of Students for Group Classes</th>
<th>Net Access Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH-3122C</td>
<td>Capturing Systems Requirements</td>
<td>This course prepares the student to properly identify, define and confirm the assessment requirements when they are needed. It is the design and development of the system. The key to every project's success, accurately scoped requirements is not only essential for meeting stakeholders' expectations, but also to avoid costly delays, added cost for rework, and poor customer relations.</td>
<td>3-days</td>
<td>NA</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
</tr>
<tr>
<td>CH-3123C</td>
<td>Hacking Requirements</td>
<td>It should be a goal of every system development project to deliver a system free of defects, no one will do a cost-effective manner. This course is designed to give students the practical skills and the specific techniques to build the core defect covers into three methods of building and maintaining systems. The primary emphasis of the workshop is to avoid errors rather than do-re-work to correct them.</td>
<td>3-days</td>
<td>NA</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
</tr>
<tr>
<td>CH-4803A</td>
<td>Counterintelligence for IT Professionals</td>
<td>This course provides counterintelligence, competition intelligence, and security awareness for cybersecurity professionals in both government and private industry. Students will be provided an overview of the intelligence community and an introduction to counterintelligence. The course identifies threats to national security and private industry interests from foreign adversaries, insiders, and various traditional and non-traditional sources. Students are introduced to counterintelligence and law enforcement agencies with cybersecurity or cybercounterintelligence missions and gain tools and techniques for building effective relationships within these organizations. The course provides an in-depth review of operations security practices to identify threats and vulnerabilities, assess risk, and employ countermeasures. The course helps students understand the requirements for safe and secure reporting of illicit activity information. At the end of this course, students will gain an understanding of traditional espionage, economic espionage, trade secret theft, and related crimes. Students will differentiate among traditional, non-traditional, and insider threat's national security and private industry interests and identify activities and emerging indications of such activity. Students will learn about the risks and responsibilities of cybersecurity professionals in preventing, detecting, and reporting illicit activity. Students will learn to identify cyber-attacks to their organization and develop skills needed to safeguard information systems at their organizations.</td>
<td>2-days</td>
<td>The year of IT work experience</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
</tr>
<tr>
<td>CH-4804A</td>
<td>Service Oriented Architecture (SOA) for Security Professionals</td>
<td>Students will learn the security implications of SOA and how to design and implement secure SOA systems.</td>
<td>2-days</td>
<td>NA</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
</tr>
<tr>
<td>CH-4805A</td>
<td>Computer Forensic Investigator (CFI)</td>
<td>Computer forensic investigations are the process of detecting hacking attacks and property extracting evidence to report the crime and conduct audits to prevent future attacks. Computer forensics enables the systematic and careful identification of evidence in criminal-related crime and abuse cases. This may range from tracing the track of a hacker through a client's systems, to tracing the origin of forensic malware, to recovering signs of fraud. The CFI course will provide participants the necessary skills to identify an intruder's fingerprints and properly gather the necessary evidence to prosecute in the court of law. It is no longer a matter of &quot;will your organization be comprised?&quot; but rather, &quot;when?&quot; Today's threats between corporations, governments, and citizens are no longer just a trip to the top floor of a building. Instead, there is a higher level of concern with the spread of information and data breaches using physical force. How the battlefield now is in the technical realm, which is in most every facet of modern life. If your or your organization requires the knowledge or skills to identify, track, and remove the footprint of a file, this course is designed for you. This 6-week course will be taught during this course, including software frameworks and specialized techniques.</td>
<td>3-days</td>
<td>The completion of the CFI course is recommended.</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
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<th>Course Code</th>
<th>Course Title</th>
<th>Course Description</th>
<th>Course Length</th>
<th>Prerequisites</th>
<th>Course Schedule and Location</th>
<th>Min/Max # of Students for Group Classes</th>
<th>Net Access Fee</th>
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</thead>
<tbody>
<tr>
<td>CH-3122C</td>
<td>Capturing Systems Requirements</td>
<td>This course prepares the student to properly identify, define and confirm the assessment requirements when they are needed. It is the design and development of the system. The key to every project's success, accurately scoped requirements is not only essential for meeting stakeholders' expectations, but also to avoid costly delays, added cost for rework, and poor customer relations.</td>
<td>3-days</td>
<td>NA</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
</tr>
<tr>
<td>CH-3123C</td>
<td>Hacking Requirements</td>
<td>It should be a goal of every system development project to deliver a system free of defects, no one will do a cost-effective manner. This course is designed to give students the practical skills and the specific techniques to build the core defect covers into three methods of building and maintaining systems. The primary emphasis of the workshop is to avoid errors rather than do-re-work to correct them.</td>
<td>3-days</td>
<td>NA</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
</tr>
<tr>
<td>CH-4803A</td>
<td>Counterintelligence for IT Professionals</td>
<td>This course provides counterintelligence, competition intelligence, and security awareness for cybersecurity professionals in both government and private industry. Students will be provided an overview of the intelligence community and an introduction to counterintelligence. The course identifies threats to national security and private industry interests from foreign adversaries, insiders, and various traditional and non-traditional sources. Students are introduced to counterintelligence and law enforcement agencies with cybersecurity or cybercounterintelligence missions and gain tools and techniques for building effective relationships within these organizations. The course provides an in-depth review of operations security practices to identify threats and vulnerabilities, assess risk, and employ countermeasures. The course helps students understand the requirements for safe and secure reporting of illicit activity information. At the end of this course, students will gain an understanding of traditional espionage, economic espionage, trade secret theft, and related crimes. Students will differentiate among traditional, non-traditional, and insider threat's national security and private industry interests and identify activities and emerging indications of such activity. Students will learn about the risks and responsibilities of cybersecurity professionals in preventing, detecting, and reporting illicit activity. Students will learn to identify cyber-attacks to their organization and develop skills needed to safeguard information systems at their organizations.</td>
<td>2-days</td>
<td>The year of IT work experience</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
</tr>
<tr>
<td>CH-4804A</td>
<td>Service Oriented Architecture (SOA) for Security Professionals</td>
<td>Students will learn the security implications of SOA and how to design and implement secure SOA systems.</td>
<td>2-days</td>
<td>NA</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
</tr>
<tr>
<td>CH-4805A</td>
<td>Computer Forensic Investigator (CFI)</td>
<td>Computer forensic investigations are the process of detecting hacking attacks and property extracting evidence to report the crime and conduct audits to prevent future attacks. Computer forensics enables the systematic and careful identification of evidence in criminal-related crime and abuse cases. This may range from tracing the track of a hacker through a client's systems, to tracing the origin of forensic malware, to recovering signs of fraud. The CFI course will provide participants the necessary skills to identify an intruder's fingerprints and properly gather the necessary evidence to prosecute in the court of law. It is no longer a matter of &quot;will your organization be comprised?&quot; but rather, &quot;when?&quot; Today's threats between corporations, governments, and citizens are no longer just a trip to the top floor of a building. Instead, there is a higher level of concern with the spread of information and data breaches using physical force. How the battlefield now is in the technical realm, which is in most every facet of modern life. If your or your organization requires the knowledge or skills to identify, track, and remove the footprint of a file, this course is designed for you. This 6-week course will be taught during this course, including software frameworks and specialized techniques.</td>
<td>3-days</td>
<td>The completion of the CFI course is recommended.</td>
<td>UMBC Designated Site</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Access Fee</td>
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**Course pricing:**
- **Price Per Student:** $1,158.01
- **Group Pricing (5):** $10,444.00
- **Group Pricing (20):** $18,452.14
- **Price Per Additional Student (Groups):** $658.01

**Net Access Fee:**
- **Price Per Student:** $1,158.01
- **Group Pricing (5):** $10,444.00
- **Group Pricing (20):** $18,452.14
- **Price Per Additional Student (Groups):** $658.01
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<th>Course Code</th>
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<th>Prerequisites</th>
<th>Course Schedule and Location</th>
<th>Min/Max # of Students for Group Classes</th>
<th>Net Access Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY-6046C</td>
<td>EC-Council Certified Security Analyst (CESA)</td>
<td>This course teaches the student the fundamental concepts, methodologies, and tools necessary to analyze the network traffic for the purposes of intrusion and threat detection, network defense, and two proficiency operations. The hands-on course begins with discussing the role of network packet analysis in computer network operations (2019). After a detailed discussion of the TCP/IP protocol suite and enhanced network operations, the student progresses using the common TCP stack and related tools to capture and analyze self-generated network traffic. Students then are asked to examine current network vulnerability methods that illustrate various exploits, network reconnaissance techniques, and more advanced network attacks. The course concludes with an extensive real-world exercise in which the student must utilize all of the concepts and tools learned in class to analyze and fully characterize the various network threats and breaches.</td>
<td>5 days</td>
<td>Certified Ethical Hacking training and certification. UMBR Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,998.81</td>
<td></td>
</tr>
<tr>
<td>CY-6046C</td>
<td>EC-Council Network Security Analyst (CMA)</td>
<td>The course teaches the student the fundamental concepts, methodologies, and tools necessary to analyze network traffic for the purposes of intrusion and threat detection, network defense, and two proficiency operations. The hands-on course begins with discussing the role of network packet analysis in computer network operations (2019). After a detailed discussion of the TCP/IP protocol suite and enhanced network operations, the student progresses using the common TCP stack and related tools to capture and analyze self-generated network traffic. Students then are asked to examine current network vulnerability methods that illustrate various exploits, network reconnaissance techniques, and more advanced network attacks. The course concludes with an extensive real-world exercise in which the student must utilize all of the concepts and tools learned in class to analyze and fully characterize the various network threats and breaches.</td>
<td>5 days</td>
<td>Certified Ethical Hacking training and certification. UMBR Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,998.81</td>
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</tr>
<tr>
<td>CY-6045C</td>
<td>Network and Packet Analysis</td>
<td>This hands-on class will empower students to understand the basics of network defense and introduce them to the fundamental tools and techniques used. Moreover, a solid foundation in methodology will be developed allowing students to use the tools in practical hands-on laboratory sessions to identify and analyze threats on the network. This class is designed to give students a comprehensive understanding of network defense. The offensive side is highlighted during the course to illustrate how attackers gain access and will do to compromise a network. The defensive side begins with an understanding of the public facing interface and focuses on the various methodologies used for protection. The class progresses from focusing on understanding network security, host security, intrusion detection and detection to incident response. Tools, techniques, and methodology are emphasized in an interactive environment where students will be exposed to various defensive tactics and processes.</td>
<td>4 days</td>
<td>Security certification or equivalent experience. Certified Ethical Hacking (CEH) training is recommended but not required. Students should have familiarity with operating system concepts (Windows and Linux/Unix), good Linux and Windows skills and a solid knowledge of TCP/IP and associated networking concepts. UMBR Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,998.81</td>
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</tr>
<tr>
<td>CY-6045C</td>
<td>Network Defense</td>
<td>Malware Analysis (Triage) was developed to provide students with a comprehensive hands-on experience into the process, tools, and procedures used to identify common types of malware and to quickly determine their capabilities and threat level. This course teaches students concepts and methods involved in finding, analyzing, and characterizing malware to determine how aware of a threat it may pose within a system or network. The course include significant amounts of hands-on practical application of skills learned. Students are introduced to topics and concepts through lectures that are given a series of lab exercises to reinforce that learning and build skills. Students must exercise the malware analysis methodology and conduct open source research of characteristics identified in order to successfully complete the goals of the course.</td>
<td>3 days</td>
<td>UMBR Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>747.32</td>
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</tr>
<tr>
<td>CY-6045C</td>
<td>Malware Analysis (Triage)</td>
<td>The Metasploit Framework course was developed to provide students with an introduction to an exploitation framework and suite of penetration testing tools commonly used by penetration testers. This course provides students with an initial overview of the capabilities and contents of the Metasploit Framework and shows them how to install, maneuver within it and maintain it. The course is designed as a precursor to the Penetration Testing class. Metasploit Framework training course uses the Metasploit Framework to teach students how to breach, infer, and expand access within networks.</td>
<td>3 days</td>
<td>Metasploit Framework training and certification recommended but not required. Students should have familiarity with operating system concepts (Windows and Linux/Unix), solid understanding of TCP/IP and associated networking concepts. UMBR Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>570.81</td>
<td></td>
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<tr>
<td>CY-6046C</td>
<td>Metasploit Framework</td>
<td>Metasploit Framework training is recommended but not required. Students should have familiarity with operating system concepts (Windows and Linux/Unix), solid understanding of TCP/IP and associated networking concepts. UMBR Designated Site</td>
<td>2 days</td>
<td>UMBR Designated Site</td>
<td>Price Per Student (Group)</td>
<td>747.32</td>
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<tr>
<td>CY-6045C</td>
<td>Network Defense</td>
<td>Metasploit Framework training is recommended but not required. Students should have familiarity with operating system concepts (Windows and Linux/Unix), solid understanding of TCP/IP and associated networking concepts. UMBR Designated Site</td>
<td>2 days</td>
<td>UMBR Designated Site</td>
<td>Price Per Student (Group)</td>
<td>747.32</td>
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<td>Course Code</td>
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<td>Course Schedule and Location</td>
<td>Min/Max # of Students for Group Classes</td>
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<tr>
<td>CL-4647C</td>
<td>Penetration Testing Methodology</td>
<td>Penetration Testing Methodology includes significant amounts of hands-on practical application of skills learned. Students are introduced to topics and concepts through lectures then given a series of lab exercises to reinforce learning and build skills. Students must exercise the penetration testing methodology, process and analyze collected data, and develop the necessary knowledge and skills to successfully complete the goals of the course.</td>
<td>5 Days</td>
<td>Students attending the course should have a strong understanding of how data traverses a network, basic UNIX and Windows competency, and comfort working with the command line.</td>
<td>UNMC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$1,696.80</td>
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<tr>
<td>CL-4648B</td>
<td>Web Development for Secure Systems</td>
<td>The advanced course introduces low developers to key technologies for developing secure web services. Specifically, we focus on XML signatures and encryption standards, the HTTPS security specification and status files, and the Security Assertion Markup Language (SAML). Students practice signing and encrypting XML message content, and configuring SSL tools to support signatures and encryption of SOAP messages under the Java IM for Web-Based RPC (WS-SEC).</td>
<td>3 Days</td>
<td>Students taking this course should have a solid Java programming experience as assumed. Some knowledge of J2EE architecture and development is also recommended.</td>
<td>UNMC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$635.82</td>
</tr>
<tr>
<td>CL-4656D</td>
<td>Securing Java Web Services</td>
<td>This program provides candidates with the skills, knowledge and credentials necessary to successfully begin a career in the field of Information Technology and Cybersecurity. The program was designed by UMBC Training Centers in collaboration with senior executives and technical staff from the Department of Defense, Leading Government Contractors, and Fortune 500 companies.</td>
<td>3 Days</td>
<td>Students are expected to be able to read and write XML, have a basic understanding of Java, and have some familiarity with XML Schema.</td>
<td>UNMC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$635.82</td>
</tr>
<tr>
<td>CL-4681C</td>
<td>Certificate in Cyber Foundations</td>
<td>This program provides candidates with the skills, knowledge and credentials necessary to successfully begin a career in the field of Information Technology and Cybersecurity. The program was designed by UMBC Training Centers in collaboration with senior executives and technical staff from the Department of Defense, Leading Government Contractors, and Fortune 500 companies.</td>
<td>18 Days</td>
<td>Students taking this program should have good end user skills with Windows-based personal computers, a strong interest in computers and technology, and good problem solving skills.</td>
<td>UNMC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$1,934.62</td>
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<tr>
<td>CL-4682D</td>
<td>Certificate in Cybersecurity</td>
<td>This program provides candidates with the skills, knowledge and credentials necessary to successfully begin a career in the field of Information Technology and Cybersecurity. The program was designed by UMBC Training Centers in collaboration with senior executives and technical staff from the Department of Defense, Leading Government Contractors, and Fortune 500 companies.</td>
<td>17 Days</td>
<td>Students should already have completed our Certificate in Cyber Foundations, or possess equivalent skills and experience.</td>
<td>UNMC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$2,534.25</td>
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<tr>
<td>CL-4684B</td>
<td>Certificate in Cyber Operations</td>
<td>UMBC Training Centers has launched the Cybersecurity Academy to address the tremendous need for cyber professionals in the workforce. This full-time, immersive training program is designed to prepare participants for immediate employment in cybersecurity job specialties within government and industry. The Certificate in Cyber Operations will develop program participants from a basic competence in computers and technology up to the level of a competent, entry-level professional as a Cyber Analyst or Operator.</td>
<td>75 Days</td>
<td>This program is closely aligned with the National Initiative for Standards and Technology (NIST) release of the National Initiative for Cybersecurity Education (NICE) Framework.</td>
<td>UNMC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$3,923.82</td>
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<td>Price Per Student</td>
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<tr>
<td>CY-484K</td>
<td>Securing Java Web Applications</td>
<td>This advanced course shows experienced developers of Java web applications how to secure those applications and to apply best practices with regard to secure enterprise coding. Authorization, authentication, and input validation are major themes, and students get good exposure to Java access controls for specific development contexts, as well as thorough discussions of HTTPS authentication and certificate management, error handling, logging, and debugging.</td>
<td>3 Days</td>
<td>Java programming experience is essential. For programming experience is required.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20)</td>
<td>$18,462.50</td>
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<tr>
<td>CY-486K</td>
<td>Certified Ethical Hacker (CEH)</td>
<td>This class will immerse the students into an interactive environment where they will be shown how to scan, test, hack, and secure their own systems. The ethically driven environment gives each student in-depth knowledge and practical experience with the current essential security systems. Students will begin by understanding how perimeter defense works and then be led into scanning and attacking their own networks, via real-world lab exercises. Students then learn how intruders exploit privileges and what steps can be taken to secure a system. Students will also learn about Intrusion Detection, Policy Creation, Social Engineering, DDOS Attacks, Buffer Overflows and Virus Infection. When a student leaves the course, they will have hands-on understanding and experience in Ethical Hacking.</td>
<td>5 Days</td>
<td>Bring Microsoft Windows skills and a good understanding of computer networking are required.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20)</td>
<td>$10,741.70</td>
</tr>
<tr>
<td>CY-488K</td>
<td>Certified Information Systems Security Professional (CISSP)</td>
<td>This course will significantly benefit security officers, auditors, security professionals, system administrators, and anyone who is concerned about the integrity of the network infrastructure. This course prepares the student for the CISSP Certification Exam exam.</td>
<td>5 Days</td>
<td>Bring Microsoft Windows skills and a good understanding of computer networking are required. CompTIA Security and Network certification or equivalent knowledge; Minimum one year of practical industry experience in networking is strongly recommended.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20)</td>
<td>$16,561.94</td>
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<tr>
<td>CY-488K</td>
<td>CompTIA Security+</td>
<td>CompTIA Security+ is the primary course you will need to take for your job responsibilities include securing network services, network devices, and network traffic. It is also the main course you will take to prepare for the CompTIA Security+ Certification Exam. The course is structured to develop your knowledge and professional experience with computer hardware, operating systems, and networks so you acquire the specific skills required to implement basic security services on any type of computer network. The Security+ Certification offers a designed for the individual interested in obtaining CompTIA's vendor-neutral, industry-standard, entry-level IT Security credential, in order to pursue an advance career as a computer security professional, or enhance any IT career role that has security implications. The security+ course of study is also appropriate as a Pre-requisite to the CISSP or other advanced course of study.</td>
<td>4 Days</td>
<td>Bring Microsoft Windows skills and fundamental understanding of computer and networking concepts are required. CompTIA Enabling Network+ Certification or equivalent knowledge, and some practical industry experience in networking are strongly recommended.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20)</td>
<td>$27,004.64</td>
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**Pricing Details:**
- **Student Pricing:** $1,995.54
- **Group Pricing (8):** $11,630.23
- **Group Pricing (10):** $19,069.27
- **Group Pricing (20):** $35,731.74
- **Price Per Additional Student (Groups):** $681.05
- **Additional Group Pricing:** $967.57
- **Price Per Student:** $1,362.89
- **Group Pricing (8):** $19,064.71
- **Group Pricing (10):** $27,004.64
- **Group Pricing (20):** $51,365.24
- **Price Per Additional Student (Groups):** $1,362.89
- **Student Pricing:** $1,995.54
- **Group Pricing (8):** $11,630.23
- **Group Pricing (10):** $19,069.27
- **Group Pricing (20):** $35,731.74
- **Price Per Additional Student (Groups):** $681.05
- **Student Pricing:** $1,435.30
- **Group Pricing (8):** $11,435.24
- **Group Pricing (10):** $19,064.71
- **Group Pricing (20):** $35,731.74
- **Price Per Additional Student (Groups):** $1,362.89

**Additional Information:**
- Certified Ethical Information Systems Security Professional (CISSP) Certification is designed to recognize mastery of an international standard for information security and understanding of a Common Body of Knowledge (CBK). The certification is managed by the International Information Systems Security Certification Consortium (ISC)², an organization individuals who have distinguished themselves in experience, knowledgeable, and proficient information security practitioners. Certifications can enhance a professional's career and provide evidence reliability. CISSP is an approved certification for various job classifications identified within DoD Directive 8570.01M.

**Description:**
- CompTIA Security+: This course is designed to prepare the new or practicing engineer for the FS exam. This course covers a broad set of topics and an emphasis on problem solving and testing strategies. Materials and sample problems are based on guidelines from the National Council of Examiners for Engineering and Surveying (NCEES). Students are expected to meet the NCEES examination requirements as defined in NCEES Exam Outline. The FS Power Exam Prep (Electrical PE Exam) course helps participants prepare for the NCEES Electrical and Computer – Power Examination, which has been introduced in the spring of 2018. This two-hour online course is designed for the national Council of Examiners for Engineering and Surveying (NCEES).
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<tr>
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<th>Course Length</th>
<th>Requisites</th>
<th>Course Schedule and Location</th>
<th>Min/Max # of Students for Group Classes</th>
<th>Net Discounted Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4823C</td>
<td>Accumulo for Administrators</td>
<td>This course is designed for those who will configure, administer, and troubleshoot large scale production systems. Students will build an Accumulo cluster from scratch, exploring concepts such as security, failover, resource management, and monitoring. They will explore integration of Accumulo into various cloud platforms. Students will also learn about optimizing Accumulo performance and learn about the implications of Accumulo configuration changes.</td>
<td>2 Days</td>
<td>Linux / Unix System Administration experience, Apache Hadoop Administration training or comparable experience</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>815.83</td>
</tr>
<tr>
<td>4823C</td>
<td>Accumulo for Developers</td>
<td>Students will gain an understanding of Apache Accumulo design, use, and position within the growing Hadoop ecosystem. They will learn about building applications on top of Accumulo and gain an appreciation for the features that make Accumulo unique. Students will also construct a basic search engine through a series of hands-on exercises. Students will be able to build a wide variety of analytical applications, taking advantage of Accumulo strengths. Students will also complete a series of exercises using advanced features of Accumulo to build information retrieval, graph theories, and metadata management applications. Students will master concepts such as controlling row and column partitioning, using built-in indexing, and building custom indexes. This course will cover the gamut of configuration options for Accumulo, and students will learn how to optimize performance for their applications.</td>
<td>4 Days</td>
<td>Programming experience, familiarity with Java and Unix, Apache Hadoop Developer training or comparable experience</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,554.50</td>
</tr>
<tr>
<td>4823C</td>
<td>Advanced WebSphere Application Server 7.0 Administration</td>
<td>This training course is meant for companies maintaining a complex WebSphere based web site. The course provides hands-on practice working perform the tasks required to maintain a production WebSphere environment. This course uses WebSphere Network Deployment Edition v7.0 on the lab. The lab uses a Linux environment to install and configure WebSphere although configuration in a Windows environment would be similar.</td>
<td>2 Days</td>
<td>Linux/Unix system administration experience, Apache Hadoop Administration training or comparable experience</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>N/A</td>
</tr>
<tr>
<td>4914C</td>
<td>Data Analysis with Apache Pig and Hive</td>
<td>This course will provide students with an introduction to Apache Pig. Pig is a platform for analyzing large data sets that consists of a high-level language for writing data analysis programs, coupled with an infrastructure for executing these programs. Pig, in conjunction with Apache Hadoop, can analyze very large data sets with relatively simple programs.</td>
<td>4 Days</td>
<td>Students should have some structured programming experience. Familiarity with SQL database is helpful but not required.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>915.83</td>
</tr>
<tr>
<td>4914C</td>
<td>Application Modernization &amp; SOA Concepts</td>
<td>This course will explore the trend around application modernization and introduce you to a wide range of techniques and strategies for modernizing legacy systems including Service Oriented Architecture (SOA), Business Process Management (BPM), Web services, Message Oriented Middleware (MOM), and Web 2.0. Special emphasis will be given to SOA and service-based solutions for modernizing legacy systems. Service Oriented Architecture provides a more agile and comprehensive way to integrate information systems and businesses processes than more traditional approaches. Students will be exposed to a broad range of concepts, opportunities, and challenges exist in modernizing legacy systems, such as standards, data distribution, workflows, business processes, and more. Students should be familiar with databases and basic programming concepts.</td>
<td>2 Days</td>
<td>N/A</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>698.84</td>
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<tr>
<td>4914C</td>
<td>VM Assembly Programming Language</td>
<td>This course introduces the student to tool-based software development using VM assembly language. The course will cover Arm Architecture, instruction set, data movement, addressing modes, mathematical functions, and input/output operations, using loop structures, basic data structures including tables, lists, stacks and strings. Course activities also include setting up the development environment, using cross compilers and elf debugger techniques, writing new programs as well as reverse engineering and modifying existing programs without access to the source code.</td>
<td>5 Days</td>
<td>Basic programming experience is required. Native programming experience in languages like C or C++ is highly recommended. Experience computer architecture or operating systems concepts like memory protection, kernel and user mode is at least a level of one undergraduate course is helpful</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,187.97</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Course Length</td>
<td>Prerequisites</td>
<td>Course Schedule and Location</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Available Rate</td>
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<tr>
<td>F 449C</td>
<td>C# and .NET Programming</td>
<td>This course introduces the student to object-oriented programming (OOP) using the C# programming language. Topics include: Abstract Data Types (ADO), an introduction to the C# programming language including string and vector, encapsulation and information hiding, aggregation, exceptions, inheritance and polymorphisms and inheritance. This course will teach the syntax and constructs of the C# programming language. Both basic and advanced techniques will be shown.</td>
<td>5 days</td>
<td>Students who enroll in this course should have completed our &quot;Intermediate C Programming&quot; course or have a good working knowledge of the C programming language.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,096.81</td>
</tr>
<tr>
<td>F 449B</td>
<td>C++ Programming</td>
<td>The Certificate in Computer and Network Technology at UMBC Training Centers provides candidates with the skills and knowledge required to successfully begin or enhance their careers in the field of information technology (IT) as a variety of roles. Upon successful completion of this program, in addition to being awarded a Certificate in Computer and Network Technology from UMBC Training Centers, participants will be prepared to obtain CompTIA's industry-leading A+ and Network+ professional certifications. These professional certifications, along with the skills and knowledge gained from the program and the credential from UMBC Training Centers should increase participants' professional value to their current or future employers and position them competitively in the marketplace.</td>
<td>5 days</td>
<td>Students taking this course should have the following skills and experience:</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,096.81</td>
</tr>
<tr>
<td>F 441B</td>
<td>Certificate in System and Network Security</td>
<td>The Certificate in Information and Network Security at UMBC Training Centers provides candidates with the skills and knowledge required to successfully begin or enhance their careers in the field of information security and assurance. Upon successful completion of this program, in addition to being awarded a Certificate in Information and Network Security from UMBC Training Centers, participants will be prepared to obtain EC-Council's Certified Ethical Hacker (CEH) professional certification. The industry-leading professional certification, along with the skills and knowledge gained from the program and the credential from UMBC Training Centers should increase participants' professional value to their current or future employers and position them competitively in the marketplace.</td>
<td>9 days</td>
<td>Applicants should already have completed our Certificate in System and Network Administration, or possess equivalent skills and experience.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 2,015.90</td>
</tr>
<tr>
<td>F 448B</td>
<td>Certificate in Oracle Database Administration</td>
<td>Oracle continues to be the clear leader in database technology, having the largest installation base including almost every government agency and large business worldwide. And with the proliferating of the demand for massive amounts of data to be stored, processed and analyzed, the demand for knowledgeable, well-qualified professionals to manage the underlying databases that contain this data will continue to grow. The Certificate in Oracle Database Administration provides students with the skills, knowledge and credentials required to enter the field of database administration. As an Oracle Workforce Development partner and an authorized Oracle Training Center, UMBC Training Centers is able to bundle official Oracle training and certification, enabling successful students to obtain Oracle Database 11g Certified Associate certification.</td>
<td>24 days</td>
<td>Basic computer usage, familiarity with Microsoft Windows and software applications.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 2,622.23</td>
</tr>
<tr>
<td>F 441C</td>
<td>Certificate in Computer and Network Technology</td>
<td>The Certificate in Computer and Network Technology at UMBC Training Centers provides candidates with the skills and knowledge required to successfully begin or enhance their careers in the field of information technology (IT) as a variety of roles. Upon successful completion of this program, in addition to being awarded a Certificate in Computer and Network Technology from UMBC Training Centers, participants will be prepared to obtain CompTIA's industry-leading A+ and Network+ professional certifications. These professional certifications, along with the skills and knowledge gained from the program and the credential from UMBC Training Centers should increase participants' professional value to their current or future employers and position them competitively in the marketplace.</td>
<td>13 days</td>
<td>Students taking this course should have the following skills and experience:</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,704.90</td>
</tr>
<tr>
<td>F 442C</td>
<td>C# Programming</td>
<td>The Certificate in Information and Network Security at UMBC Training Centers provides candidates with the skills and knowledge required to successfully begin or enhance their careers in the field of information security and assurance. Upon successful completion of this program, in addition to being awarded a Certificate in Information and Network Security from UMBC Training Centers, participants will be prepared to obtain EC-Council's Certified Ethical Hacker (CEH) professional certification.</td>
<td>13 days</td>
<td>Students taking this course should have the following skills and experience:</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,704.90</td>
</tr>
<tr>
<td>F 443C</td>
<td>C# and .NET Programming</td>
<td>This course introduces the student to object-oriented programming (OOP) using the C# programming language. Topics include: Abstract Data Types (ADO), an introduction to the C# programming language including string and vector, encapsulation and information hiding, aggregation, exceptions, inheritance and polymorphisms and inheritance. This course will teach the syntax and constructs of the C# programming language. Both basic and advanced techniques will be shown.</td>
<td>5 days</td>
<td>Students who enroll in this course should have completed our &quot;Intermediate C Programming&quot; course or have a good working knowledge of the C programming language.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,096.81</td>
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</tbody>
</table>
This Enterprise Wi‐Fi fundamentals course provides the networking professional a foundational knowledge for entering into or advancing within the wireless networking industry. From basic RF theory and regulatory requirements to implementation and securing of Wi‐Fi devices, this course focuses on bringing Wi‐Fi professionals up to speed on the latest in 802.11 technologies in a practical way.

Course Code: IT‐454C
Course Title: Certified Wireless Technical Specialist (CWTS)
Course Description: This Enterprise Wi‐Fi fundamentals course provides the networking professional a foundational knowledge for entering into or advancing within the wireless networking industry. From basic RF theory and regulatory requirements to implementation and securing of Wi‐Fi devices, this course focuses on bringing Wi‐Fi professionals up to speed on the latest in 802.11 technologies in a practical way.
Course Length: 3 days
Pricing:
- Group Pricing (5) $18,452.25
- Price Per Additional Student (Group 6) $95.61
- UMBC Designated Site Price Per Student $4,447.93
- Price Per Additional Student (Group 5) $18,452.25
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 4) $18,452.25
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 3) $18,452.25
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 2) $18,452.25
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 1) $18,452.25
- UMBC Designated Site Price Per Student $4,500.41

The Cisco Certified Network Associate (CCNA) is one of the most desired certifications in IT today. Anyone seeking to further their career as a network technician, network administrator, or information systems specialist will benefit from the range of theoretical and practical skills covered by the CCNA certification course of study. This certification validates the ability to install, configure, operate, and troubleshoot medium size routed and switched networks, including implementation and verification of connections to remote sites in a WAN. CCNA also covers basic configuration of security threats and an introduction to wireless networking. CCNA certification is a prerequisite for Cisco’s more advanced certifications such as the Cisco Certified Network Professional (CCNP) certification.

Course Code: IT‐452C
Course Title: Cisco Certified Network Associate (CCNA)
Course Description: Cisco Certified Network Associate (CCNA) validates the ability to plan, implement, verify and troubleshoot small and medium‐sized enterprise networks and work collaboratively with specialists on extended security, voice, wireless and video solutions. The CCNA certification is appropriate for CCNA certified individuals with at least one year of networking experience who are ready to advance their skills and work independently on complex network solutions. Those who achieve CCNA have demonstrated the skills required to implement Cisco switches such as network technicians, support engineers, systems engineers or network engineers. You obtain your CCNA certification by passing the exam:
Course Length: 8 days
Pricing:
- Group Pricing (5) $24,132.42
- Price Per Additional Student (Group 6) $95.61
- UMBC Designated Site Price Per Student $4,447.93
- Price Per Additional Student (Group 5) $24,132.42
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 4) $24,132.42
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 3) $24,132.42
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 2) $24,132.42
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 1) $24,132.42
- UMBC Designated Site Price Per Student $4,500.41

In this course administrators of medium to large network sites will learn to use advanced routing to provide scalability for Cisco routers that are connected to sites and sites. Administering networks professionals will learn to dramatically increase the number of routers and sites using these techniques instead of refactoring the network when additional sites or new configurations are added. Hands on labs ensure you thoroughly understand how to implement advanced routing within your network.

Course Code: IT‐452A
Course Title: Cisco Route Bootcamp
Course Description: In this course administrators of medium to large network sites will learn to use advanced routing to provide scalability for Cisco routers that are connected to sites and sites. Administering networks professionals will learn to dramatically increase the number of routers and sites using these techniques instead of refactoring the network when additional sites or new configurations are added. Hands on labs ensure you thoroughly understand how to implement advanced routing within your network.
Course Length: 5 days
Pricing:
- Group Pricing (5) $16,070.52
- Price Per Additional Student (Group 6) $95.61
- UMBC Designated Site Price Per Student $4,447.93
- Price Per Additional Student (Group 5) $16,070.52
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 4) $16,070.52
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 3) $16,070.52
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 2) $16,070.52
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 1) $16,070.52
- UMBC Designated Site Price Per Student $4,500.41

In this course students will learn to plan, configure, and verify the implementation of complex enterprise switching solutions for campus environments using the Cisco Enterprise Campus Architecture. This course is a component of the Cisco CCNP Routing and Switching curriculum, a professional‐level certification, and it is designed to give you a firm foundation of tools to manage switches in an enterprise campus environment.

Course Code: IT‐452C
Course Title: Cisco Switch Bootcamp
Course Description: In this course students will learn to plan, configure, and verify the implementation of complex enterprise switching solutions for campus environments using the Cisco Enterprise Campus Architecture. This course is a component of the Cisco CCNP Routing and Switching curriculum, a professional‐level certification, and it is designed to give you a firm foundation of tools to manage switches in an enterprise campus environment.
Course Length: 5 days
Pricing:
- Group Pricing (5) $15,621.42
- Price Per Additional Student (Group 6) $95.61
- UMBC Designated Site Price Per Student $4,447.93
- Price Per Additional Student (Group 5) $15,621.42
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 4) $15,621.42
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 3) $15,621.42
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 2) $15,621.42
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 1) $15,621.42
- UMBC Designated Site Price Per Student $4,500.41

Cloud Computing is gaining increasing attention within enterprise of all shapes and size. Several technologies actually know how to properly design Cloud solutions. This course provides foundational knowledge in Cloud computing components, foundational technologies, architecture, design, and business value. Attendees are provided with a broad survey of Cloud computing concepts and gain an appreciation of the engine Cloud from multiple angles. Special attention is given to requirements and Cloud utilization analysis, Cloud solution design strategies, and deployment scenarios. Students will also work on labs in an actual Cloud Computing development environment.

Course Code: IT‐452A
Course Title: Cloud Computing Bootcamp
Course Description: Cloud Computing is gaining increasing attention within enterprise of all shapes and size. Several technologies actually know how to properly design Cloud solutions. This course provides foundational knowledge in Cloud computing components, foundational technologies, architecture, design, and business value. Attendees are provided with a broad survey of Cloud computing concepts and gain an appreciation of the engine Cloud from multiple angles. Special attention is given to requirements and Cloud utilization analysis, Cloud solution design strategies, and deployment scenarios. Students will also work on labs in an actual Cloud Computing development environment.
Course Length: 8 days
Pricing:
- Group Pricing (5) $19,070.52
- Price Per Additional Student (Group 6) $95.61
- UMBC Designated Site Price Per Student $4,447.93
- Price Per Additional Student (Group 5) $19,070.52
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 4) $19,070.52
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 3) $19,070.52
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 2) $19,070.52
- UMBC Designated Site Price Per Student $4,500.41
- Price Per Additional Student (Group 1) $19,070.52
- UMBC Designated Site Price Per Student $4,500.41

Cloud Computing is a must‐have technology in it is a technological one. There are tremendous implications and expectations around technologies, infrastructure, enterprise IT funding models, and business continuity planning.

Course Code: IT‐452C
Course Title: Cloud Computing Bootcamp
Course Description: Cloud Computing is a must‐have technology in it is a technological one. There are tremendous implications and expectations around technologies, infrastructure, enterprise IT funding models, and business continuity planning.
Course Length: 4 days
Pricing:
- Group Pricing (5) $3,945.21
- Price Per Additional Student (Group 6) $95.61
- UMBC Designated Site Price Per Student $4,793.41
- Price Per Additional Student (Group 5) $3,945.21
- UMBC Designated Site Price Per Student $4,793.41
- Price Per Additional Student (Group 4) $3,945.21
- UMBC Designated Site Price Per Student $4,793.41
- Price Per Additional Student (Group 3) $3,945.21
- UMBC Designated Site Price Per Student $4,793.41
- Price Per Additional Student (Group 2) $3,945.21
- UMBC Designated Site Price Per Student $4,793.41
- Price Per Additional Student (Group 1) $3,945.21
- UMBC Designated Site Price Per Student $4,793.41
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Description</th>
<th>Course Length</th>
<th>Prerequisites</th>
<th>Course Schedule and Location</th>
<th>Min/Max # of Students for Group Classes</th>
<th>Net Accession Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-495C</td>
<td>Cloud Computing Executive Overview</td>
<td>Cloud Computing holds tremendous potential for organizations of all shapes and sizes, and is a viable solution for enterprises within every industry. The course provides an overview of the technology involved in cloud computing and troubleshooting, as well as an introduction to cloud computing.</td>
<td>4 days</td>
<td>NA</td>
<td>UMBC Designed Site</td>
<td>Price Per Student: NA</td>
<td>$1,108.57</td>
</tr>
<tr>
<td>F-495C</td>
<td>Cloud Computing for Architects</td>
<td>Cloud Computing is gaining increasing attention within enterprises of all shapes and sizes, but few technologies actually have a true impact on their systems and design, and could be considered as a solution. Taking standard software applications, databases, and user interfaces that currently exist and deploying them in a cloud environment is a major for disaster. Proper scaling, usage modeling, and compute design are all essential to success in the Cloud.</td>
<td>4 days</td>
<td>NA</td>
<td>UMBC Designed Site</td>
<td>Price Per Additional Student (Group): 128.32</td>
<td>$1,071.68</td>
</tr>
<tr>
<td>F-495C</td>
<td>Cloud Computing for Architects</td>
<td>Cloud Computing is gaining increasing attention within enterprises of all shapes and sizes, but few technologies actually have a true impact on their systems and design, and could be considered as a solution. Taking standard software applications, databases, and user interfaces that currently exist and deploying them in a cloud environment is a major for disaster. Proper scaling, usage modeling, and compute design are all essential to success in the Cloud.</td>
<td>4 days</td>
<td>NA</td>
<td>UMBC Designed Site</td>
<td>Price Per Additional Student (Group): 128.32</td>
<td>$1,071.68</td>
</tr>
<tr>
<td>F-495C</td>
<td>Cloud Computing Primer</td>
<td>Cloud Computing is gaining increasing attention within enterprises of all shapes and sizes, but few technologies actually have a true impact on their systems and design, and could be considered as a solution. Taking standard software applications, databases, and user interfaces that currently exist and deploying them in a cloud environment is a major for disaster. Proper scaling, usage modeling, and compute design are all essential to success in the Cloud.</td>
<td>1 day</td>
<td>NA</td>
<td>UMBC Designed Site</td>
<td>Price Per Additional Student (Group): 128.32</td>
<td>$1,071.68</td>
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<tr>
<td>F-495C</td>
<td>Cloud Computing Workshop</td>
<td>Cloud Computing is gaining increasing attention within enterprises of all shapes and sizes, but few technologies actually have a true impact on their systems and design, and could be considered as a solution. Taking standard software applications, databases, and user interfaces that currently exist and deploying them in a cloud environment is a major for disaster. Proper scaling, usage modeling, and compute design are all essential to success in the Cloud.</td>
<td>2 days</td>
<td>NA</td>
<td>UMBC Designed Site</td>
<td>Price Per Additional Student (Group): 128.32</td>
<td>$1,071.68</td>
</tr>
<tr>
<td>F-495C</td>
<td>Cloud Programming</td>
<td>If you are getting ready for a career as an entry-level information technology (IT) professional or personal computer (PC) service technician, the CompTIA A+ Certification course is the first step in your preparation. The course will cover all aspects of computer technology, from hardware to software, and is designed to help you prepare for the CompTIA A+ Certification exam.</td>
<td>8 days</td>
<td>NA</td>
<td>UMBC Designed Site</td>
<td>Price Per Additional Student (Group): 128.32</td>
<td>$1,071.68</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Course Length</td>
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<td>Course Schedule and Location</td>
<td>Min/Max # of Students for Group Classes</td>
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<td>F 412C</td>
<td>CompTIA Advanced Security Practitioner (SCAN)</td>
<td>Students will examine advanced security concepts, principles, and implementations that pertain to enterprise-level security. Course includes: Computer and networking terminology, the functional components of a computer and a network (both wired and wireless). Installing and troubleshooting Microsoft® Windows® XP and Windows® 7; installing and troubleshooting software, hardware, and networking components. Working with computer peripherals. Setting up, maintaining, and troubleshooting mobile devices, computer and network security best practices.</td>
<td>5 days</td>
<td>While there are no strict prerequisites, CompTIA recommends the A+ certification to serve as an add-on to the CompTIA Security+® certification, or equivalent technical experience. UMBC Designated Site</td>
<td>Price Per Student</td>
<td>N/A</td>
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<td>CompTIA Healthcare IT</td>
<td>The CompTIA healthcare IT Technician certification covers the knowledge and skills required to implement, deploy, and support healthcare IT systems in various clinical settings. The CompTIA Healthcare IT Technician certification exam covers: Regulatory requirements, Organizational behavior, IT operations, Medical business operations, Security.</td>
<td>3 days</td>
<td>Computer and networking terminology The functional components of a computer and a network (both wired and wireless). Installing and troubleshooting Windows® XP and Windows® 7; installing and troubleshooting software, hardware, and networking components. Working with computer peripherals. Setting up, maintaining, and troubleshooting mobile devices, computer and network security best practices.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,084.81</td>
</tr>
<tr>
<td>F 495C</td>
<td>CompTIA Linux + Certification Prep</td>
<td>This course is designed to prepare the student for the CompTIA Linux+ certification exams. The exam consists of two exams: LX0-101 and LX0-102. The exams cover system administration, Linux installation and package management, Samba and Unix commands, devices, Linux file systems, and the Unix file system hierarchy. Students will learn to work in the Linux command line, understanding fundamental Linux concepts including basic networking tools, audit users, and install and configure applications.</td>
<td>8 days</td>
<td>Participants should have at least 2 years of experience performing computer management tasks, including working on the command line, on a modern operating system such as Windows XP, Windows 7, or Mac OS X. Understanding of basic computer concepts such as concurrent processes, network settings, and the file system is recommended.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,548.62</td>
</tr>
<tr>
<td>F 422C</td>
<td>CompTIA Network+</td>
<td>This course is designed to prepare the student for the CompTIA Network+ certification exam. The exam consists of two exams: N10-005 and N10-006. The exams cover: Networking concepts, networking fundamentals, router configuration, cabling standards, and troubleshooting.</td>
<td>5 days</td>
<td>Competency with the C programming language is required. Students should have a strong understanding of computer concepts including the C language and the Linux operating system.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>987.52</td>
</tr>
<tr>
<td>F 499C</td>
<td>Data Structure</td>
<td>This 4-week course investigates the characteristics and performance of various search and sorting operations and related algorithms as a variety of data structures implemented within the C programming language. This course will examine the underlying structure of the major data structures and the performance of various operations and algorithms. The utility of data structures in various business and scientific environments that affect the performance will be considered.</td>
<td>5 days</td>
<td>Familiarity with basic HTML constructs is required. Knowledge of Java or C# and the HTML DOM is helpful.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,094.81</td>
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<td></td>
<td>Developing Java Applications</td>
<td>This course introduces the Java programming model for web applications. We begin with a tour of basic browser programming, using JavaScript, the HTML, DOM, and SSL. Then, students learn how to establish communication between their web pages and server-side application components, and how to develop robust, user-friendly and responsive web applications. We pursue Apache connectivity entirely from the client side in this course, and at several levels. From an initial study of the browser-based approach using the Wrox/RF/remote browser object, we move on to consider programming for high-availability and performance, and the use of more common browsers such as Internet Explorer and Firefox.</td>
<td>3 days</td>
<td>Familiarity with basic HTML constructs is required. Knowledge of JavaScript, CSS, and the HTML DOM is helpful.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>689.61</td>
</tr>
<tr>
<td>F 410C</td>
<td>Discrete Math for Computer Science</td>
<td>This course introduces the fundamental tools, topics and concepts of discrete mathematics needed to study computer science. This course emphasizes counting methods, proof techniques and problem solving strategies. The course will provide a comprehensive introduction to each of these topics using practical applications. The emphasis will be on the foundation of the discrete math techniques.</td>
<td>5 days</td>
<td>Students should have completed a college-level calculus course with a grade of C or better.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>1,094.81</td>
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<tr>
<td>14402C</td>
<td>Enterprise iPhone and iPad Programming</td>
<td>This iPhone training course teaches application development for the iOS platform. It covers iPhone, iPad and iPad Touch device. After completing this course, students will be able to build robust, high-performing and compatible applications for iPhone and iPad. The course gives a solid foundation in Objective-C. It then goes into details of application user interface development. After that, the course teaches network services, like database, multithreading and graphics programming. A solid knowledge of programming is an asset oriented language such as C++, Java, or C# is required. Knowledge of Objective-C is not required. Nearly a full day is spent on teaching Objective-C.</td>
<td>5 days</td>
<td>None</td>
<td>UMBE Designated Site</td>
<td>Group Pricing (1): $ 17,564.60</td>
<td>$ 17,564.60</td>
</tr>
<tr>
<td>14403C</td>
<td>Enterprise Linux Security Administration</td>
<td>This highly technical course focuses on properly securing machines running the Linux operating system. A broad range of security techniques and concepts are covered. The emphasis is placed on real-world problems. Advanced security technologies such as Kerberos and SNMP are taught. Special attention is given to securing commonly deployed network services. At the end of the course, students have an excellent understanding of the potential security vulnerabilities. From how to audit existing machines, and how to securely deploy new network services.</td>
<td>5 days</td>
<td>This course teaches advanced security topics and is intended for experienced systems administrators. Candidates should have current Linux or Unix system administration experience equivalent to the Linux Fundamentals, Linux Systems Administration, and Linux Networking and Security Administration.</td>
<td>UMBE Designated Site</td>
<td>Group Pricing (1): $ 17,564.60</td>
<td>$ 17,564.60</td>
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<tr>
<td>14404</td>
<td>Hadoop for Administrators</td>
<td>This course provides administrators with the fundamentals required to successfully implement and maintain Hadoop clusters. After an overview of Hadoop and its capabilities, you will examine best practices for deploying Hadoop clusters, determining hardware needs, and monitoring Hadoop clusters. You will see how to handle failures of Hadoop components and how to add and remove these components from your Hadoop cluster. In addition, you will learn how to install Hadoop you will learn to install other related technologies such as HBase, Pig, and Accumulo.</td>
<td>3 days</td>
<td>Linux / Unix System Administration</td>
<td>UMBE Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,094.81</td>
</tr>
<tr>
<td>14405</td>
<td>Hadoop for Developers</td>
<td>This course provides developers with the fundamentals required to successfully implement and maintain Hadoop clusters. After an overview of Hadoop and its capabilities, you will examine best practices for deploying Hadoop clusters, determining hardware needs, and monitoring Hadoop clusters. You will see how to handle failures of Hadoop components and how to add and remove these components from your Hadoop cluster. In addition, you will learn how to install Hadoop you will learn to install other related technologies such as HBase, Pig, and Accumulo.</td>
<td>4 days</td>
<td>Linux / Unix System Administration</td>
<td>UMBE Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 854.42</td>
</tr>
<tr>
<td>14490C</td>
<td>HTML 5 for Enterprise Web Developers</td>
<td>This course teaches the skills, techniques, and strategies needed to successfully create and promote a presence on the Web. It includes the leading edge HTML5 techniques needed to enhance web pages with frames, images, columns, form maps, and multimedia. Learners how to create HTML5 forms, as well as scripts that process form results. In addition, discover how to use real-life case to ensure that users complete the appropriate fields. In this course program, the student will learn ways to produce dynamic HTML, and write simple JavaScript code. This allows you to have a close contact with the HTML5 topics.</td>
<td>3 days</td>
<td>See HTML and JavaScript course or equivalent knowledge of HTML, JavaScript, and web page design</td>
<td>UMBE Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 654.84</td>
</tr>
<tr>
<td>14495C</td>
<td>jQuery and JavaScript</td>
<td>This course teaches the skills, techniques, and strategies needed to successfully create and promote a presence on the Web. It includes the leading edge HTML5 techniques needed to enhance web pages with frames, images, columns, form maps, and multimedia. Learners how to create HTML5 forms, as well as scripts that process form results. In addition, discover how to use real-life case to ensure that users complete the appropriate fields. In this course program, the student will learn ways to produce dynamic HTML, and write simple JavaScript code. This allows you to have a close contact with the HTML5 topics.</td>
<td>3 days</td>
<td>Good working knowledge of Windows and the Internet</td>
<td>UMBE Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,094.81</td>
</tr>
<tr>
<td>14510</td>
<td>Installing, Maintaining and Troubleshooting Windows 7 Client</td>
<td>This free, two-day instructor-led course is intended for IT professionals who are interested in expanding their knowledge base and technical skills about Windows 7 Client. In this course, students learn how to install, upgrade, troubleshoot and migrate to Windows 7 Client. Students then configure Windows 7 Client for remote connectivity, security, maintenance, and mobile computing. The goal of this training is to enable these individuals to support Windows clients. It covers problems that can exist when migrating to Windows 7 and Windows Server 2008 R2 networking environments.</td>
<td>3 days</td>
<td>Knowledge of hardware components and basic networking similarities are required</td>
<td>UMBE Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 167.62</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Course Length</td>
<td>Prerequisites</td>
<td>Course Schedule and Location</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Available Rate</td>
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<tr>
<td>4912C</td>
<td>Intel Assembly Language Programming</td>
<td>This course introduces the student to the low-level abstraction of a computer system from a programmer’s point of view, with an emphasis on low-level programming in assembly language on the Intel x86 Processor Architecture. Topics include data representation, Intel x86 assembly language programming, compiling and linking C programs, the Linux memory model, digital logic, gates, and circuits, and linear feedback shift registers. This course is presented in a Linux environment.</td>
<td>5 days</td>
<td>Completion of &quot;Intermediate C&quot; or a strong working knowledge of the C programming language is required. Experience with a Unix system shell and with the Unix shell debugger is strongly recommended.</td>
<td>UMBC Designated Site</td>
<td>1 (4)</td>
<td>1,807.52</td>
</tr>
<tr>
<td>4911C</td>
<td>Interoperating Cisco Network Devices 1</td>
<td>Interoperating Cisco Network Devices (Part 1) (DOT45C) is a six instructor-led course that explores the interconnection of different Cisco routers and switches with different types of characteristics. The course focuses on fundamental concepts and protocols, including configuration, verification, and troubleshooting using various Cisco networking devices. This course prepares the student for the CCIE exam.</td>
<td>4 days</td>
<td>Students should have basic computer literacy, basic networking knowledge, and basic usage skills</td>
<td>UMBC Designated Site</td>
<td>1 (5)</td>
<td>1,107.92</td>
</tr>
<tr>
<td>4912C</td>
<td>Interoperating Cisco Network Devices 2</td>
<td>This course continues the student's study of the C programming language using the C99 standard. The course includes variables, control structures, functions, arrays, strings, pointers, structures, and file I/O. Programming techniques covered in this course include modularity, top-down design, documentation, debugging, and testing. This course is designed to help students prepare for the CCIE exam.</td>
<td>4 days</td>
<td>Students should have completed our &quot;Introduction to C Programming&quot; course or have equivalent knowledge of the C programming language</td>
<td>UMBC Designated Site</td>
<td>1 (5)</td>
<td>1,095.81</td>
</tr>
<tr>
<td>4914C</td>
<td>Intermediate C Programming</td>
<td>This course introduces the student to computer programming using the C99 standard of the C programming language. The course includes variables, control structures, functions, arrays, strings, pointers, structures, and file I/O. Programming techniques covered in this course include modularity, top-down design, documentation, debugging, and testing. Both basic and advanced techniques will be demonstrated.</td>
<td>90 days</td>
<td>Some programming experience in a high-level structured programming language is highly recommended.</td>
<td>UMBC Designated Site</td>
<td>1 (7)</td>
<td>635.81</td>
</tr>
<tr>
<td>4913C</td>
<td>Intro to C Programming (Online, self-paced)</td>
<td>This course introduces the student to computer programming using the C99 standard of the C programming language. The course includes variables, control structures, functions, arrays, strings, pointers, structures, and file I/O. Programming techniques covered in this course include modularity, top-down design, documentation, debugging, and testing. Both basic and advanced techniques will be demonstrated.</td>
<td>10 days</td>
<td>Some programming experience in a high-level structured programming language is highly recommended.</td>
<td>UMBC Designated Site</td>
<td>1 (7)</td>
<td>1,099.81</td>
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<tr>
<td>4990C</td>
<td>Introduction to Big Data, Hadoop &amp; Spark</td>
<td>This course introduces the basic concepts and fundamental principles of big data and NoSQL. Students learn about the big data lifecycle and adoption. Course includes an introduction to big data, NoSQL, and social media, as well as an introduction to Hadoop. Students will learn how to use Hadoop to process large datasets and how to use Spark to process real-time data.</td>
<td>1 day</td>
<td>Basic understanding and familiarity of information systems and development is expected. Additional knowledge on an systems development lifecycle and development is also helpful.</td>
<td>UMBC Designated Site</td>
<td>1 (7)</td>
<td>304.92</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Course Length</td>
<td>Prerequisites</td>
<td>Course Schedule and Location</td>
<td>Min/Max # of Students for Group Sizes</td>
<td>Net Available</td>
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<tr>
<td>F 484C</td>
<td>Introduction to Data Warehousing</td>
<td>From a business perspective, students are introduced to best practice approaches and in-depth approaches for data warehouse development and implementation. Common definitions and characteristics of data warehouses, data warehouse architecture, readiness issues, incremental data warehouse project planning, data warehouse strategy, and techniques to assist in avoiding common data warehouse pitfalls. This course concentrates on data warehouse deliverables independent of any specific methodology, but within the framework of best practices. It focuses on understanding deliverables that may be produced throughout the data warehouse process and unique issues for producing them. This course gives exploration for practical next steps the students can take. This includes moving further to develop knowledge and skills, to position oneself for success, and to get started with data warehousing.</td>
<td>2 Days</td>
<td>NA</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups)</td>
<td>458.02</td>
</tr>
<tr>
<td>F 483C</td>
<td>JBoss EE Foundation</td>
<td>This course is designed for Java programmers and web application developers who have interest in learning how to build and maintain enterprise applications based on the JBoss architecture using Eclipse. This training course teaches students how to develop Java EE applications using Eclipse for the JBoss Application Server. This course covers some of the newest technologies of the JBoss EE Platform including, JSF 2.1, EJB 3.1, and Jakarta. A brief intro to OJB ORM web services is also covered.</td>
<td>3 Days</td>
<td>There are no prerequisites for this course. Although a basic knowledge of Java EE concepts will be helpful.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups)</td>
<td>458.02</td>
</tr>
<tr>
<td>F 484C</td>
<td>Java EE 5 Programming using Java 5</td>
<td>This course is designed for Java programmers and web application developers who have interest in learning how to build and maintain enterprise applications based on the Java EE 5 architecture using Eclipse. This training course teaches students how to develop Java EE 5 applications using Eclipse for the JBoss Application Server. This course covers some of the newest technologies of the Java EE 5 Platform including, JSF 2.1, EJB 3.1, and Jakarta. A brief intro to OJB ORM web services is also covered.</td>
<td>8 Days</td>
<td>Students should have completed an intermediate level course in J2EE programming language.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups)</td>
<td>458.02</td>
</tr>
<tr>
<td>F 484C</td>
<td>Java Programming (Online, self-paced)</td>
<td>This training is a great start to creating and working with JavaScript. This course covers the material you need to know to become proficient using JavaScript with your web pages. You will master JavaScript critical elements, including language syntax, script design, and deployment. This course will provide you with a strong foundation to develop and make you build complete web-based tools pages currently used with confidence.</td>
<td>3 Days</td>
<td>Practical experience with PCs and desktop workstations; knowledge of the and Bloomer platform; JavaScript, VisualStudio, HTML, CSS, etc. is helpful. General knowledge of front-end technologies including font tags, basic programming knowledge is helpful, but not necessary</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups)</td>
<td>458.02</td>
</tr>
<tr>
<td>F 4954C</td>
<td>Linux Certified System Administrator</td>
<td>This class comprehensively covers the fundamental tools and concepts of Linux, including the usage, configuration, maintenance and administration of Linux and Unix. This is a hands-on, lab intensive course. The objective is to prepare students to be proficient handling the tasks commonly found in large professional Linux System Administrators. Upon completion of the course, students will be very well prepared to take the leading industry Linux certification exams. Includes course materials and 1 year audit privilege (Pentestmap may apply).</td>
<td>5 Days</td>
<td>Participants should have experience performing basic computer management tasks on a modern operating system such as Windows 7, and Linux OS, understanding of TCP/IP and networking concepts is strongly recommended.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups)</td>
<td>1,143.80</td>
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<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Course Length</td>
<td>Prerequisites</td>
<td>Course Schedule and Location</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Available Rate</td>
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<tr>
<td>P 495C</td>
<td>Linux Fundamentals</td>
<td>This course comprehensively covers the fundamental tools and concepts of Linux shells and systems. The course is focused on providing solid command line skills and knowledge. Topics include: installation and configuration of Linux; basic Linux commands and tools; administration, including security; basic shell scripting; and basic system management.</td>
<td>5 Days</td>
<td>Participants should have experience performing basic computer management tasks on a modern operating system such as Windows XP, Windows 7, or Mac OS X.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 27,991.60</td>
<td></td>
</tr>
<tr>
<td>P 495A</td>
<td>Linux Networking and Security Administration</td>
<td>This course covers a wide range of network services useful to every organization. Special attention is paid to the concepts needed to implement these services securely, and to the troubleshooting skills which will be necessary for real-world administration of these network services. The course material is designed to provide extensive hands-on experience. This course also helps students prepare for the Red Hat Certified Engineer (RHCE) certification.</td>
<td>5 Days</td>
<td>Students should already be comfortable with basic Linux or Linux administration. Fundamentals such as the Linux filesystem, process management, and how to edit files will not be covered in class. A good understanding of network concepts; the TCP/IP protocol suite; scripts; and troubleshooting is also assumed. These skills are taught in courses such as Linux Fundamentals and Linux System Administration courses.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 20,024.47</td>
<td></td>
</tr>
<tr>
<td>P 494C</td>
<td>Linux Shell Scripting</td>
<td>This course is designed to provide the skills necessary to automate tasks on a Linux or Unix system. Systems Administrators and Developers alike use shell scripting to simplify repetitive work patterns with shell scripts. The best way to learn shell scripting is writing shell scripts. For this reason, all courses are hands-on.</td>
<td>3 Days</td>
<td>Solid understanding of Unix-based systems and proficiency on the shell or Linux command line. No prior programming experience is needed.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 1,163.80</td>
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</tr>
<tr>
<td>P 495B</td>
<td>Linux System Administration</td>
<td>This is an in-depth course that explores installation, configuration and maintenance of Red Hat Enterprise Linux (RHEL) 6 systems. The course focuses on issues universal to every workstation and server. The course provides extensive hands-on experience. This course also helps students prepare for the RHCSA (RHEL 6) exam.</td>
<td>5 Days</td>
<td>Students should have already taken (or already possess the skills covered in) our Linux Fundamentals course.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 1,163.80</td>
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</tr>
<tr>
<td>P 495C</td>
<td>Linux System Administration (RHCSA Certification Programmand)</td>
<td>This is an in-depth course that explores installation, configuration and maintenance of Red Hat Enterprise Linux (RHEL) 6 systems. The course focuses on issues universal to every workstation and server. The course provides extensive hands-on experience. This course also helps students prepare for the Red Hat Certified System Administrator (RHCSA) Certification.</td>
<td>5 Days</td>
<td>Participants should have at least 2 years of experience performing computer management tasks, including working at the command line, as a system administrator.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 1,163.80</td>
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<tr>
<td>P 495D</td>
<td>Linux System Programming</td>
<td>This course is designed for application/systems programmers who require hands-on access to the system-dependent features of shell/Unix systems. It is designed to teach programmers the mechanics of using system calls, the and interprocess communication (IPC) standard functions, standard library functions and other system-level procedures.</td>
<td>5 Days</td>
<td>Completion of Linux Fundamentals and an intermediate C Programming course is strongly recommended. Students should also have solid C programming skills.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 1,163.80</td>
<td></td>
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<tr>
<td>P 495C</td>
<td>NCFSP - Enterprise Administrator (NCFSP KA)</td>
<td>The NCFSP Windows Server 2008 Certification (formerly known as the NCFSP - Server Administrator) certification validates your ability to handle day-to-day management of the Windows Server 2008 operating system, file structure, and directory services; handle software distribution and updates; monitor servers; provide Tier-2 troubleshooting support; support engineering and \n</td>
<td></td>
<td>NCFSP-Server Administrator Certification and/or (or training is required)</td>
<td>10 Days</td>
<td>Windows Server 2008 certification is strongly recommended. Students should also have solid Windows Server 2008 skills.</td>
<td>UMBC Designated Site</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Course Length</td>
<td>Prerequisites</td>
<td>Course Schedule and Location</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net/Assisted Rate</td>
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<tr>
<td>4390C</td>
<td>MCTS Windows Server 2008R2/MCSIT: Server Administrator</td>
<td>This course is intended for IT professionals who are interested in expanding their knowledge base and technical skills about Windows Server 2008 R2. It will cover key Windows Server 2008 R2 administration, infrastructure, and management topics.</td>
<td>10 days</td>
<td>MCSE/MCSD/MCITP, or equivalent knowledge in IT, network connections, storage, and client operating systems.</td>
<td>Group Pricing</td>
<td>3,605.79</td>
<td></td>
</tr>
<tr>
<td>4390E</td>
<td>MCTS Windows 7 Configuration</td>
<td>This course will also introduce the students to Windows Server 2008 R2, and more Windows Server and networking technologies used by modern IT organizations including file and print services, domains, Active Directory, Routing, General Access, and Group Policy.</td>
<td>6 days</td>
<td>An Introduction to, or equivalent knowledge in configuring Windows systems is required.</td>
<td>Group Pricing</td>
<td>16,865.89</td>
<td></td>
</tr>
<tr>
<td>4390F</td>
<td>MCTS: Microsoft SQL Server 2008, Implementation and Maintenance</td>
<td>This course will also introduce the students to Windows Server 2008 R2, and more Windows Server and networking technologies used by modern IT organizations including file and print services, domains, Active Directory, Routing, General Access, and Group Policy.</td>
<td>6 days</td>
<td>An Introduction to, or equivalent knowledge in configuring Windows systems is required.</td>
<td>Group Pricing</td>
<td>16,865.89</td>
<td></td>
</tr>
<tr>
<td>4435C</td>
<td>Microsoft Office Excel 2010 Level 1</td>
<td>This course will cover the basics of Excel, including creating and using basic Excel spreadsheets and worksheets.</td>
<td>1 day</td>
<td>Basic computer skills, including the ability to create and edit text, and use basic computer commands.</td>
<td>UMBC Designated Site</td>
<td>$218.21</td>
<td></td>
</tr>
<tr>
<td>4436C</td>
<td>Microsoft Office Excel 2010 Level 2</td>
<td>This course will cover advanced features of Excel, including advanced formulas, pivot tables, and conditional formatting.</td>
<td>1 day</td>
<td>Excel Level 1, or equivalent experience.</td>
<td>UMBC Designated Site</td>
<td>$218.21</td>
<td></td>
</tr>
<tr>
<td>4437C</td>
<td>Microsoft Office Excel 2010 Level 3</td>
<td>This course will cover advanced features of Excel, including advanced formulas, pivot tables, and conditional formatting.</td>
<td>1 day</td>
<td>Excel Level 1, or equivalent experience.</td>
<td>UMBC Designated Site</td>
<td>$218.21</td>
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</tr>
<tr>
<td>4438C</td>
<td>Microsoft Office Excel 2010 Level 4</td>
<td>This course will cover advanced features of Excel, including advanced formulas, pivot tables, and conditional formatting.</td>
<td>1 day</td>
<td>Excel Level 1, or equivalent experience.</td>
<td>UMBC Designated Site</td>
<td>$218.21</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Course Length</td>
<td>Prerequisites</td>
<td>Course Schedule and Location</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Pricing</td>
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<tr>
<td>F-451C</td>
<td>Office Outlook 2010: Level 2</td>
<td>In this course you will customize the Outlook environment, calendar, and mail messages, and will also read, share, sign, and quickly locate various Outlook items. Before taking this course, it is recommended that students take the following course or possess equivalent knowledge: Microsoft Office Outlook 2010: Level 1.</td>
<td>1 day</td>
<td></td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups) $ 218.20</td>
<td>Price Per Group $ 3,491.18</td>
</tr>
<tr>
<td>F-430C</td>
<td>Office PowerPoint Audit: Level 1</td>
<td>In this course you will explore the PowerPoint environment and create a presentation. You will format or slides to enhance clarity. To enhance the visual appeal, you will add graphical objects to a presentation and modify them. You will also add tables and charts to a presentation to prevent data in structured form. You will then finalize a presentation to deliver it.</td>
<td>1 day</td>
<td></td>
<td>NA</td>
<td>Price Per Additional Student (Groups) $ 218.20</td>
<td>Price Per Group $ 4,973.20</td>
</tr>
<tr>
<td>F-431C</td>
<td>Office PowerPoint 2010: Level 2</td>
<td>In this course you will explore your presentation by using features that will transform it into a powerful means of communication. You will customize the PowerPoint interface to suit your requirements and use features to create dynamic and visually appealing presentation. You will then finalize a presentation and ensure it to authenticate its validity.</td>
<td>1 day</td>
<td>Microsoft Office PowerPoint 2010 Level 1</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups) $ 218.20</td>
<td>Price Per Group $ 4,973.20</td>
</tr>
<tr>
<td>F-432C</td>
<td>Office Word 2010: Level 1</td>
<td>In this course you will create, edit, and enhance standard business documents using Microsoft® Office Word 2010. To be successful in this course, you should be familiar with using personal computers and you should have used the mouse and keyboard. You should be comfortable in the Windows environment and be able to use Windows to manage information on the computer. You should be able to launch and close programs (open to information stored on the computer) and manage files and folders.</td>
<td>1 day</td>
<td></td>
<td>NA</td>
<td>Price Per Additional Student (Groups) $ 218.20</td>
<td>Price Per Group $ 4,973.20</td>
</tr>
<tr>
<td>F-433C</td>
<td>Office Word 2010: Level 2</td>
<td>In this course you will create complex documents and build personalized efficiency tools using Microsoft® Office Word 2010. Before starting this course, students are recommended to take the following course or have equivalent knowledge: Microsoft® Office Word 2010 Level 1.</td>
<td>1 day</td>
<td>Microsoft Office Word 2010 Level 1</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups) $ 218.20</td>
<td>Price Per Group $ 4,973.20</td>
</tr>
<tr>
<td>F-434C</td>
<td>Office Word 2010: Level 3</td>
<td>In this course you will create, manage, revise, and distribute documents.</td>
<td>1 day</td>
<td></td>
<td>NA</td>
<td>Price Per Additional Student (Groups) $ 218.20</td>
<td>Price Per Group $ 4,973.20</td>
</tr>
<tr>
<td>F-435C</td>
<td>SharePoint 2010: Application Development</td>
<td>This course is intended for professional developers who use Microsoft SharePoint 2010 in a development, medium-to-large development environment. Members of the audience are experienced users of Microsoft Visual Studio 2010 SP1. The audience understands how to use the new features of SharePoint 2010 and Visual Studio 2010. This course provides hands-on, in-depth training on how to develop applications using the new features of SharePoint 2010 and Visual Studio 2010. Before starting this course, you should be familiar with building .NET applications and have completed the following courses or have equivalent experience: Microsoft® Office SharePoint Server 2010.</td>
<td>3 days</td>
<td>.NET Development experience and experience using Microsoft® Office SharePoint Server 2010.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups) $ 1,099.81</td>
<td>Price Per Group $ 5,499.45</td>
</tr>
<tr>
<td>F-437C</td>
<td>SharePoint 2010: Business Users</td>
<td>This is a 3-day instructor-led course that covers the topics covered in the 5-day instructor-led course.</td>
<td>2 days</td>
<td></td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups) $ 558.41</td>
<td>Price Per Group $ 2,792.06</td>
</tr>
<tr>
<td>F-436C</td>
<td>SharePoint 2010: Business Users</td>
<td>This 3-day instructor-led course explores the basic functions of SharePoint 2010.</td>
<td>3 days</td>
<td>Basic understanding of web sites and SharePoint sites.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Groups) $ 655.61</td>
<td>Price Per Group $ 3,277.05</td>
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<td>Course Code</td>
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<td>Course Description</td>
<td>Course Length</td>
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<td>Course Schedule and location</td>
<td>Min/Max # of Students for Group Classes</td>
<td>Net Amount</td>
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<tr>
<td>F-437C</td>
<td>Microsoft SharePoint 2010: Configuring and Administering</td>
<td>This 2-day instructor-led course explores how to navigate and use the new Ribbon interface, learn what new things you can do from the Designer, what changes have been made to the actions and conditions workflows, how to build external content types, and how to modify Out Of The Box workflows.</td>
<td>2 days</td>
<td>Understanding of SharePoint site elements (lists, libraries, Content Types, etc.)</td>
<td>UMBC Designated Site</td>
<td>Price Per Student: NA</td>
<td>Price Per Group (3-8): $ 7,613.63</td>
</tr>
<tr>
<td>F-437C</td>
<td>Microsoft SharePoint 2010: Designer</td>
<td>This course is intended for Microsoft SharePoint Server 2010 users who will need to collaborate with team members, organize documents, manage lists, and integrate SharePoint 2010 with Microsoft Office 2010. During the course students will learn how to collaborate with team members, and store information with them using Microsoft SharePoint Server 2010. To ensure success in this course, familiarity with the Office 2010 environment and navigational tools is highly recommended.</td>
<td>2 days</td>
<td></td>
<td>UMBC Designated Site</td>
<td>Price Per Student: NA</td>
<td>Price Per Group (3-8): $ 5,491.44</td>
</tr>
<tr>
<td>F-437C</td>
<td>Microsoft SharePoint 2010: Foundations</td>
<td>Students will learn to create, find and edit content in a team website. As well as create and perform basic management of a team site using Sharepoint Foundation 2010. Students will also manage site collections and site components as a site collection administrator and as a site administrator.</td>
<td>3 days</td>
<td></td>
<td>UMBC Designated Site</td>
<td>Price Per Student: NA</td>
<td>Price Per Group (3-8): $ 454.51</td>
</tr>
<tr>
<td>F-437C</td>
<td>Microsoft SharePoint 2010: Power User</td>
<td>This course explores several advanced topics of working with SharePoint 2010 sites. Topics include SharePoint Server site definition (business intelligence, search center, etc.), in-depth coverage of workflows, site types and social computing, site administration, site customization and site collection administration. It is designed for people responsible for managing SharePoint sites as Power Users or Site Collection Administrators and those who need to develop how to create sites and lists, manage user access and administrator lists and pages.</td>
<td>3 days</td>
<td></td>
<td>UMBC Designated Site</td>
<td>Price Per Student: NA</td>
<td>Price Per Group (3-8): $ 11,760.00</td>
</tr>
<tr>
<td>F-437C</td>
<td>Microsoft SharePoint 2010: Site Collection Administrators</td>
<td>Microsoft® SharePoint® 2010 is a platform designed to facilitate collaboration and allow people to use familiar applications and web-based tools to create, access, store, and share data and documents in a central location. As such, SharePoint has many distinct features that must be enabled and configured, and many content structures that must be selected, added, and configured. In this course, you will learn how to create, customize, configure, and manage a SharePoint farm. Site so that your team or organization can store and collaborate effectively.</td>
<td>4 days</td>
<td></td>
<td>UMBC Designated Site</td>
<td>Price Per Student: NA</td>
<td>Price Per Group (3-8): $ 24,623.43</td>
</tr>
<tr>
<td>F-480C</td>
<td>Microsoft Sharepoint Foundation 2010: Site Owner</td>
<td>To ensure your success in your course you should have basic end-user skills with Microsoft Windows 7 and any or all of the Microsoft Office 2007, 2010, or 2013 suite components, and basic comprehension with internet browsing.</td>
<td>1 day</td>
<td></td>
<td>UMBC Designated Site</td>
<td>Price Per Student: NA</td>
<td>Price Per Group (3-8): $ 218.22</td>
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</table>

Microsoft® SharePoint® 2010 is a platform designed to facilitate collaboration and allow people to use familiar applications and web-based tools to create, access, store, and share data and documents in a central location. As such, SharePoint has many distinct features that must be enabled and configured, and many content structures that must be selected, added, and configured. In this course, you will learn how to create, customize, configure, and manage a SharePoint farm. Site so that your team or organization can store and collaborate effectively.

SharePoint content structure and configuration options are complex. Site owners must understand what features, options, and content structure are available in SharePoint, as well as how to properly configure them. With SharePoint features, features, and content structures properly implemented, users will be able to securely share files, collaborate on documents, and access information that needs to work with their colleagues more effectively.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Description</th>
<th>Course Length</th>
<th>Prerequisites</th>
<th>Course Schedule and Location</th>
<th>Min/Max # of Students for Group Classes</th>
<th>Net Available Rate</th>
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</thead>
<tbody>
<tr>
<td>E 48BC</td>
<td>Microsoft Sharepoint 2013 Site Owner</td>
<td>SharePoint has many distinct features that must be enabled and configured, and many content structures that can be selected, added, and configured. In this course, you will learn how to create, configure, and manage a SharePoint Site, so that your team or organization can store information and collaborate effectively. SharePoint content structure and configuration options are complex. Site owners must understand what features, options, and content structures are available in SharePoint, and how to properly configure them. With Sharepoint, this, features, and content structures properly implemented, users will be able to securely share files, collaborate on documents, and access information they cannot work with their colleagues more effectively.</td>
<td>1-day</td>
<td>To ensure your success in this course you should have basic skills and experience with Microsoft Windows 7 and any of the Microsoft Office 2007, 2010, or 2013 suite components. Also basic competence with Internet browsing.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group) $ 218.20</td>
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</tr>
<tr>
<td>E 4362C</td>
<td>Microsoft SQL Server 2012: Database Administrator</td>
<td>You have created databases and executed queries on them. You are now ready to perform database administration tasks such as installation of SQL server instances, configuration of SQL server databases and settings, monitoring database performance, controlling user access to databases, and database maintenance. In addition to these, SQL Server 2012 provides many advanced features that enable you to manage databases efficiently. By reinforcing yourself with these tasks and features, you can play, deploy, administer, and maintain SQL server databases efficiently. In this course, you will perform database administration tasks.</td>
<td>5-days</td>
<td>To ensure your success in this course you should have some working knowledge of relational databases. You should also be comfortable working with the Microsoft Windows Server operating system. and be able to use the core functionalities of Windows Server. Also, working knowledge of Transact-SQL queries is essential.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group) $ 878.41</td>
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</tr>
<tr>
<td>E 48BC</td>
<td>Oracle Database 11G Administrator</td>
<td>This course is designed to prepare students to become an Oracle Database 11g Administrator Certified Professional. The purpose of the Oracle Foundation is for students in an Oracle database administrator role to understand the Oracle database architecture and how to optimize performance to interact with one another. Students learn how to create an operatinal database and properly manage the various structures in an efficient and efficient manner including performance monitoring, database security, user management, and backup/restore techniques. The lessons are reinforced with structured hands-on practices.</td>
<td>5-days</td>
<td>Working knowledge of SQL, Oracle Database 11g: Introduction to SQLs.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group) $ 1,781.62</td>
<td></td>
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<tr>
<td>E 48BC</td>
<td>Oracle Database 11g: Administration Workshop I</td>
<td>In this course, the concepts and architecture that support backup and recovery, along with the steps of how to carry it out in various ways and situations, are covered in detail. This includes how to define and test your backup and recovery scenarios. Also, the students learn to manage memory effectively and to perform some performance evaluation and tuning tasks, including using some of the various maintenance tools. The types of backup and restoration techniques, scheduling jobs inside and outside of the database, and controlling system resource usage are covered. Topics are reinforced with hands-on practices.</td>
<td>8-days</td>
<td>SQL Fundamentals or equivalent experience required.</td>
<td>N/A</td>
<td>Price Per Student $ 14,070.53</td>
<td></td>
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<tr>
<td>E 48BC</td>
<td>Oracle Database 11g: Administration Workshop II</td>
<td>This course is designed to prepare students to become an Oracle Database 11g: Administration Certified Professional. Students learn to express and validate the object and system level.</td>
<td>5-days</td>
<td>Working knowledge of SQL, Oracle Database 11g: Introduction to SQLs.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group) $ 878.41</td>
<td></td>
</tr>
<tr>
<td>E 48BC</td>
<td>Oracle Database 11g: Administration Workshop III</td>
<td>This course offers an introduction to Oracle Database 11g database technology. In this course, students learn the concepts of relational databases. This course provides the essential SQL skills that allow developers to write queries against single and multiple tables, manipulate data in tables, and update database objects. Students learn to control privileges on the object and system level. Students learn creating indexes and constraints, and altering existing schema objects. Students also learn how to create and use external tables. These lessons are reinforced with hands-on practices.</td>
<td>8-days</td>
<td>Working knowledge of SQL, Oracle Database 11g: Introduction to SQLs.</td>
<td>N/A</td>
<td>Price Per Student $ 14,070.53</td>
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<tr>
<td>E 48BC</td>
<td>Oracle Database 11g: Introduction to SQL</td>
<td>This course gives students the opportunity to learn about and practice with new language management features and other enhancements to Oracle SQL. The language management features help ease the burden of managing and reporting on the increasing number of language characteristics maintained in Oracle Database 11g. Language management features include features in managing change, diagnosing and recovering from problems, managing high availability, minimizing redundancy and performance, strengthening security, and several other areas that concern database administrators. In addition, the hands-on practice sessions help reinforce</td>
<td>6-days</td>
<td>N/A</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group) $ 315.93</td>
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</tbody>
</table>

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This course introduces students to PL/SQL and helps them understand the benefits of this powerful programming language. Students learn to create PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Students will learn to create entrance PL/SQL blocks as well as stored procedures and functions. Students learn to develop, execute, and manage PL/SQL stored programs with both procedures, functions, packages, and database triggers. Students also learn to manage PL/SQL subprograms, triggers, declaring identifiers and trapping exceptions. Students are introduced to the utilization of some of the advanced capabilities.

Oracle Weblogic seven 11g Administration

This course teaches both the programming interface and the techniques that can be used to write scripts and applications in Perl. This course also covers advanced concepts and capabilities, including object-oriented features, the Perl network interface, and database interfaces. Upon completion, students will be able to write and debug Perl scripts, understand and utilize advanced features of the language, and utilize advanced features of the language for the creation of professional-quality applications.

Perl Programming

This course is designed to provide an introduction to problem-solving and computer programming that does not require prior programming experience. Students should have a working knowledge of computers and good problem-solving skills.

Android

Android is an open-source platform for mobile computing. Applications are developed using familiar Java and Eclipse tools. Many vendors and carriers offer Android-based devices (phones). Android is enjoying a healthy growth, in terms of both sales and applications available and new project starts.

This course teaches students the architecture, API, and techniques to create high-performance and appealing applications for the Android devices. After mastering the API, students will be able to build robust and high-performance applications for the enterprise.

Programming for Android

This course is an introduction to computer science through problem-solving and computer programming. Programming techniques covered in this course include modularization, abstraction, top-down design, specifications, documentation, debugging, and testing. Selected topics in computer science are introduced through programming projects in the Python language running under a UNIX operating system. The core material for this course includes an introduction to Python, the language used for the course readings and exercises. Students will learn to use the Python programming language to develop Python programs. Example programs are used extensively to illustrate basic computer programming. Students complete homework based on exercises for each programming concept.

Python Programming (Online, self-paced)

This course is an introduction to computer science through problem-solving and computer programming. Programming techniques covered in this course include modularization, abstraction, top-down design, specifications, documentation, debugging, and testing. Selected topics in computer science are introduced through programming projects in the Python language running under a UNIX operating system. The core material for this course includes an introduction to Python, the language used for the course readings and exercises. Students will learn to use the Python programming language to develop Python programs. Example programs are used extensively to illustrate basic computer programming. Students complete homework based on exercises for each programming concept.
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<th>Net Available Rate</th>
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<tbody>
<tr>
<td>T 499C</td>
<td>Python Programming</td>
<td>Course teaches the fundamentals of Python programming, including object-oriented design, file handling, and scripting. Students will learn to write and execute Python programs, and understand how to use Python for data analysis and web development.</td>
<td>10 days</td>
<td>Students should have experience with programming (preferably Java or C#) and an understanding of object-oriented programming.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 16,452.34</td>
<td>$ 654.01</td>
</tr>
<tr>
<td>T 488C</td>
<td>Ruby Programming</td>
<td>This course provides an introduction to Ruby programming, focusing on the language's unique syntax and its role in web development. Students will practice writing and debugging Ruby code, and learn about web frameworks like Sinatra.</td>
<td>3 days</td>
<td>Students should have prior experience in object-oriented programming.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 18,452.34</td>
<td>$ 654.01</td>
</tr>
<tr>
<td>T 497C</td>
<td>Regular Expressions</td>
<td>This course introduces students to regular expressions and their applications in computer science, such as text processing, data validation, and scripting.</td>
<td>3 days</td>
<td>Students should be familiar with basic programming concepts and have experience with a scripting language.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 18,452.34</td>
<td>$ 654.01</td>
</tr>
<tr>
<td>T 498C</td>
<td>Reverse Engineering</td>
<td>This course offers an introduction to reverse engineering, teaching students how to analyze and reconstruct computer programs in order to understand their functionality.</td>
<td>5 days</td>
<td>Students should have experience with computer programming and an understanding of software design patterns.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 18,452.34</td>
<td>$ 654.01</td>
</tr>
<tr>
<td>T 500C</td>
<td>Ruby Programming</td>
<td>This course covers the Ruby language's syntax, features, and its applications in web development. Students will practice writing and debugging Ruby code, and learn about web frameworks like Sinatra.</td>
<td>3 days</td>
<td>Students should have prior experience in object-oriented programming.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 18,452.34</td>
<td>$ 654.01</td>
</tr>
<tr>
<td>T 491C</td>
<td>Secure Programming Best Practices</td>
<td>This course introduces students to secure programming practices, teaching them how to write code that is resistant to common attacks and vulnerabilities.</td>
<td>5 days</td>
<td>Students should have completed at least one programming course and have a good understanding of software design patterns.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 18,452.34</td>
<td>$ 654.01</td>
</tr>
<tr>
<td>T 5100</td>
<td>Service Oriented Architecture (SOA) for Architects</td>
<td>This course covers the fundamentals of Service Oriented Architecture (SOA) and its role in modern software development. Students will learn about SOA's concepts, architecture, and practical applications.</td>
<td>5 days</td>
<td>Previous experience with software architecture is required.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 18,452.34</td>
<td>$ 654.01</td>
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<tr>
<td>T 5101</td>
<td>Service Oriented Architecture (SOA) Testing Workshop</td>
<td>This workshop provides hands-on experience with testing SOA and its components, including services, interfaces, and data models. Students will practice using testing frameworks like JUnit and Selenium.</td>
<td>2 days</td>
<td>No specific technical prerequisites are required.</td>
<td>UMBC Designated Site</td>
<td>Group Pricing (20) $ 18,452.34</td>
<td>$ 654.01</td>
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<tr>
<td>34-4984C</td>
<td>GHA and Data Management</td>
<td>This one day interactive seminar addresses the critical issues data and information management professionals will encounter in a GHA environment. It will define the five layers of GHA and the data management skills, methods and models essential to each layer.</td>
<td>1 day</td>
<td>It is expected that students have a clear idea about the GHA methodology and its benefits. UMBC Designated Site.</td>
<td>Price Per Additional Student (Groups)</td>
<td>$ 218.32</td>
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</tr>
<tr>
<td>34-4951C</td>
<td>GHA Foundation Workshops</td>
<td>This 3-day course will introduce you to GHA (Service Oriented Architecture), one of the most popular business initiatives among corporations and government agencies today. Service Oriented Architecture provides a more agile and comprehensive way to integrate information systems and business processes than more traditional approaches. Students will be exposed to a broad range of enterprise GHA subject Matter, providing a solid foundational understanding of both business and technology elements of SOA. Concepts in this workshop are re-focused through a combination of group discussion, class exercises, case study explorations, and daily review.</td>
<td>3 days</td>
<td>User Systems / IT work experience</td>
<td>Price Per Additional Student (Groups)</td>
<td>$ 653.81</td>
<td></td>
</tr>
<tr>
<td>34-5294B</td>
<td>Software Engineering and Programming Best Practices</td>
<td>This course is an introduction to the basic concepts of software development, including the software lifecycle. Emphasis is placed on the requirements phase of the lifecycle. Students will learn various software development tools and expand their software development methodologies including waterfall and agile. Best practice in software design and implementation will be seen toward recognizing and avoiding weaknesses and vulnerabilities in software as a key part of this course.</td>
<td>3 days</td>
<td>Students should have significant training or experience in a high level language such as C, C++ or Java.</td>
<td>Price Per Additional Student (Groups)</td>
<td>$ 653.81</td>
<td></td>
</tr>
<tr>
<td>34-4932C</td>
<td>Linux Administration Essentials</td>
<td>This course will teach the commands and methods needed to setup and manage a Linux version 1.0 system. The course will also cover a problem-solving approach in the lab exercises to teach system managers advanced topics, for long-term management of the system. Upon completion of this course, a system administrator should be able to install, update, and boot the Solaris operating system, set up own accounts and directories, prepare queries for use, perform backups for integrity and performance reasons, monitor the system for performance and in basic setup of network software and capabilities.</td>
<td>3 days</td>
<td>Participants should have at least 1 year of Linux or Unix experience, including working at the command line. Understanding of basic TCP/IP networking concepts is required.</td>
<td>Price Per Additional Student (Groups)</td>
<td>$ 1,094.81</td>
<td></td>
</tr>
<tr>
<td>34-4912C</td>
<td>GHA Fundamentals</td>
<td>In this course, students will learn the fundamentals of the structural query language (SQL) and how to use SQL to store, extract and present information in databases. Numerous hands-on lab exercises using Microsoft Access and Oracle SQL, along with an excellent textbook (which students keep) are used to provide students with a solid understanding of SQL. This is the perfect course for anyone who frequently queries data or works with databases or querying tools. Business analysts, report writers, programers new to SQL, data quality specialists, QA testers. While the course is taught using Access and Oracle, the focus of the course is on database-independent SQL statements and concepts.</td>
<td>3 days</td>
<td>Participants should be comfortable with Windows and MS Office, but does not need prior experience with database.</td>
<td>Price Per Additional Student (Groups)</td>
<td>$ 653.81</td>
<td></td>
</tr>
<tr>
<td>34-4933C</td>
<td>VMware vSphere 5.1 with ESXi and vCenter</td>
<td>This powerful 5-day class is an intensive introduction to virtualization using VMware’s vSphere 5.1 including VMware ESXi 5.1.0 and Center. This class starts with the basics and rapidly progresses to more advanced topics. More than 70% of class time is devoted to lab or case-studies. Skills and best practices are developed and reinforced. Initial lab focus is on installation and configuration of virtual ESX servers. As the class progresses, storage networking and entire virtual management are introduced. The class continues on to more advanced topics including resource balancing, high availability, load balancing, and more. Safety recovery, rapid deployment, real time, and workload consolidation are also covered. This class is unique in its approach, which is to identify common (i.e. pain points) and clearly explain and demonstrate how virtualization delivers clear, tangible benefits (i.e. reduced costs, greater consistency, reproducibility, reduced administration, server consolidation, etc.). Each topic is presented from the perspective of delivering key business value. Not just the technical or mechanical aspects of the software.</td>
<td>5 days</td>
<td>Attendees should have user, operator or administrator experience on common operating systems such as Microsoft Windows, Linux, UNIX, etc. Experience installing, configuring and managing operating systems, storage systems, and/or networking is helpful but not required. All attendees should have a basic familiarity with PC server hardware, disk partitioning, IP addressing, BIOS installation, networking, etc.</td>
<td>Price Per Additional Student (Groups)</td>
<td>$ 1,094.81</td>
<td></td>
</tr>
<tr>
<td>34-4514C</td>
<td>WebSphere Application Server v7.0 Administration Course</td>
<td>This course teaches the basics of the administration and deployment of enterprise applications in the WebSphere Application Server v7.0 network deployment environment. The labs for the course use a Linux environment.</td>
<td>5 days</td>
<td>The student should have a good understanding of WebSphere technology, Java, and operational skills for Unix. Administrators skills for a web server like Apache or IBM HTTP server would also be beneficial although not required.</td>
<td>Price Per Additional Student (Groups)</td>
<td>$ 1,094.81</td>
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<tr>
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<td>Min/Max # of Students for Group Classes</td>
<td>Net Authorized Rate</td>
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<tr>
<td>F 4513C</td>
<td>WebSphere Application Server v7.0 Administration on Windows</td>
<td>This course teaches the basics of the administration and deployment of enterprise applications in the IBM WebSphere Application Server 7.0 network deployment environment. The labs for the course are a Windows environment.</td>
<td>5 days</td>
<td>The student should have a good understanding of Web technology, Java, and operational skills for Windows Administration skills for a web server like Apache or IIS. HTTP server would also be beneficial although not required</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,098.81</td>
</tr>
<tr>
<td>F 4514C</td>
<td>WebSphere Application Server v8.0 Administration on Linux</td>
<td>This course teaches the basics of the administration and deployment of enterprise applications in the IBM WebSphere Application Server 8.0 network deployment environment. This course covers all of the topics required to administer a production deployment environment, including troubleshooting, security, databases, messaging, performance, scripting, web services, and auditing.</td>
<td>5 days</td>
<td>The student should have a good understanding of Web technology, Java, and operational skills for Linux. Administration skills for a web server like Apache or IBM HTTP Server would also be beneficial although not required</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,098.81</td>
</tr>
<tr>
<td>F 4515C</td>
<td>WebSphere Application Server v8.0 Administration on Windows</td>
<td>This course teaches the basics of the administration and deployment of enterprise applications in the IBM WebSphere Application Server 8.0 network deployment environment. This course covers all of the topics required to administer a production deployment environment, including troubleshooting, security, databases, messaging, performance, scripting, web services, and auditing.</td>
<td>5 days</td>
<td>The student should have a good understanding of Web technology, Java, and operational skills for Windows. Administration skills for a web server like Apache or IIS. HTTP server would also be beneficial although not required</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,098.81</td>
</tr>
<tr>
<td>F 4522C</td>
<td>Windows System Programming</td>
<td>This course is an introduction to the basic concepts of Windows System Programming. Emphasis is placed on user development; this course will not cover kernel development. Students will use the Visual Studio Development Platform to develop Windows applications. In conjunction with development, students will utilize the MSDN Documentations to learn best practices in Microsoft software design and implementation.</td>
<td>5 days</td>
<td>Students should have significant training or experience in a high level language such as C/C++ – Network Programming, preferably with sockets, is highly recommended, but not required.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,187.97</td>
</tr>
<tr>
<td>F 4523C</td>
<td>Certified Wireless Network Administrator (CWNA)</td>
<td>This Enterprise Wireless Unit: Administration course, whether in an academic format or a 4-day boot camp format, provides the networking professional a complete foundation of knowledge for entering into or advancing in the wireless networking industry. From basic 802.11 theory to 802.11r frame exchange processes, this course delivers hands-on training that will benefit the novice as well as the experienced network professional.</td>
<td>5 days</td>
<td>Basic networking and computer knowledge.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,098.81</td>
</tr>
<tr>
<td>F 4532C</td>
<td>AXI for GIA and Web Services</td>
<td>This course will focus on fundamental skills necessary to use XML in the data-driven applications in GIA and Web Services. Through lecture and hands-on lab exercises, you will learn the essentials of data interoperability using XML, well-formed XML documents, enforce document validity, use XML and transforms to transform XML documents, and gain an introduction to XML programming options. You will also learn best practices for how to evolve XML data and structure over time and how XML relates to some of the fundamental technologies used by Web Services. This course contains hands-on labs to reinforce the lecture topics. The labs use the Eclipse Web Tools Project although the XML tools available in any other Eclipse-based development tool, like NetBeans, VisualAge, or GIA Workbench, would be the same. The XML tools used in these practices are the same ones offered from Eclipse. Students who take this course will be able to apply their knowledge of the Eclipse XML tools even if they use one of these other tools.</td>
<td>5 days</td>
<td>Familiarity with Web and data processing concepts. HTML and programming experience is helpful.</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 658.61</td>
</tr>
<tr>
<td>800</td>
<td>Microsoft® Windows Server® 2012: Installation and Configuration (Exam 70-660)</td>
<td>Welcome to Microsoft® Windows Server® 2012: Installation and Configuration (Exam 70-660). This course covers all the topics listed in the exam objectives for 70-660. It also contains practical information for the working server administrator.</td>
<td>3 days</td>
<td>To ensure your success in this course, you should understand the fundamentals of networking. You should have experience with completing administration and security tasks in an enterprise environment. In addition, you should be comfortable with supporting, configuring, and using a Windows® client such as Windows Vista®, Windows 7, or Windows 8. You can obtain this level of skills and knowledge by taking the following UMBC Training Centers courses: Configuring Windows® Desktops, Configuring Windows® Desktops Course</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,098.81</td>
</tr>
<tr>
<td>801</td>
<td>Microsoft® Windows Server® 2012: Installation and Configuration (Exam 70-661)</td>
<td>This course covers all the topics listed in the exam objectives for 70-661. It also contains practical information for the working server administrator.</td>
<td>3 days</td>
<td>To ensure your success in this course, you should understand the fundamentals of networking. You should have experience with completing administration and security tasks in an enterprise environment. In addition, you should be comfortable with supporting, configuring, and using a Windows® client such as Windows Vista®, Windows 7, or Windows 8. You can obtain this level of skills and knowledge by taking the following UMBC Training Centers courses: Configuring Windows® Desktops, Configuring Windows® Desktops Course</td>
<td>UMBC Designated Site</td>
<td>Price Per Additional Student (Group)</td>
<td>$ 1,098.81</td>
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</table>
Course Code: TBD
Course Title: TBD
Course Description: TBD
Course Length: TBD
Prerequisites: TBD
Course Schedule and Location: TBD
Min/Max # of Students for Group Classes: TBD
Net/Reduced Rate: TBD

**Course Code: 132**
Course Title: Microsoft® Windows Server® 2012: Administration (Exam 70-411)
Course Description: This course covers the topics listed in the exam objectives for 70-411. In addition, it contains practical exercises for the working server administrator.
Course Length: 5 days
Prerequisites: TBD
Net/Reduced Rate: $10,744.72

**Course Code: 132**
Course Title: Microsoft® Windows Server® 2012: Configuring Advanced Services (Exam 70-412)
Course Description: This course is an introduction to Data Analysis, with a focus on Cyber security and IT operational applications. Data Analysis is "the process of inspecting, cleaning, transforming, and modeling data with the goal of highlighting useful information, suggesting conclusions, and supporting decision making. Data Analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, in different business, science, and social science domains."
Course Length: 5 days
Prerequisites: TBD
Net/Reduced Rate: $10,744.72

**Course Code: 132**
Course Title: Data Analysis for Cyber Operations
Course Description: TBD
Course Length: 5 days
Prerequisites: TBD
Net/Reduced Rate: $5,835.42
<table>
<thead>
<tr>
<th>Labor Category Title</th>
<th>Minimum Years of Experience</th>
<th>Minimum Educational/ Degree Requirements</th>
<th>Functional Responsibilities</th>
<th>Net Awarded Hourly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject Matter Expert 1</td>
<td>4 years</td>
<td>Masters Degree</td>
<td>Services include, but are not limited to, document design support, counsel to individuals and/or teams on areas of expertise, instructional delivery, curriculum assessment, curriculum development, client interviews, process reviews and other organizational matters.</td>
<td>$163.21</td>
</tr>
<tr>
<td>Subject Matter Expert 2</td>
<td>8 years</td>
<td>Masters Degree</td>
<td>Provides expert consultative support to a functional technical area of the project. Develops solutions to complex problems. Manages and configures commercial off-the-shelf applications; installs and configures systems. Works closely with the information technologists to identify the best technological solution to technical issues. Develops policy, conducts independent analysis or evaluation, and provides reports. Aligns information technology with business requirements, and integrates, as appropriate.</td>
<td>$195.47</td>
</tr>
<tr>
<td>Subject Matter Expert 3</td>
<td>12 years</td>
<td>Masters Degree</td>
<td>Provides high level expert consultative support to a functional technical area of the project. Develops solutions to complex problems and is in charge of SME 1 and 2. Manages and configures commercial off-the-shelf applications; installs and configures systems. May supervise the activities of other subject matter experts or technical personnel. Provides expert, independent services and leadership in specialized technical areas; leverages expertise and specialization in functional areas or IT solutions. Aligns information technology with business requirements, and integrates, as appropriate.</td>
<td>$244.33</td>
</tr>
<tr>
<td>IT Instructor</td>
<td>5 years</td>
<td>Bachelor's Degree</td>
<td>The IT Instructor is responsible for the full life cycle of course development and delivery of training classes, both instructor lead and remote/web-based training. Additional responsibilities include, but are not limited to: Course Planning; Course Design; Course Material Development; Lab/Exercise Development (if applicable); Course Material and Lab Testing; Course Delivery</td>
<td>$163.21</td>
</tr>
<tr>
<td>Project Executive</td>
<td>12 years</td>
<td>Bachelor's Degree</td>
<td>Program Executives participate in establishing and defining program plan requirements. Program Executives coordinate interdepartmental development of program plans and interface with vendors and customers. Program Executives monitor and report performance against plans to ensure that contractual, cost and schedule objectives are met. Liaison between project team and government on all binding contractual matters. Provides executive level oversight and leadership to fully access all required corporate resources. Participates in key planning meetings, performance review sessions, and status briefings to ensure that project direction is in alignment with the contracting agency's strategic business goals and objectives.</td>
<td>$195.47</td>
</tr>
<tr>
<td>Project Manager</td>
<td>7 years</td>
<td>Bachelor's Degree</td>
<td>The Project Manager is responsible for overall project performance. Project Managers leads strategic planning, budgeting, and staffing efforts in response to task requirements. Formulates, communicates, and enforces quality work standards. Monitors progress and resolves any identified issues impacting successful product/service delivery. Ensures compliance with all administrative and contractual requirements. Serves as point-of-contact with government contract management staff for reporting project status and negotiating change orders. Assigns staff responsibilities and supervises all staff efforts.</td>
<td>$163.21</td>
</tr>
<tr>
<td>Principal Instructional Designer</td>
<td>8 years</td>
<td>Bachelor's Degree</td>
<td>The Principal Instructional Designer is responsible for supervising and/or performing documentation design, development, and preparation throughout the production cycle that can include: technical writing/editing, editorial consultation, copy design/editing, proofreading, or overall documentation review. Works with all levels of management, technical personnel, authors, and subject matter experts to define documentation content, guidelines, specifications, and development schedules. Prepares required documentation in an appropriate format. Supports configuration management and quality assurance standards. Reviews and analyzes the data and user requirements to ensure that documentation is clear, concise, and valid. Confirms the adequacy of material submitted for publication or final product quality. Ensures that documents follow the appropriate style guide and may develop project-specific style guide supplements. Can manage or supervise production cycle activities through document delivery and maintenance.</td>
<td>$163.21</td>
</tr>
<tr>
<td>Senior Instructional Designer</td>
<td>5 years</td>
<td>Bachelor's Degree</td>
<td>The Senior Instructional Designer is responsible for documentation design, development, and preparation throughout the production cycle that can include: technical writing/editing, editorial consultation, copy design/editing, proofreading, or overall documentation review. Prepares required documentation in an appropriate format. Adheres to required configuration management or quality assurance standards. Analyzes the data and user requirements to ensure that documentation is clear, concise, and valid. Ensures that documents follow the appropriate style guide. May be responsible for any activity in the production cycle through document delivery and maintenance. Coordinates or supervises resources during the production cycle.</td>
<td>$130.96</td>
</tr>
<tr>
<td>Labor Category Title</td>
<td>Minimum Years of Experience</td>
<td>Minimum Educational/Degree Requirements</td>
<td>Functional Responsibilities</td>
<td>Net Awarded Hourly Rate</td>
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<tr>
<td>Junior Instructional Designer</td>
<td>2 years</td>
<td>Bachelor's Degree</td>
<td>Junior Instructional Designers are responsible for documentation development and preparation throughout the production cycle that can include: technical writing/editing, editorial consultation, copy design/editing, proofreading, or overall documentation review. Checks documents for spelling, grammar, organization, consistency, and content. Ensures that documents follow the appropriate style guide.</td>
<td>$97.73</td>
</tr>
<tr>
<td>Training Coordinator</td>
<td>2 years</td>
<td>Bachelor's Degree</td>
<td>The Training Coordinator provides all the coordination for both internal and external training needs. From working with project and training management, to scheduling dates, to getting all course materials and tracking training attendance. The training coordinator will work through the details keeping each training initiative on track, on schedule and on time.</td>
<td>$97.73</td>
</tr>
<tr>
<td>Graphic Designer</td>
<td>2 years</td>
<td>Bachelor's Degree</td>
<td>The Graphic Designer designs and develops graphic illustrations from sketches and other types of artwork using Commercial Off The Shelf computer tools. Creates graphic displays in both black and white and color, as well as in Internet compatible formats. Provides scanning, sizing, and enhancement support. Assists in integrating graphics with text in desktop publishing media.</td>
<td>$97.73</td>
</tr>
<tr>
<td>Administrative Assistant</td>
<td>1 year</td>
<td>Bachelor's Degree</td>
<td>The Administrative Assistant supports the production of project deliverables and performs clerical and administrative functions required to complete work related to the project. Duties include general clerical, receptionist and project-based work. Projects a professional company image through in-person and phone interaction.</td>
<td>$52.78</td>
</tr>
</tbody>
</table>

**Education Substitutions**

A Masters Degree may be substituted with two years of additional experience and a Bachelors Degree.