CCS
LEARNING ACADEMY

13475 Danielson Street Suite 230, Poway, CA 92064
Office: (858) 208-4131   Fax: (858) 683-2424
www.ccslearningacademy.com

Catalog of Courses
01/01/23 to 12/31/23

Updated 03/22/23

Contents

Institutional Mission and Objectives

CCS Learning Academy is dedicated to providing the most comprehensive and highest quality of education and training to prepare graduates for entry-level through senior-level careers in information technology. Our goal is to have each student acquire the essential analytical and critical abilities, attributes, and skills necessary to obtain employment as professionals, empowering individuals with the professional skills and development of values necessary to achieve higher levels of career excellence in the information technology industry. As industry standards and technologies evolve, CCS Learning Academy adapts and revises its curriculum accordingly, ensuring the highest quality of education within the industry.

The objective of CCS Learning Academy is to develop professional qualities in each of our students.

To teach those subject areas which are most needed and emphasize those most needed for success, including obtaining professional and/or vocational employment.
To provide instruction that will enable each student to progress as rapidly as capability permits.
To establish themselves as practicing professionals.
To advance professionally through organized training or self-learning.

Catalog Update Policy

The policy of this institution is to update the official school catalog at least annually, in January of each year. Annual updates may be made by the use of supplements or inserts accompanying the catalog. If changes in educational programs, educational services, procedures, or policies required to be included in the catalog by statute or regulation are implemented before the issuance of the annually updated catalog, those changes shall be reflected at the time they are made in supplements or inserts accompanying the catalog.

Policy – Distribution of This Catalog and Program Brochures

This institution makes its current catalog and current program brochures available to the public at no charge. Individuals who wish to obtain a copy can make arrangements by simply calling the school's office.

Instructional Locations:

San Diego
13475 Danielson Street, Suite 230
Poway, CA 92064

Enrollees shall be given a copy of the catalog, program brochures and other relevant publications, and in case of eligible persons under the GI Bill, written materials containing VA policies. Receipt by the enrollee of such materials shall be made in writing in the form provided by the school.

Programs delivered in both in the classroom setting and remotely, if applicable, are made on synchronous basis.

BPPE Approval

This institution is a private institution approved to operate by the California Bureau for Private Postsecondary Education (BPPE). Approval to operate means the institution is compliant with minimum standards contained in the California Education Code (CEC), California Private Postsecondary Education Act of 2009 (as amended), and Division 7.5 of Title 5 of the California Code of Regulations (CCR).

GI Bill

This institution is not an approved educational institution by the Veterans Affairs (VA) under Title 38 of the Code of Federal Regulations (pertinent portion of the GI Bill). The references to VA and the GI Bill in this catalog are premised on the institution's intention to apply for approval as an educational institution under the GI Bill.

Financial Stability – Bankruptcy History

This institution has not had a pending petition in bankruptcy, is not operating as a debtor in possession and has not filed a bankruptcy petition within the preceding five years nor has had a petition in bankruptcy filed against it within the preceding five years that resulted in reorganization under chapter 11 of the United States Bankruptcy Code.

Review Documents

As a prospective student, you are encouraged to review this catalog prior to signing an enrollment agreement. You are also encouraged to review the School Performance Fact Sheet, which must be provided to you prior to signing an enrollment agreement.

Description of the Facilities and Type of Equipment Used for Instruction

The school is located on the second floor of a two-story standalone building in a light industrial business park in the city of Poway. The school facility is approximately 3,781 square feet with sufficient parking

available in the rear of the building. The administrative area is divided into a reception area, 5 offices, 8 office cubicles, two classrooms rooms, a conference area, and kitchen. Restrooms are available in the building. Instruction is provided in the primary classroom and remotely. At the present time the computer classroom is equipped with modern and currently in use systems including laptops, a projector and standard peripherals.

Student capacity:
Onsite, 18; Remote, 18

Equipment used for all educational programs:
Laptops and headphones, Desks, Chairs, Projector, Conference camera systems

Software:
Microsoft SQL Server
Erwin
Tableau
MS Excel
Power BI Desktop
TFS plugins
SharePoint

Library Resources

No formal library is needed to meet the instructional needs of the students. General library materials would not be compatible with the objectives of this program as the acquisition of specialized knowledge and hands-on-skills are the essential elements for completion of the programs offered. Learning resources provided include access to books, periodicals, videos, and access to specially selected internet sources of information which support the learning objectives of the programs offered. Student may access learning resources by asking any staff member during normal business hours, 9am to 5pm Monday through Friday. Staff members are also available to provide research assistance. Learning resources may not be taken from the premises. After any student has been enrolled in a program and prior to the first day of instruction, the student will be contacted by the instructor via email and provided a login and password to access the institution's learning resources.

Questions

Any questions a student may have regarding this catalog that have not been satisfactorily answered by the institution may be directed to the Bureau for Private Postsecondary Education at:

Address: 1747 N. Market Blvd. Ste 225 Sacramento, CA 95834
                  P.O. Box 980818, West Sacramento, CA 95798-0818

Web Site: www.bppe.ca.gov
Telephone and Fax: (888) 370-7589 or by fax (916) 263-1897
                      (916) 574-8900 or by fax (916) 263-1897

Complaints

A student, or any member of the public, may file a complaint about this institution with the Bureau for Private Postsecondary Education by calling toll free (888) 370-7589 or by completing a complaint form, which can be obtained on the bureau's Internet web site www.bppe.ca.gov.

NOTICE CONCERNING TRANSFERABILITY OF CREDITS AND CREDENTIALS EARNED AT OUR INSTITUTION

The transferability of credits you earn at CCS Learning Academy is at the complete discretion of an institution to which you may seek to transfer. Acceptance of the certificate you earn in the educational program is also at the complete discretion of the institution to which you may seek to transfer. If the certificate that you earn at this institution are not accepted at the institution to which you seek to transfer, you may be required to repeat some or all of your coursework at that institution. For this reason you should make certain that your attendance at this institution will meet your educational goals. This may include contacting an institution to which you may seek to transfer after attending CCS Learning Academy to determine if your certificate will transfer.

Admissions Policy

The institution shall conduct an assessment prior to admission in order to determine whether each student has the skills and competencies to succeed in the training environment for all programs.

The institution utilizes technical and professional development questions when screening candidates. It assists administrators and guides the admissions process by providing insight into potential risk factors that often contribute to a student's decision to drop out of a program. The results of this test identify areas where additional support from school advisors could be helpful, directing students towards alternative programs that seem more suitable, and in some cases, to delay or deny admission when too many risk factors are present. The assessment will focus on:

Schedule Management	Program Commitment
Motivation	Academic Confidence
Communication Skills	Transportation
Tech Knowledge	Educational Background

Programs require a minimum associate's degree, preferably in a STEM field (science, technology, engineering, mathematics). Foreign equivalent degrees are accepted.

This institution does not award credit for satisfactory completion of CLEP or other comparable examinations. This institution does not award credit for experiential learning. No Ability to Benefit Students will be admitted. This institution has not entered into an articulation or transfer agreement with any other institution.

Maximum enrollment in each program offered is 18 students onsite and 18 students for remote learning.

Unless otherwise specified, the institution shall transmit the first lesson and any materials to any student within seven days after the institution accepts the student for admission.

Transferability and Recognition of Credits

This institution will require enrollees to provide records of previous education and training, if any. These records will be evaluated to determine whether awarding or recognition of credits are proper. Credits that are substantially relevant to units associated with the program being enrolled in shall be recognized such that the program of study is adjusted, and duration of classes is shortened proportionately. In all cases of recognition of credits, the student shall be notified accordingly.

For veterans and eligible persons under the GI Bill, this institution maintains a written record of previous education and training that clearly indicates whether or not appropriate credit has been given for previous education and training. In each of the cases where credit is given and the training period is shortened proportionately, the Department of Veterans Affairs shall be notified.

Visa Related Services

This institution does not admit students from other countries, so no visa related services are offered for study or education purposes.

Language Proficiency

For a student whose high school or equivalent coursework was not completed in English, and for whom English was not a primary language, the student must attain qualifying score of 97 on the CELSA. This requirement does not apply to students who have received their high school diploma or the equivalent at an academic institution which has provided the instruction in the English language. Similarly, this requirement does not apply to students who have completed coursework, in English, at the college level.

Language of Instruction

Instructions will be given in no language other than English.

English as a Second Language Instruction

This institution does not provide ESL instruction.

Accreditation Status

This institution is not accredited by an accrediting agency recognized by the United States Department of Education. These programs do not lead to licensure in California or other states. A student enrolled in an unaccredited institution is not eligible for federal financial aid. For school policy purposes, federal financial aid does not include benefits received under the GI Bill.

Student Tuition Recovery Fund Disclosures

The State of California established the Student Tuition Recovery Fund (STRF) to relieve or mitigate economic loss suffered by a student in an educational program at a qualifying institution, who is or was a California resident while enrolled, or was enrolled in a residency program, if the student enrolled in the institution, prepaid tuition, and suffered an economic loss. Unless relieved of the obligation to do so, you must pay the state-imposed assessment for the STRF, or it must be paid on your behalf, if you are a student in an educational program, who is a California resident, or are enrolled in a residency program, and prepay all or part of your tuition.

You are not eligible for protection from the STRF and you are not required to pay the STRF assessment, if you are not a California resident, or are not enrolled in a residency program.
It is important that you keep copies of your enrollment agreement, financial aid documents, receipts, or any other information that documents the amount paid to the school. Questions regarding the STRF may be directed to the Bureau for Private Postsecondary Education, 1747 N. Market Blvd., Suite 225, Sacramento, CA 95834, (916) 574-8900 or (888) 370-7589.

To be eligible for STRF, you must be a California resident or are enrolled in a residency program, prepaid tuition, paid or deemed to have paid the STRF assessment, and suffered an economic loss as a result of any of the following:

1. The institution, a location of the institution, or an educational program offered by the institution was closed or discontinued, and you did not choose to participate in a teach-out plan approved by the Bureau or did not complete a chosen teach-out plan approved by the Bureau.
2. You were enrolled at an institution or a location of the institution within the 120 day period

before the closure of the institution or location of the institution, or were enrolled in an educational program within the 120 day period before the program was discontinued.

3. You were enrolled at an institution or a location of the institution more than 120 days before the closure of the institution or location of the institution, in an educational program offered by the institution as to which the Bureau determined there was a significant decline in the quality or value of the program more than 120 days before closure.
4. The institution has been ordered to pay a refund by the Bureau but has failed to do so.
5. The institution has failed to pay or reimburse loan proceeds under a federal student loan program as required by law, or has failed to pay or reimburse proceeds received by the institution in excess of tuition and other costs.
6. You have been awarded restitution, a refund, or other monetary award by an arbitrator or court, based on a violation of this chapter by an institution or representative of an institution, but have been unable to collect the award from the institution.
7. You sought legal counsel that resulted in the cancellation of one or more of your student loans and have an invoice for services rendered and evidence of the cancellation of the student loan or loans.

To qualify for STRF reimbursement, the application must be received within four (4) years from the date of the action or event that made the student eligible for recovery from STRF.

A student whose loan is revived by a loan holder or debt collector after a period of noncollection may, at any time, file a written application for recovery from STRF for the debt that would have otherwise been eligible for recovery. If it has been more than four (4) years since the action or event that made the student eligible, the student must have filed a written application for recovery within the original four (4) year period, unless the period has been extended by another act of law.

However, no claim can be paid to any student without a social security number or a taxpayer identification number.

Privacy Act

It is this institution's intent to carefully follow the rules applicable under the Family Education Rights and Privacy Act. It is our intent to protect the privacy of a student's financial, academic and other school records. We will not release such information to any individual without having first received the student's written request to do so, or unless otherwise required by law.

Student Conduct

Students are expected to behave professionally and respectfully at all times. Students are subject to dismissal for any inappropriate or unethical conduct or for any act of academic dishonesty. Students are

expected to dress and act accordingly while attending this institution. At the discretion of the school administration a student may be dismissed from school for reasons including, but not limited to:

> Coming to class in an intoxicated or drugged state.
> Possession of drugs or alcohol on campus.
> Possession of a weapon on campus.
> Behavior creating a safety hazard to other person(s).
> Disobedient or disrespectful behavior to other students, an administrator or instructor.
> Stealing or damaging the property of another.

Any students found to have engaged in such conduct will be asked to leave the premises immediately. Disciplinary action will be determined by the Chief Academic Officer of this institution and such determination will be made within 10 days after meeting with both the chair of the department in which the student is enrolled and the student in question.

Nondiscrimination Policy

This institution is committed to providing equal opportunities to all applicants to programs and to all applicants for employment. Therefore, no discrimination shall occur in any program or activity of this institution, including activities related to the solicitation of students or employees on the basis of race, color, religion, religious beliefs, national origin, sex, sexual orientation, marital status, pregnancy, age, disability, veteran's status, or any other classification that precludes a person from consideration as an individual. Please direct any inquiries regarding this policy, if any, to the Chief Academic Officer who is assigned the responsibility for assuring that this policy is followed.

Academic Freedom

CCS Learning Academy is committed to assuring full academic freedom to all faculty. Confident in the qualifications and expertise of its faculty members, the school encourages its faculty members to exercise their individual judgments regarding the content of the assigned courses, organization of topics and instructional methods, providing only that these judgments are made within the context of the course descriptions as currently published, and providing that the instructional methods are those official sanctioned by the institution, methods for which the institution has received oversight approval.

CCS Learning Academy encourages instructors and students to engage in discussion and dialog. Students and faculty members alike are encouraged to freely express views, however controversial, as long as they believe it would advance understanding in their specialized discipline or sub-disciplines.

Sexual Harassment

This institution is committed to providing a work environment that is free of discrimination, intimidation and harassment. In keeping with this commitment, we believe that it is necessary to affirmatively confront this subject and express our strong disapproval of sexual harassment. No one associated with this institution may engage in verbal abuse of a sexual nature; use sexually degrading or graphic words to describe an individual or an individual's body; or display sexually suggestive objects or pictures at any facility or other venue associated with this institution. Students are responsible for conducting themselves in a manner consistent with the spirit and intent of this policy.

Student's Right to Cancel

Direct Instruction:
The student has the right to cancel the enrollment agreement and obtain a refund of charges paid through attendance at the first-class session, or the seventh day after enrollment, whichever is later. The institution shall refund 100 percent of the amount paid for institutional charges, less a reasonable deposit or application fee not to exceed two hundred fifty dollars ($250).

Indirect Instruction:
The student shall have the right to cancel the agreement and receive a full refund before the first lesson and materials are received or the seventh day after enrollment, whichever is later. Cancellation is effective on the date written notice of cancellation is sent. The institution shall make the refund as per the calculation consistent with the California Code of Regulations. If the institution delivered the first lesson and materials before an effective cancellation notice was received, the institution shall make a full refund within 45 days after the student's return of the materials.

A notice of cancellation shall be in writing, and a withdrawal may be effectuated by the student's written notice to the school administrative office, 13475 Danielson Street, Suite 230, Poway, CA 92064 or by the student's conduct, including, but not necessarily limited to, a student's lack of attendance.

The institution shall issue a refund for unearned institutional charges if the student cancels an enrollment agreement or withdraws during a period of attendance. The refund policy for students shall be a pro rata refund. The institution shall pay or credit refunds within 45 days of a student's cancellation or withdrawal.

If the student has received federal student financial aid funds, the student is entitled to a refund of moneys not paid from federal student financial aid program funds.

Refund Policy

A pro rata refund pursuant to section 94910(c) or 94920(d) or 94927 of the code shall be no less than the total amount owed by the student for the portion of the educational program provided subtracted from the amount paid by the student calculated as follows:

The amount owed equals the daily charge for the program (total institutional charge, divided by the number of days or hours in the program), multiplied by the number of days student attended, or was scheduled to attend, prior to withdrawal.

For purposes of determining a refund, a student shall be considered to have withdrawn from an educational program when he or she withdraws or is deemed withdrawn in accordance with the withdrawal policy stated in this institution's catalog.

If an institution has collected money from a student for transmittal on the student's behalf to a third party for a bond, library usage, or fees for a license, application, or examination and the institution has not paid the money to the third party at the time of the student's withdrawal or cancellation, the institution shall refund the money to the student within 45 days of the student's withdrawal or cancellation.

If the student has received federal student financial aid funds, the student is entitled to a refund of moneys not paid from federal student financial aid program funds.

This institution shall refund any credit balance on the student's account within 45 days after the date of the student's completion of, or withdrawal from, the educational program in which the student was enrolled.

A student shall be entitled to a pro rata refund of the unused portion of the tuition, fees, and charges if the eligible person fails to enter the program or discontinues or is discontinued from it prior to completion. This applies throughout the period of attendance regardless of the amount of clock hours of instruction received during any given period of attendance.

Policies and Procedures Regarding Financial Aid

The school does not participate in either State or Federal financial aid programs, nor does it provide financial aid directly to its students. A student enrolled in an unaccredited institution is not eligible for federal financial aid programs.

Loan Repayment

If a student obtains a loan to pay for an educational program, the student will have the responsibility to repay the full amount of the loan plus interest, less the amount of any refund, and that, if the student has received federal student financial aid funds, the student is entitled to a refund of the moneys not paid from federal student financial aid program funds.

Financial Aid Disclosures

If a student obtains a loan to pay for an educational program, the student will have to repay to repay the full amount of the loan plus interest, less the amount of any refund, and that, if the student has received federal student financial aid funds, the student is entitled to a refund of the money not paid from federal student financial aid program funds.

Grades and Standards for Student Achievement - Satisfactory Progress

Grades are awarded on a traditional A, B, C, D, F system. The minimum passing grade is a C. The minimum allowable grade point average to maintain satisfactory progress is a C, or 2.0. In calculating a student's grade point average, the following policy applies:

90% to 100%	=	A	4 Grade Points
80% to 89%	=	B	3 Grade Points
70% to 79%	=	C	2 Grade Points
60% to 69%	=	D	1 Grade Point
0 to 59%	=	F	0 Grade Points

If the student has not completed the coursework and earned a grade at the end of the course, the instructor may issue one of the following grades.

I – Incomplete:
If the course has not been completed, the instructor may grant an I on a two-month extension of the term, at no additional tuition cost, when the student is making satisfactory progress and the instructor believes that an extension of time will permit satisfactory completion. At the end of this period, a final grade must be recorded.

W – Withdraw:
The student may withdraw from any course before the end of the term. At the end of the term, the instructor may withdraw the student from the course and issue a W when the instructor believes the student's progress is insufficient to warrant an extension. A student who withdraws or is administratively withdrawn must retake the course and is responsible for a new tuition payment for that course of study.

Attendance Policy – All Programs

Students are required to attend more than 85% of the scheduled sessions throughout the entire program. When a student falls below 90% attendance they will be given a verbal warning by their instructor. When a student falls below 85% attendance they will be placed on probation for the remainder of the program. The student will be notified of their probation status and they will be required to meet with the Chief Academic Officer. Students who arrive to class more than 10 minutes after the class is scheduled to commence will receive an unexcused absence for that class period. An excused absence may be granted by receiving advanced permission. Acceptable reasons for an excused absence are deaths in the family, religious observances and jury duty. Make-up work necessitated by excused absences shall be allowed upon written instructions by any concerned faculty member.

This institution's policy on attendance is based on the premise that regular communication between the teacher and the student and, also, among students themselves, has significant value in the learning process. To assure this timely communication, your instructor will respond to each of your assignment submissions or exam submissions within 10 days. To further assure this timely communication, you must respond to each of your instructor's inquiries within 10 days as well.

The student must demonstrate regular and substantive interaction with the instructor. Regular and substantive interaction is defined as completing one of the following academically related activities once a week in order to be marked as having attended and actively participating:

- Post to the course discussion board substantive comments relevant to the subject
- Substantive exchanges with the instructor about course content, concepts, and assignments
- Submit a graded unit assignment or exercise
- Attempt a pre-final exam or final exam
- Submit a final project

Logging into a course and clicking on resources will not count as having participated. Reading discussion boards, and reading or viewing course resources, though academically important, are not measured or counted as student attendance.

Academic Probation and Dismissal Policies

The Chief Academic Officer may place a student on academic probation if the student is not making satisfactory academic progress as per this institution's published policy. The student's grade point average will be monitored at the end of each module of instruction as the grades are posted. Should the student's GPA fall below that required for graduation, a student may be placed on academic probation. This will result in a formal advisory, which will be sent to the student by mail, explaining the reason for the probation. If the student wishes to appeal the formal advisory, the student is to submit a written request for an administrative academic review to info@ccslearningacademy.com or the school main campus:

CCS Learning Academy
13475 Danielson Street, Suite 230 Poway, CA 92064

After the completion of the current module of instruction, the student will be able to take two additional modules of instruction to bring his or her grade point average up to or exceeding the minimum standard of the institution. The number of total modules of instruction is dependent on the program the student has enrolled. Thereafter, the student's failure to achieve satisfactory academic progress may result in dismissal from the program. The Chief Academic Officer will offer assistance in locating a suitable tutor, should such service be requested by the student. Any student seeking a tutor is financially responsible for the cost of all such tutoring.

Students who incur tardiness on more than 3 occasions during the course of their program will be placed on academic probation. Students who incur more than 3 instances of tardiness shall be dismissed unless for compelling circumstances the Chief Academic Officer determines otherwise. A student incurs an instance of tardiness if the student is late for class by 15 minutes, or if the student leaves early and misses more than 30 minutes of class.

Violations of the Harassment or Discrimination Policy of this institution will become part of the student's record. Depending on the severity and/or frequency of the violation(s), the Faculty may take disciplinary action, including administrative withdrawal from the institution. A student who has become subject to disciplinary action may submit an appeal to the Chief Academic Officer per the institution's grievances policy.

For students who are veterans and eligible persons under the GI Bill, the school will require that VA educational benefits be discontinued if the student is placed on academic probation more than twice. A student who was put on academic probation at least twice and was subsequently dismissed due to failure to achieve satisfactory academic process shall not be permitted to reenter or reenroll to the same or substantially the same program.

All cases of reenrollment with the same program by a former student shall be evaluated based on the reasons for and merits of the application according to the sole discretion of the Chief Academic Officer. Reenrollments include reentrance by a former student who was previously dismissed for unsatisfactory progress.

Leaves of Absence

Should circumstances be such that a leave of absence is to be requested, a student must submit an application for a leave of absence to the main campus:

CCS Learning Academy
13475 Danielson Street, Suite 230 Poway, CA 92064

The written notice must contain a statement of the nature of the request. At the discretion of the Chief Academic Officer, a leave may be granted for up to 6 months, as warranted by the circumstances. If a student repeatedly resorts to the use of a leave of absence, and if such applications show a pattern of delays, or should the issuance of a leave of absence be such that it would significantly interfere with the planned completion of a program of study, the Chief Academic Officer may, in his/her sole discretion, dismiss a student from the program and issue the appropriate refunds as may be required.

The school does not allow make-up classes for missed classes. Students, however, are required to submit assignments within the time prescribed by instructors in case the classes they missed provided for such assignments.

Student Grievance Procedures – Student Rights

Most problems or complaints that students may have with the school or its administrators can be resolved through a personal meeting with the student's instructor or a counselor. If, however, this action does not resolve the matter to the satisfaction of the student, he/she may submit a written complaint to the main campus: CCS Learning Academy, 13475 Danielson Street, Suite 230, Poway, CA 92064. The written complaint must contain a statement of the nature of the problem, the date the problem occurred, the names of the individuals involved, copies of documents if any, which contain information regarding the problem, evidence demonstrating that the institution's complaint procedure was properly followed, and the student's signature. The student can expect to receive a written response within ten business days. The COO will verify that the student has made an attempt to resolve the incident or complaint. If the student has followed the above three steps, the COO will call a grievance session and include all of the concerned parties. Each party involved may be asked to present their version of the incident prior to all parties being present. The person against whom the complaint is filed shall receive written notice which shall include the initial report, the factual allegations, a list of witnesses and evidence. Each party involved may be asked to present their version of the incident prior to all parties being present. The COO will then issue a statement to all parties within 48 hours of the grievance meeting conclusion. If the decision is unacceptable to the student, the student must, within 48 hours, send written copies of all documents and a cover letter to the COO explaining why they believe the decision is unacceptable.. The school has the right to suspend the student until the problem is resolved if the student does not follow the proper grievance procedures.

Continued unresolved complaints may be directed to:

Bureau for Private Postsecondary Education
P.O. Box 980818
West Sacramento, CA 95798-0818
Phone: (916) 574-8900
Web site: www.bppe.ca.gov

Student Services

This institution does not provide orientations, airport reception services, housing assistance or other services. Further, this institution maintains a focus on the delivery of educational services. Should a student encounter personal problems which interfere with his or her ability to complete coursework, this institution will provide assistance in identifying appropriate professional assistance in the student's local community but does not offer personal counseling assistance.

The institution will provide on going support during and after completion of the program to include:

      Hands-on Project Experience
      Access to Real-Time Projects
      Technical Mock interviews
      Professional Development Coaching including social media branding Dress for Success Coaching

Placement Services

This institution does not provide placement assistance.

Student Housing

<u>This institution has no responsibility to find or assist a student in funding housing.</u> This institution does not operate dormitories or other housing facilities. This institution does not provide assistance nor does it have any responsibility to assist students in finding housing. Housing in the immediate area is available in two story walkup and garden apartments.

Student Records and Transcripts

Student records for all students are kept for five years. Transcripts are kept permanently. Students may inspect and review their educational records. To do so, a student should submit a written request to 13475 Danielson Street, Suite 230, Poway, CA 92064 or by email to info@ccslearningacademy.com identifying the specific information to be reviewed. Should a student find, upon review, that records that are inaccurate or misleading, the student may request that errors be corrected. In the event that a difference of opinion exists regarding the existence of errors, a student may ask that a meeting be held to resolve the matter. Each student's file will contain student's records, including a transcript of grades earned. The first copy of the official transcript is provided at no charge. Subsequent copies are available upon advance payment of the transcript fee of $25.00 for two copies. Transcripts will only be released to the student upon receipt of a written request bearing the student's live signature. No transcript will be issued until all tuition and other fees due the institution are paid current.

Return of Lessons and Projects

Instructors will evaluate student submissions and Student's lessons, projects or dissertations will be returned within ten days from the date of receipt of such items.

Professions – Requirements for Eligibility for Licensure

None of the educational services offered lead to occupations that require licensure.

Graduation

Upon graduation, students who satisfactorily completed their programs shall be given a certificate indicating the program completed.

Charges: Tuition & Fees

All fees are subject to change from time to time, without notice.

Program Name	Tuition	Registration Fee	STRF	Books & Materials	Total Program Charges
Data Analytics and Engineering Bootcamp	$11,995	$250	$30	$200	$12,475
Data Warehouse (OLAP) Design Techniques	$810	$50	$0	$0	$860
ETL Design Techniques	$810	$50	$0	$0	$860
SQL Server Integration Services (SSIS)	$3,240	$50	$7.50	$0	$3,297.50
SQL Server Analysis Services (SSAS)	$1,296	$50	$2.50	$0	$1,348.50
SQL Server Reporting Services (SSRS)	$1,296	$50	$2.50	$0	$1,348.50
Power BI	$648	$50	$0	$0	$698
Data Visualization using Tableau	$2,268	$50	$5	$0	$2,323

Database Design and Administration Bootcamp	$9,995	$250	$25	$200	$10,470
Database (OLTP) Design Techniques	$1,248	$50	$2.50	$0	$1,300.50
SQL Server Programming, Basic	$4,160	$50	$10	$0	$4,220
SQL Server Programming, Advanced	$2,912	$50	$7.50	$0	$2,969.50
SQL Server Administration	$1,664	$50	$5	$0	$1,719

Transcript Fee: First copy at no-charge. $25 for 2 copies thereafter.

Schedule of Total Charges

Program Name	Total Charges for Current Attendance	Estimated Total Charges for the Entire Educational Program
Database Design and Administration Bootcamp	$10,445	$10,470
Data Analytics and Engineering Bootcamp	$12,445	$12,475
Data Warehouse (OLAP) Design Techniques	$860	$860
ETL Design Techniques	$860	$860
SQL Server Integration Services (SSIS)	$3,290	$3,297.50
SQL Server Analysis Services (SSAS)	$1,346	$1,348.50
SQL Server Reporting Services (SSRS)	$1,346	$1,348.50
Power BI	$698	$698
Data Visualization using Tableau	$2,318	$2,323
Database (OLTP) Design Techniques	$1,298	$1,300.50
SQL Server Programming, Basic	$4,210	$4,220
SQL Server Programming, Advanced	$2,962	$2,969.50
SQL Server Administration	$1,714	$1,719

Faculty

<u>Pushpendra Singh</u>

Pushpendra has over 11 years of job-related work experience, 4 years of teaching experience, 8 years of certificate level education, holds multiple master's degrees.

Master in Technology. Karnataka State Open University. Mysore (Karnataka), India.
Master in Computer Application. Shivaji University. Kolhapur (Maharashtra), India.
Bachelor in Science. Avadh University. Faizabad (UP), India.

<u>Gayathri Janagama</u>

Gayathri has over 8 years of job-related work experience, 5 years of teaching experience, 6 years of certificate level education.

Bachelor of Engineering. Jawaharlal Nehru Technological University. Hyderabad, India.

<u>Nishant Mishra</u>

Nishant has over 9 years of job-related work experience, 8 years of teaching experience, 2 years of certificate level education.

Master in Business Administration. Uttar Pradesh Technical University. Lucknow, India.
Bachelor's degree in Computer Applications. Integral University. Lucknow, India.

<u>Swapnil Shah</u>

Swapnil has over 10 years of job-related work experience, 9 years of teaching experience, 6 years of certificate level education, holds a master's degree.

Master of Science in Computer Science. University Of North Texas. Denton, TX.
Bachelor of Engineering in Computer Engineering. University Of Pune. Pune, India.

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Program Details
Includes Program Description, Program Objectives and Course Outline

<u>Program 1:</u>
<u>Database Design and Administration Bootcamp</u>

The program is designed for students who have an interest in developing the skills needed to create MS SQL Server applications and databases. Students will be able to provide back-end development support and solutions, delivering more data to more people across their prospective organization.

In this program students will gain the necessary knowledge and skills to successfully program SQL server. Students will learn requirement gathering, database design, database creation, and maintenance of database objects.

Additionally, students will become familiar with administrative tasks (such as backups, recoveries, profiling, log shipping, role management, users, logins, and database security).s

Total Clock Hours: 240 Hours, 8-week program

Program Schedule: 6 hours per day, 5 days per week
                      Monday to Friday, 9 AM to 5 PM
                      Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
                      To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
                      Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:
                      - Database Architect (15-1243)
                      - Database Administrator (15-1242)

Modules: Database (OLTP) Design Techniques
                      SQL Server Programming, Basic
                      SQL Server Programming, Advanced
                      SQL Server Administration

Course outline and Sequence of Instruction:

   I. <u>Module 1 - Database (OLTP) Design Techniques - 30 Hours</u>

       A good database design is crucial for a high-performance application. Just like you wouldn't start building a house without the benefit of a blueprint, you need to think about how your

data will be stored beforehand. Taking the time to design a database saves time and frustration later on, and a well-designed database ensures ease of access and retrieval of information. While choosing a design, a lot of considerations have to be accounted for. In this course, you'll learn how to process, store, and organize data in an efficient way. You'll see how to structure data through normalization and present your data with views. Finally, you'll learn how to manage your database and all of this will be done on a variety of datasets from book sales, car rentals, to music reviews.

A. Learning Objectives
    i. Gather business requirements (JRD and JAD sessions)
    ii. Analyze business requirements
    iii. Understanding various keys and constraints
    iv. Relationships, Degree, Cardinality and ER Diagrams
    v. Create logical and physical data models
    vi. Normalization Techniques
    vii. Learn Erwin modeling tools
    viii. Forward and reverse engineering techniques

B. Introduction to Data Modeling
    i. Understanding different ways to gather the business requirements such as JRD/JAD sessions
    ii. Conceptualizing advantages of RDBMS system
    iii. Understanding various keys and constraints including their degrees, relationships, cardinalities and ER Diagrams

C. Database Designing (Conceptual Design)
    i. Learn to design actual database from scratch based on the business requirements
    ii. Learn to create ER-Diagrams and will represent various attributes, entities and relationships in the ER Diagram as data representation

D. Database Designing (Logical Design)
    i. Identifying key attributes and constraints
    ii. Normalizing database design
    iii. Learn different normalization forms such as 1NF, 2NF, 3NF and BCNF (3.5 NF) to reduce the degree of redundancy and optimize the memory requirement

E. Database Designing (Physical Design)
    i. Includes database management-related topics
    ii. Learn how to translate paper-based ER diagram onto data model tool such as ER-Win
    iii. Learn to translate robust ER models into physical instance of database into any RDBMS per business requirements.

II. Module 2: SQL Server Programming, Basic - 100 Hours

In this course, students will learn the basic level of TSQL programming on MS SQL Server. Students learn basic DDL, DML, and DQL scripting.

Additionally, students will be exposed to and gain an understanding of Joins, Sub-Queries. Set-Operators, and various other functions. Furthermore, students will learn a basic level of understanding of (and be able to manipulate and mange) multiple database objects such as tables, views, stored procedures, user defined functions, triggers, indexes, and cursors.

This comprehensive SQL Server training course will give you an excellent overview of the entire Microsoft SQL Server product. You will get hands-on introduction to all the main features, facets, and functions of the SQL Server Database Engine. You will be creating databases/tables and adding keys and constraints utilizing DDL scripts. You would also learn in detail on DDL, DML, DQL statements to create, manage, maintain and process data from databases.

A. Learning Objectives
    i. Create and manage database objects
    ii. Learn how to use Microsoft Server SQL
    iii. Extract, manipulate, and analyze data
B. Course Introduction
C. Why SQL Server?
D. Installing, Configuring SQL Server
E. Creating and Managing SQL Server Databases
F. Writing basic DQL queries to fetch data from tables with filter conditions
G. Understanding the use of various operators
H. SQL Server Joins, Sub-Queries and SET Operators
I. Capabilities and limitations of MS SQL Server

III. Module 3: SQL Server Programming Advanced - 70 Hours

In this course students will learn about advanced techniques in T SQL programming. Students will understand how procedural objects are created, used, and maintained. Students will learn how data is stored in databases and develop strategies to create indexes for optimizing query performance. Students will be able to code scripts and procedures using multiple Error Handling techniques and Isolation Levels. Additionally, students will be exposed to multiple optimization techniques and execution plans.

Organizations use large SQL databases to store information about clients, products, or sales. However, that data is locked into those databases until it is accessed by a business intelligence tool such as Power BI, Tableau or Crystal Reports. With the proper permissions, analysts can use SQL to select the data they need for additional analysis and reporting. This class, SQL Server Programming Advanced provides holistic view of SQL Server and its advanced capabilities.

A. Learning Objectives
    i. Manage advanced database objects
    ii. Perform error handling

          iii.   Develop and implement optimizations
          iv.   Perform database index maintenance
           v.   Manage transactions and isolations

B. Introduction to SQL Server
C. DDL, DML, DQL Scripts (Writing Queries and Manipulating Data)
D. Various SQL constructs (Joins, Sub-Queries, SET Operators, CTEs)
E. Stored Procedures, Triggers, and Functions
F. Views, Indexes, and Query Plans
G. Jobs and Automating Maintenance
H. High Availability/Disaster Recovery
I. SQL Server Security: Database Level

IV. <u>Module 4: SQL Server Administration- 40 Hours</u>

This course covers installing, configuring, and troubleshooting SQL server services. Additionally, students shall solve database-related incidents and requests, fulfilling requests, and resolving incidents within SLAs. Students shall review service-related reports (database backups, maintenance, monitoring), manage security, logins, users, and roles. Furthermore, students will perform performance tuning and query optimization, utilizing Performance Monitor, SQL Profiler, and other related monitoring/troubleshooting tools.

A. Learning Objectives
            i.   Install, configure, and troubleshoot database servers
          ii.   Perform database backups
          iii.   Create and implement database maintenance plans
          iv.   Manage security; create and manage logins, users, and roles
           v.   Perform performance tuning and query optimizations
          vi.   Manage SQL profiler and SQL server job agent
B. How to use Microsoft TechNet MSDN Virtual Labs
C. T-SQL Quick Guide
D. Importing and Exporting Data
E. Using Activity monitor
F. Using Performance monitor
G. Backing up database
H. Restoring database
I. Monitoring database
J. Improving performance
K. Authenticating users and groups
L. Setting up Permissions
M. Setting up Auditing

Data Analytics and Engineering Bootcamp

The program is designed for students who have an interest in developing the skills needed to create MS SQL Server applications and databases. Students will be able to provide back-end development support and solutions, delivering more data to more people across their prospective organization.

This program will cover a wide-range of topics, from the basics to advanced- level MS SQL Server programming and database administration. The program is a rigorous 14-week long boot-camp, transforming students with basic technical knowledge into masters of SQL Server with the ability to develop and provide cutting-edge technical data solutions to businesses.

Total Clock Hours: 380 Hours
For up to 14 weeks, inclusive of optional practical exercises

Program Schedule: 6 hours per day, 5 days per week
Monday to Friday, 9 AM to 5 PM
Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:
- Software Developers, Applications (15-1252)

Modules: Database Design and Modeling
Database Programming and Administration
Data Warehouse (OLAP) Design Techniques
Data Integration – ETL and ELT
- SQL Server Integration Services (SSIS)
- Azure
- Snowflake
- Python

SQL Server Analysis Services (SSAS)
SQL Server Reporting Services (SSRS)
Power BI
Data Visualization using Tableau

Course outline and Sequence of Instruction:

I.   <u>Module 1 – Database Design and Modeling – 15 Hours</u>

This module focuses on various aspects of database designing concepts right from entities, keys, constraints, etc. to creating physical instance of databases. The focus of Data Modeling is to understand different stages of database designs patterns along with ways to gather business requirements.

II.   Module 2 – Database Programming and Administration – 50 Hours

This module exposes the candidates to the very details of TSQL programming along with working on database objects such as tables, views, stored procedures, user defined functions, triggers, and indexes. Module also covers performance implications of multitude of SQL structures such as joins, sub-queries, set operators, CTEs to be incorporated for implementing business requirements.

This course focuses on extract, transform, and load techniques to populate dimensional models. Students will be exposed to multiple ETL initial and incremental load techniques (to include, but not limited to: checksums, CDCs, and time stamps) to effectively load data into a data warehouse/data mart.

Additionally, students will be exposed to real-time problems which occur while performing ETL, including multiple data operations (such as data profiling, data cleansing, and data verification).

A.   Learning Objectives
    i.   Manage ETL strategies
    ii.   Perform initial and incremental loads
    iii.   Learn incremental load, CDC, Check Sum, and Time Stamp techniques
    iv.   Perform data profiling, cleansing, validation, and verification
B.   Concepts of Business Intelligence Data Warehousing
C.   ETL Testing, QA Lifecycle and RDBMS Concepts
D.   Data Warehouse Workflows and comparison between Database Testing and Data Warehouse Testing
E.   ETL Testing scenarios like Constraint Testing, Source to Target Testing, Business Rules Testing, Negative Scenarios Testing, Dependency Testing, Error Handling Testing
F.   Data Checks using SQL and BI Testing

III.   Module 3 - Data Warehouse (OLAP) Design Techniques - 25 Hours

Students will learn basic concepts, such as the purpose of Data Warehouses and how it is different from an OLTP database. The course will provide a thorough understanding of data warehousing concepts such as different types of dimensions, facts, and methodologies to design Data Warehouses or Data Marts. Student will be able to design DWHs using schemas such as STAR, SNOW FLAKE, and GALAXY. Students will be able to design multiple Slowly Changing, Degenerate, and Inferred Dimensions. In the concluding section, student will learn about ETL processes and options available to handle multiple data loads.

A. Learning Objectives
    i. Develop and implement data warehouse designs
    ii. Perform requirements gathering
    iii. Analyze requirements
    iv. Identify star, snowflake, and galaxy schema
    v. Manage dimensions and facts
B. Concepts and terminologies related to the Datawarehouse
C. Data management in the Data Warehouse
D. Reading and writing data onto the Warehouse
E. Data Modelling (logical and physical)
F. Facts, Dimensions, Aggregations
G. Commonly used techniques of ETL

IV. <u>Module 4 – Data Integration – ETL and ELT– 120 Hours</u>

This course covers the Extract, Transform, and Load (ETL) data technique utilizing SQL Server 2012 Integration Services/SSDT. This course will cover how to create, edit, deploy, schedule, and manage SSIS packages; Managing packages utilizing configuring control flow, data flow, and event handling.

Additionally, students will learn about the implementation of loggings, checkpoints, and error-handling techniques during package execution.

A. Learning Objectives
    i. Learn SQL Server Data Tools (SSDT)
    ii. Create and edit SSIS packages
    iii. Configure control flow and data flow
    iv. Manage event handlers
    v. Manage checkpoints, loggings, and error handling
    vi. Perform SSIS package configurations and deployments
B. Introduction to SSIS
    i. SSIS Overview
    ii. Architecture
    iii. Object Model
    iv. XML Framework
    v. Data Flow Task Introduction
C. Data Flow Task – Source and Destination Adapters
    i. OLEDB Source and Destination with Access Modes
    ii. Flat File, Excel Source and Destination
    iii. ODBC Source and Destination
    iv. ADO.Net Source and Destination
    v. Raw File Source and Destination

      vi.   XML Source, SQL Server Destination and
     vii.   SQL Server Compact Destination

D. Data Flow Task – Transformations
        i.   Introduction to Data Flow Transformations, Types
       ii.   Synchronous and Asynchronous
      iii.   Data Conversion, Character Map, Copy Column
      iv.   Derived Column
       v.   Union All, Merge, Merge Join, Sort
      vi.   Aggregate, Row Count, Audit, Multicast and Conditional Split
     vii.   Lookup and Cache Transform
    viii.   Fuzzy Lookup and Fuzzy Grouping
      ix.   OLEDB Command and SCD Transformation

E. Control Flow Components - Tasks
        i.   Tasks, Containers
       ii.   Precedence Constraints, Bulk Insert Task, File System Task
      iii.   Execute Process Task and Execute Package Task
      iv.   Execute SQL Task, Execute T-SQL
       v.   Statement Task, Script Task
      vi.   Data Profiling Task, Send Mail Task,
     vii.   FTP and SFTP Task

F. Control Flow Components - Containers
        i.   For loop Container
       ii.   For-each loop Container
      iii.   Sequence Container
      iv.   Task Host Container

G. Error Handling on SSIS (at Control Flow & Data Flow level)
        i.   Precedence Constraints
       ii.   Event Handlers
      iii.   Error Data Pipelines
      iv.   Error Escalation
       v.   Labs

H. Transactions in SSIS
        i.   Introduction to Transactions
       ii.   Transaction-Option Property (Required, Supported & Not Supported)
      iii.   Implications of transactions on ETL Framework
      iv.   Labs

I. Checkpoints in SSIS
        i.   Introduction to Checkpoints and practical application
       ii.   Checkpoint usage
      iii.   Fail Package On-failure/Fail Parent On-failure
      iv.   Implications of checkpoints on ETL Framework
       v.   Labs

J. Loggings in SSIS Packages
        i.   Built-in SSIS Loggings

      ii.   Custom Loggings

      iii. Various log providers

      iv. Labs

K. Package Deployment Model

      i.   Package Configurations (XML, SQL Server Table, Environment Variable, Parent Package Variable, Registry Entry)

      ii.   Package Security (Protection Level Property)

      iii. Package Deployment (Package Deployment Utility - .SSISMaifest File)

      iv. Labs

L. Project Deployment Model

      i.   Package Configurations (package level Parameters)

      ii.   Package Security

      iii. Package Deployment (Package Deployment Utility - .ispac File)

      iv. Labs

M. Different ways to execute packages

      i.   SQL Server Agent, Execute Package Utility

      ii.   Automating the execution of SSIS packages

      iii. Labs

N. SSIS Package Optimization Techniques

O. Azure

P. Snowflake

Q. Python

V. <u>Module 5 - SQL Server Analysis Services (SSAS) – 40 Hours</u>

In this course, students will learn how to design and implement Multidimensional OLAP cubes to support Business Intelligence (BI) solutions. The course will focus on SQL Server Data Tools for design, creation and deployment of SQL Server BISM (Business Intelligence Semantic Model) Multidimensional Mode projects, and SQL Server Management Studio for the management of Multidimensional databases. The course will cover the building of a multidimensional cube in its simplest form to extend features within the cube, implementing MDX calculations, Key Performance Indicators (KPIs), Actions, and Dimension/Cube Intelligence. The main emphasis of the course is on the design and creation of cubes, however, basic administration and security of cubes is covered as well.

A. Learning Objectives

      i.   Create/manage OLAP cubes

      ii.   ID and manage Key Perf Indicators (KPIs)

      iii. Manage actions, hierarchies, and calculations

      iv. Config and deployment of cubes

B. Install and Configure SQL Server with PowerShell

      i.   Install SQL Server

      ii.   Configure Database Settings

   iii. Configure SQL Server Settings
   iv. Configure SQL Server Policy-Based Management
 C. Administering SQL Servers with PowerShell
   i. Managing Users and Roles
   ii. Managing Database Performance
   iii. Managing Database Availability
   iv. Managing SQL Server Features
 D. Maintaining SQL Server with PowerShell
   i. Managing Backups and Restores
   ii. Maintaining Database Integrity and Performance
   iii. Monitoring and Auditing
   iv. Task Automation
   v. Generating Reports

VI. <u>Module 6 - SQL Server Reporting Services (SSRS) – 40 Hours</u>

The course provides a fundamental understanding of the components of Reporting Services deployments, exploring its basic architecture and terminology. This course will cover how to create tabular, matrix, charts, and list reports which employ datasets based on ad-hoc queries and stored procedures. Students will be exposed to add custom expressions, custom functions, and report formatting. Additionally, students will implement shared data sources, interactive sorting, drill-down capabilities, and create parameter based reports using the Report Designer. Reports including gauges, indicators, spark lines, and maps will also be introduced. The course will introduce SQL Server Data Tools (SSDT) for SSRS project environment and Report Builder 3.0 applications for creating, saving and deploying reports.

 A. Learning Objectives
   i. Determine report layouts based on reporting nature and needs
   ii. Create matrix, tabular, chart, list, drill-down, and drill-through reports
   iii. Create parameter reports
   iv. Manage report security
   v. Configure and deploy SSRS reports
   vi. Manage report servers
 B. Writing Reports with Report Builder and SSRS Level 1
   i. Exploring the Report Builder Environment
   ii. Adding Data to Table Reports
   iii. Formatting Data and Creating Expressions in Reports
   iv. Grouping Report Data
   v. Matrix Reports
   vi. Charts
   vii. Printing and Exporting Reports
 C. Writing Reports with Report Builder and SSRS Level 2
   i. Parameter Reports
   ii. Create Custom Reports with List Data Regions and Master-Detail Data

   iii.   Enhancing Reports with Formatting and Complex Expressions
   iv.   Enhance Reports with Images and Sub reports
   v.   Drilldown and Drillthrough Reports
   vi.   Inline Data Analysis with Sparklines, Data Bars, and Indicators

VII. <u>Module 7 – Power BI – 20 Hours</u>

In this course, students will learn how to create simple, yet elegant data models in PowerPivot. Students shall use these data models to create pivot tables based on multiple tables. Students will review another Add-In (Power View), create reports, navigate a Power View report, filter, and group. Students will use Power Query to build queries for extraction, transforming, and loading data.

Students will use DAX language (for in-depth data analyses), create Power Maps, and display KPIs in Excel and Power BI Desktop.

A. Learning Objectives
   i.   Determine dashboard layouts based on information needs
   ii.   Create dashboards
   iii.   Implement filters and groups
   iv.   Create scorecards with KPIs
   v.   Implement Power View and Power Pivot
   vi.   Manage Excel services with Power BI
B. Introduction to Self-Service BI Solutions
   i.   Introduction to Business Intelligence
   ii.   Introduction to Data Analysis
   iii.   Introduction to Data Visualization
   iv.   Overview of Self-Service BI
   v.   Considerations for Self-Service BI
   vi.   Microsoft Tools for Self-Service BI
   vii.   Exploring an Enterprise BI Solution
   viii.   Viewing Reports
   ix.   Creating a Power BI Report
   x.   Creating a Power BI Dashboard
C. Introducing Power BI
   i.   Power BI
   ii.   The Power BI Service
   iii.   Creating a Power BI Dashboard
   iv.   Connecting to Power BI Data
   v.   Create a Power BI Dashboard
D. Power BI Data
   i.   Using Excel as a Data Source for Power BI
   ii.   The Power BI Data Model
   iii.   Using Databases as a Data Source for Power BI

iv. The Power BI Service

v. Importing Data into Power BI

vi. Importing Excel files into Power BI

vii. Viewing Reports from Excel Files

E. Shaping and Combining Data

i. Power BI Desktop Queries

ii. Shaping Data

iii. Combining Data

iv. Lab : Shaping and Combining Data

v. Shape Power BI Data

vi. Combine Power BI Data

F. Modeling Data

i. Relationships

ii. DAX Queries

iii. Calculations and Measures

iv. Lab : Modeling Data

v. Create Relationships

vi. Calculations

G. Interactive Data Visualizations

i. Creating Power BI Reports

ii. Managing a Power BI Solution

iii. Lab : Creating a Power BI Report

iv. Connecting to Power BI Data

v. Building Power BI Reports

vi. Creating a Power BI Dashboard

H. Direct Connectivity

i. Cloud Data

ii. Connecting to Analysis Services

iii. Direct Connectivity

iv. Direct Connections to Power BI

I. Development with Power BI

i. The Power BI API

ii. Custom Visuals

iii. Using Marketplace Visualizations

iv. Using a Custom Visualization

J. Power BI Mobile

i. Power BI Mobile Apps

ii. Using the Power BI Mobile App

VIII. Module 8 – Data Visualization using Tableau - 70 Hours

This course covers the designing of dashboards, Scorecards, and various other reports utilizing various charts and graphs (such as bar, pie, line, maps, histogram, and area charts). This course will cover theoretical and hands-on activities to reinforce acquired skills and

knowledge in data visualization.

A. Learning Objectives
    i. Create dashboards and scorecards according to needs
    ii. Create reports with multiple graphs (bar, pie, line, histogram, area charts)
    iii. Deploy reports and dashboards on Tableau servers
    iv. Manage data sources on report servers
    v. Manage security roles, groups, and users on Tableau servers
B. Introduction to Tableau
    i. Overview
    ii. Installation
C. Tableau Workspace
    i. Connecting to a Data Source
    ii. Creating a view
    iii. Refining the view
D. Emphasizing the Results
    i. Adding Filters to the view
    ii. Adding Colors to the view
    iii. Key Findings
E. Map View
    i. Building a Map View
    ii. Getting into details
    iii. Identifying the Key points
F. Dashboard
    i. Creating a dashboard
    ii. Adding Interactiveness
G. Story
    i. Building a Story
    ii. Making a Conclusion
H. Tableau's integration with R, Python & SQL Server
    i. Tableau & R
    ii. Tableau & Python
    iii. Tableau & SQL Server
I. Saving the Work

<div align="center">
Program 3:
Database (OLTP) Design Techniques
</div>

A good database design is crucial for a high-performance application. Just like you wouldn't start building a house without the benefit of a blueprint, you need to think about how your data will be stored beforehand. Taking the time to design a database saves time and frustration later on, and a well-designed database ensures ease of access and retrieval of information. While choosing a design, a lot of considerations have to be accounted for. In this course, you'll learn how to process, store, and organize

data in an efficient way. You'll see how to structure data through normalization and present your data with views. Finally, you'll learn how to manage your database and all of this will be done on a variety of datasets from book sales, car rentals, to music reviews.

Total Clock Hours: 30 Hours, 1-week program

Program Schedule: 6 hours per day
                     Monday to Friday, 9 AM to 5 PM
                     Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
                     To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
                     Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:
                     - Database Architect (15-1243)
                     - Database Administrator (15-1242)

Course outline:

A. Learning Objectives
   i. Gather business requirements (JRD and JAD sessions)
   ii. Analyze business requirements
   iii. Understanding various keys and constraints
   iv. Relationships, Degree, Cardinality and ER Diagrams
   v. Create logical and physical data models
   vi. Normalization Techniques
   vii. Learn Erwin modeling tools
   viii. Forward and reverse engineering techniques
B. Introduction to Data Modeling
   ix. Understanding different ways to gather the business requirements such as JRD/JAD sessions
   x. Conceptualizing advantages of RDBMS system
   xi. Understanding various keys and constraints including their degrees, relationships, cardinalities and ER Diagrams
C. Database Designing (Conceptual Design)
   xii. Learn to design actual database from scratch based on the business requirements
   xiii. Learn to create ER-Diagrams and will represent various attributes, entities and relationships in the ER Diagram as data representation
D. Database Designing (Logical Design)
   xiv. Identifying key attributes and constraints

xv. Normalizing database design

xvi. Learn different normalization forms such as 1NF, 2NF, 3NF and BCNF (3.5 NF) to reduce the degree of redundancy and optimize the memory requirement

E. Database Designing (Physical Design)

xvii. Includes database management-related topics

xviii. Learn how to translate paper-based ER diagram onto data model tool such as ER-Win

xix. Learn to translate robust ER models into physical instance of database into any RDBMS per business requirements.

<u>Program 4:</u>
<u>SQL Server Programming, Basic</u>

In this course, students will learn the basic level of TSQL programming on MS SQL Server. Students learn basic DDL, DML, and DQL scripting.

Additionally, students will be exposed to and gain an understanding of Joins, Sub-Queries. Set-Operators, and various other functions. Furthermore, students will learn a basic level of understanding of (and be able to manipulate and mange) multiple database objects such as tables, views, stored procedures, user defined functions, triggers, indexes, and cursors.

This comprehensive SQL Server training course will give you an excellent overview of the entire Microsoft SQL Server product. You will get hands-on introduction to all the main features, facets, and functions of the SQL Server Database Engine. You will be creating databases/tables and adding keys and constraints utilizing DDL scripts. You would also learn in detail on DDL, DML, DQL statements to create, manage, maintain and process data from databases.

Total Clock Hours: 100 Hours, 4-week program

Program Schedule: 6 hours per day
                      Monday to Friday, 9 AM to 5 PM
                      Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
                      To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
                      Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:
                      • Database Architect (15-1243)
                      • Database Administrator (15-1242)

Course outline:

A. Learning Objectives
    i. Create and manage database objects
    ii. Learn how to use Microsoft Server SQL
    iii. Extract, manipulate, and analyze data
B. Course Introduction
C. Why SQL Server?
D. Installing, Configuring SQL Server
E. Creating and Managing SQL Server Databases
F. Writing basic DQL queries to fetch data from tables with filter conditions
G. Understanding the use of various operators
H. SQL Server Joins, Sub-Queries and SET Operators
I. Capabilities and limitations of MS SQL Server

Program 5:
SQL Server Programming, Advanced

In this course students will learn about advanced techniques in T SQL programming. Students will understand how procedural objects are created, used, and maintained. Students will learn how data is stored in databases and develop strategies to create indexes for optimizing query performance. Students will be able to code scripts and procedures using multiple Error Handling techniques and Isolation Levels. Additionally, students will be exposed to multiple optimization techniques and execution plans.

Organizations use large SQL databases to store information about clients, products, or sales. However, that data is locked into those databases until it is accessed by a business intelligence tool such as Power BI, Tableau or Crystal Reports. With the proper permissions, analysts can use SQL to select the data they need for additional analysis and reporting. This class, SQL Server Programming Advanced provides holistic view of SQL Server and its advanced capabilities.

Total Clock Hours: 70 Hours, 3-week program

Program Schedule: 6 hours per day
                      Monday to Friday, 9 AM to 5 PM
                      Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
                      To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
                      Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:
                      • Database Architect (15-1243)

- Database Administrator (15-1242)

Course outline:

    A. Learning Objectives
        i. Manage advanced database objects
        ii. Perform error handling
        iii. Develop and implement optimizations
        iv. Perform database index maintenance
        v. Manage transactions and isolations
    B. Introduction to SQL Server
    C. DDL, DML, DQL Scripts (Writing Queries and Manipulating Data)
    D. Various SQL constructs (Joins, Sub-Queries, SET Operators, CTEs)
    E. Stored Procedures, Triggers, and Functions
    F. Views, Indexes, and Query Plans
    G. Jobs and Automating Maintenance
    H. High Availability/Disaster Recovery
    I. SQL Server Security: Database Level

Program 6:
SQL Server Administration

This course covers installing, configuring, and troubleshooting SQL server services. Additionally, students shall solve database-related incidents and requests, fulfilling requests, and resolving incidents within SLAs. Students shall review service-related reports (database backups, maintenance, monitoring), manage security, logins, users, and roles. Furthermore, students will perform performance tuning and query optimization, utilizing Performance Monitor, SQL Profiler, and other related monitoring/troubleshooting tools.

Total Clock Hours: 40 Hours, 2-week program

Program Schedule: 6 hours per day
        Monday to Friday, 9 AM to 5 PM
        Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
        To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
        Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:

- Database Architect (15-1243)
- Database Administrator (15-1242)

Course outline:

    A. Learning Objectives
- i. Install, configure, and troubleshoot database servers
- ii. Perform database backups
- iii. Create and implement database maintenance plans
- iv. Manage security; create and manage logins, users, and roles
- v. Perform performance tuning and query optimizations
- vi. Manage SQL profiler and SQL server job agent

    B. How to use Microsoft TechNet MSDN Virtual Labs
    C. T-SQL Quick Guide
    D. Importing and Exporting Data
    E. Using Activity monitor
    F. Using Performance monitor
    G. Backing up database
    H. Restoring database
    I. Monitoring database
    J. Improving performance
    K. Authenticating users and groups
    L. Setting up Permissions
    M. Setting up Auditing

Program 7:
Data Warehouse (OLAP) Design Techniques

Students will learn basic concepts, such as the purpose of Data Warehouses and how it is different from an OLTP database. The course will provide a thorough understanding of data warehousing concepts such as different types of dimensions, facts, and methodologies to design Data Warehouses or Data Marts. Student will be able to design DWHs using schemas such as STAR, SNOW FLAKE, and GALAXY. Students will be able to design multiple Slowly Changing, Degenerate, and Inferred Dimensions. In the concluding section, student will learn about ETL processes and options available to handle multiple data loads.

Total Clock Hours: 25 Hours, 1-week program

Program Schedule: 6 hours per day
                       Monday to Friday, 9 AM to 5 PM
                       Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.

To complete this program, a student must complete all prescribed courses and earn a grade of C or better.

Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:

- Software Developers (15-1252)

Course outline:

   A. Learning Objectives
      i. Develop and implement data warehouse designs
     ii. Perform requirements gathering
    iii. Analyze requirements
    iv. Identify star, snowflake, and galaxy schema
     v. Manage dimensions and facts
   B. Concepts and terminologies related to the Datawarehouse
   C. Data management in the Data Warehouse
   D. Reading and writing data onto the Warehouse
   E. Data Modelling (logical and physical)
   F. Facts, Dimensions, Aggregations
   G. Commonly used techniques of ETL

Program 8:
ETL Design Techniques

This course focuses on extract, transform, and load techniques to populate dimensional models. Students will be exposed to multiple ETL initial and incremental load techniques (to include, but not limited to checksums, CDCs, and time stamps) to effectively load data into a data warehouse/data mart.

Additionally, students will be exposed to real-time problems which occur while performing ETL, including multiple data operations (such as data profiling, data cleansing, and data verification).

Total Clock Hours: 25 Hours, 1-week program

Program Schedule: 6 hours per day
Monday to Friday, 9 AM to 5 PM
Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:

- Software Developers (15-1252)

Course outline:

    A. Learning Objectives
       i. Manage ETL strategies
      ii. Perform initial and incremental loads
     iii. Learn incremental load, CDC, Check Sum, and Time Stamp techniques
     iv. Perform data profiling, cleansing, validation, and verification
    B. Concepts of Business Intelligence Data Warehousing
    C. ETL Testing, QA Lifecycle and RDBMS Concepts
    D. Data Warehouse Workflows and comparison between Database Testing and Data Warehouse Testing
    E. ETL Testing scenarios like Constraint Testing, Source to Target Testing, Business Rules Testing, Negative Scenarios Testing, Dependency Testing, Error Handling Testing
    F. Data Checks using SQL and BI Testing

Program 9:
SQL Server Integration Services (SSIS)

This course covers the Extract, Transform, and Load (ETL) data technique utilizing SQL Server 2012 Integration Services/SSDT. This course will cover how to create, edit, deploy, schedule, and manage SSIS packages; Managing packages utilizing configuring control flow, data flow, and event handling.

Additionally, students will learn about the implementation of loggings, checkpoints, and error-handling techniques during package execution.

Total Clock Hours: 100 Hours, 4-week program

Program Schedule: 6 hours per day
                    Monday to Friday, 9 AM to 5 PM
                    Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
                    To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
                    Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:

- Software Developers (15-1252)

Course outline:

A. Learning Objectives
   i. Learn SQL Server Data Tools (SSDT)
   ii. Create and edit SSIS packages
   iii. Configure control flow and data flow
   iv. Manage event handlers
   v. Manage checkpoints, loggings, and error handling
   vi. Perform SSIS package configurations and deployments
B. Introduction to SSIS
   i. SSIS Overview
   ii. Architecture
   iii. Object Model
   iv. XML Framework
   v. Data Flow Task Introduction
C. Data Flow Task – Source and Destination Adapters
   i. OLEDB Source and Destination with Access Modes
   ii. Flat File, Excel Source and Destination
   iii. ODBC Source and Destination
   iv. ADO.Net Source and Destination
   v. Raw File Source and Destination
   vi. XML Source, SQL Server Destination and
   vii. SQL Server Compact Destination
D. Data Flow Task – Transformations
   i. Introduction to Data Flow Transformations, Types
   ii. Synchronous and Asynchronous
   iii. Data Conversion, Character Map, Copy Column
   iv. Derived Column
   v. Union All, Merge, Merge Join, Sort
   vi. Aggregate, Row Count, Audit, Multicast and Conditional Split
   vii. Lookup and Cache Transform
   viii. Fuzzy Lookup and Fuzzy Grouping
   ix. OLEDB Command and SCD Transformation
E. Control Flow Components - Tasks
   i. Tasks, Containers
   ii. Precedence Constraints, Bulk Insert Task, File System Task
   iii. Execute Process Task and Execute Package Task
   iv. Execute SQL Task, Execute T-SQL
   v. Statement Task, Script Task

      vi.   Data Profiling Task, Send Mail Task,

      vii.   FTP and SFTP Task

F.   Control Flow Components - Containers

      i.   For loop Container

      ii.   For-each loop Container

      iii. Sequence Container

      iv. Task Host Container

G. Error Handling on SSIS (at Control Flow & Data Flow level)

      i.   Precedence Constraints

      ii.   Event Handlers

      iii. Error Data Pipelines

      iv. Error Escalation

      v.   Labs

H. Transactions in SSIS

      i.   Introduction to Transactions

      ii.   Transaction-Option Property (Required, Supported & Not Supported)

      iii. Implications of transactions on ETL Framework

      iv. Labs

I.   Checkpoints in SSIS

      i.   Introduction to Checkpoints and practical application

      ii.   Checkpoint usage

      iii. Fail Package On-failure/Fail Parent On-failure

      iv. Implications of checkpoints on ETL Framework

      v.   Labs

J.   Loggings in SSIS Packages

      i.   Built-in SSIS Loggings

      ii.   Custom Loggings

      iii. Various log providers

      iv. Labs

K. Package Deployment Model

      i.   Package Configurations (XML, SQL Server Table, Environment Variable, Parent Package Variable, Registry Entry)

      ii.   Package Security (Protection Level Property)

      iii. Package Deployment (Package Deployment Utility - .SSISMaifest File)

      iv. Labs

L.   Project Deployment Model

      i.   Package Configurations (package level Parameters)

      ii.   Package Security

      iii. Package Deployment (Package Deployment Utility - .ispac File)

      iv. Labs

M. Different ways to execute packages

      i.   SQL Server Agent, Execute Package Utility

      ii.   Automating the execution of SSIS packages

      iii. Labs

N. SSIS Package Optimization Techniques

Program 10:
SQL Server Analysis Services (SSAS)

In this course, students will learn how to design and implement Multidimensional OLAP cubes to support Business Intelligence (BI) solutions. The course will focus on SQL Server Data Tools for design, creation and deployment of SQL Server BISM (Business Intelligence Semantic Model) Multidimensional Mode projects, and SQL Server Management Studio for the management of Multidimensional databases. The course will cover the building of a multidimensional cube in its simplest form to extend features within the cube, implementing MDX calculations, Key Performance Indicators (KPIs), Actions, and Dimension/Cube Intelligence. The main emphasis of the course is on the design and creation of cubes, however, basic administration and security of cubes is covered as well.

Total Clock Hours: 40 Hours, 2-week program

Program Schedule: 6 hours per day
                     Monday to Friday, 9 AM to 5 PM
                     Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
                     To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
                     Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:
                     • Software Developers (15-1252)

Course outline:

A. Learning Objectives
    i. Create/manage OLAP cubes
    ii. ID and manage Key Perf Indicators (KPIs)
    iii. Manage actions, hierarchies, and calculations
    iv. Config and deployment of cubes
B. Install and Configure SQL Server with PowerShell
    i. Install SQL Server
    ii. Configure Database Settings
    iii. Configure SQL Server Settings
    iv. Configure SQL Server Policy-Based Management
C. Administering SQL Servers with PowerShell
    i. Managing Users and Roles

ii.   Managing Database Performance
    iii.   Managing Database Availability
    iv.   Managing SQL Server Features
D. Maintaining SQL Server with PowerShell
    i.   Managing Backups and Restores
    ii.   Maintaining Database Integrity and Performance
    iii.   Monitoring and Auditing
    iv.   Task Automation
    v.   Generating Reports

Program 11:
SQL Server Reporting Services (SSRS)

The course provides a fundamental understanding of the components of Reporting Services deployments, exploring its basic architecture and terminology. This course will cover how to create tabular, matrix, charts, and list reports which employ datasets based on ad-hoc queries and stored procedures. Students will be exposed to add custom expressions, custom functions, and report formatting. Additionally, students will implement shared data sources, interactive sorting, drill-down capabilities, and create parameter based reports using the Report Designer. Reports including gauges, indicators, spark lines, and maps will also be introduced. The course will introduce SQL Server Data Tools (SSDT) for SSRS 2012 project environment and Report Builder 3.0 applications for creating, saving and deploying reports.

Total Clock Hours: 40 Hours, 2-week program

Program Schedule: 6 hours per day
    Monday to Friday, 9 AM to 5 PM
    Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
    To complete this program, a student must complete all prescribed courses and earn a grade of C or better.
    Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:
- Software Developers (15-1252)

Course outline:

A. Learning Objectives
    i.   Determine report layouts based on reporting nature and needs
    ii.   Create matrix, tabular, chart, list, drill-down, and drill-through reports

iii. Create parameter reports
iv. Manage report security
v. Configure and deploy SSRS reports
vi. Manage report servers
B. Writing Reports with Report Builder and SSRS Level 1
i. Exploring the Report Builder Environment
ii. Adding Data to Table Reports
iii. Formatting Data and Creating Expressions in Reports
iv. Grouping Report Data
v. Matrix Reports
vi. Charts
vii. Printing and Exporting Reports
C. Writing Reports with Report Builder and SSRS Level 2
i. Parameter Reports
ii. Create Custom Reports with List Data Regions and Master-Detail Data
iii. Enhancing Reports with Formatting and Complex Expressions
iv. Enhance Reports with Images and Sub reports
v. Drilldown and Drillthrough Reports
vi. Inline Data Analysis with Sparklines, Data Bars, and Indicators

Program 12:
Power BI

In this course, students will learn how to create simple, yet elegant data models in PowerPivot. Students shall use these data models to create pivot tables based on multiple tables. Students will review another Add-In (Power View), create reports, navigate a Power View report, filter, and group. Students will use Power Query to build queries for extraction, transforming, and loading data.

Students will use DAX language (for in-depth data analyses), create Power Maps, and display KPIs in Excel and Power BI Desktop.

Total Clock Hours: 20 Hours, 1-week program

Program Schedule: 6 hours per day
                     Monday to Friday, 9 AM to 5 PM
                     Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.
                     To complete this program, a student must complete all prescribed courses and earn a grade of C or better.

Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:
- Software Developers (15-1252)

Course outline:

  O. Learning Objectives
     i.   Determine dashboard layouts based on information needs
     ii. Create dashboards
     iii. Implement filters and groups
     iv. Create scorecards with KPIs
     v. Implement Power View and Power Pivot
     vi. Manage Excel services with Power BI
  P. Introduction to Self-Service BI Solutions
     i.   Introduction to Business Intelligence
     ii. Introduction to Data Analysis
     iii. Introduction to Data Visualization
     iv. Overview of Self-Service BI
     v. Considerations for Self-Service BI
     vi. Microsoft Tools for Self-Service BI
     vii. Exploring an Enterprise BI Solution
     viii. Viewing Reports
     ix. Creating a Power BI Report
     x. Creating a Power BI Dashboard
  Q. Introducing Power BI
     i.   Power BI
     ii. The Power BI Service
     iii. Creating a Power BI Dashboard
     iv. Connecting to Power BI Data
     v. Create a Power BI Dashboard
  R. Power BI Data
     i.   Using Excel as a Data Source for Power BI
     ii. The Power BI Data Model
     iii. Using Databases as a Data Source for Power BI
     iv. The Power BI Service
     v. Importing Data into Power BI
     vi. Importing Excel files into Power BI
     vii. Viewing Reports from Excel Files
  S. Shaping and Combining Data
     i.   Power BI Desktop Queries
     ii. Shaping Data
     iii. Combining Data

iv. Lab : Shaping and Combining Data
　　　v. Shape Power BI Data
　　　vi. Combine Power BI Data
　T. Modeling Data
　　　i. Relationships
　　　ii. DAX Queries
　　　iii. Calculations and Measures
　　　iv. Lab : Modeling Data
　　　v. Create Relationships
　　　vi. Calculations
　U. Interactive Data Visualizations
　　　i. Creating Power BI Reports
　　　ii. Managing a Power BI Solution
　　　iii. Lab : Creating a Power BI Report
　　　iv. Connecting to Power BI Data
　　　v. Building Power BI Reports
　　　vi. Creating a Power BI Dashboard
　V. Direct Connectivity
　　　i. Cloud Data
　　　ii. Connecting to Analysis Services
　　　iii. Direct Connectivity
　　　iv. Direct Connections to Power BI
　W. Development with Power BI
　　　i. The Power BI API
　　　ii. Custom Visuals
　　　iii. Using Marketplace Visualizations
　　　iv. Using a Custom Visualization
　X. Power BI Mobile
　　　i. Power BI Mobile Apps
　　　ii. Using the Power BI Mobile App

Program 13:
Data Visualization using Tableau

This course covers the designing of dashboards, Scorecards, and various other reports utilizing various charts and graphs (such as bar, pie, line, maps, histogram, and area charts). This course will cover theoretical and hands-on activities to reinforce acquired skills and knowledge in data visualization.

Total Clock Hours:　70 Hours, 3-week program

Program Schedule:　6 hours per day
　　　　　　　　　Monday to Friday, 9 AM to 5 PM
　　　　　　　　　Exclusive of lunch and other breaks

Additional notes: No externship or internship is required.

To complete this program, a student must complete all prescribed courses and earn a grade of C or better.

Students are evaluated through written and performance assessments.

SOC Codes: Students who complete this program shall be ready to perform the duties of the technical profession/s enumerated below:

- Software Developers (15-1252)

Course outline:

A. Learning Objectives
    i. Create dashboards and scorecards according to needs
    ii. Create reports with multiple graphs (bar, pie, line, histogram, area charts)
    iii. Deploy reports and dashboards on Tableau servers
    iv. Manage data sources on report servers
    v. Manage security roles, groups, and users on Tableau servers
B. Introduction to Tableau
    i. Overview
    ii. Installation
C. Tableau Workspace
    i. Connecting to a Data Source
    ii. Creating a view
    iii. Refining the view
D. Emphasizing the Results
    i. Adding Filters to the view
    ii. Adding Colors to the view
    iii. Key Findings
E. Map View
    i. Building a Map View
    ii. Getting into details
    iii. Identifying the Key points
F. Dashboard
    i. Creating a dashboard
    ii. Adding Interactiveness
G. Story
    i. Building a Story
    ii. Making a Conclusion
H. Tableau's integration with R, Python & SQL Server
    i. Tableau & R
    ii. Tableau & Python
    iii. Tableau & SQL Server
I. Saving the Work

2023 Term Schedules

Start dates:

- February 21, 2023
- April 10, 2023
- May 22, 2023
- July 12, 2023
- August 21, 2023
- October 9, 2023
- November 20, 2023

Notes:

- Classes are held Mondays through Fridays, within 9:00 AM to 5:00 PM
- Specific schedules are handed out upon enrollment
- Term end dates vary depending on the program enrolled in
- Students are expected to be available during the allotted classroom schedule
- Students are constituted as full-time with 40 hours per week including classroom, lab and coaching
- Start Dates may be changed based on the quantity of participants in a program.
- Participants will be notified in advanced if the course is canceled or postponed to a later date.

2023 Holiday Schedule

Holiday for Observance	Date of Observance (Office closed)	Actual Holiday Date (if different from Date of Observance)
New Year's Day	Monday, January 2, 2023	Sunday, January 1, 2023
President's Day	Monday, February 20, 2023	
Memorial Day	Monday, May 29, 2023	
Juneteenth	Monday, June 19, 2023	
Independence Day	Tuesday, July 4, 2023	
Labor Day	Monday, September 4, 2023	
Veteran's Day	Friday, November 10, 2023	Saturday, November 11, 2023
Thanksgiving Day	Thursday, November 23, 2023	
Day After Thanksgiving	Friday, November 24, 2023	
Christmas Day	Monday, December 25, 2023	
Day after Christmas	Tuesday, December 26, 2023	
New Year's Eve	Friday, December 29, 2023	Sunday, December 31, 2023

Catalog Receipt Form For Veteran Students

Instructions: Print a copy of this page and hand over the signed copy to CCS Learning Academy staff.

Student Name: _____

Program: _____

Start Date: _____

I have received a copy of the CCS Learning Academy catalog and have reviewed the information contained in it. I understand that the policies in this catalog apply to me, including those policies specific to Veteran students, and if policies are updated while I am attending, I will be responsible for complying with those updated policies as well. I also understand that this catalog is updated at least on an annual basis and it is my responsibility to review the updated catalog which is available on the CCS Learning Academy website (www.ccslearningacademy.com).

By signing below, I am confirming receipt of this catalog.

Signature: _____

Date: _____