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\*For the sake of clarity and readability, the masculine form is used throughout this catalogue.

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#### **CASUALTY INSURANCE - LCA.BF**

Program leading to an Attestation of College Studies (ACS)

FB-CDI-PQ-ADP-0418

	Course Code	Course Title	Hours
COURSES	410-AFT-ID	The Profession and the Training Process	45
	410-NF1-ID	Introduction to Computers	45
	410-TDT-ID	Word Processing I	60
	410-RCR-ID	Preparation of Reports and Correspondence	45
	410-CEL-ID	Spreadsheet I	60
	410-GBD-ID	Database Management Systems I	60
	410-ASA-ID	Automobile Insurance	75
	410-ASH-ID	Household Insurance	90
	410-DAD-ID	Legal Concepts and Legislation in Casualty Insurance	75
	410-RSP-ID	Claims Adjustment	60
	410-PVM-ID	Promotion, Sales and Marketing	60
	410-SCP-ID	Customer Service	60
	410-TAR-ID	Pricing and Risk Analysis	60
	410-PIN-ID	Integration Project	45
		TOTAL PROGRAM HOURS	840
		TOTAL NUMBER OF UNITS: 28 1/3	

#### **Program Objectives**

The objective of the Casualty Insurance program is to train qualified professionals who are ready to embrace the challenges offered by a career in insurance. This field, which presents great opportunities for the next generation, offers graduates job opportunities with insurance companies, insurance brokerage firms, as well as major financial institutions.

At the end of this program, graduates will understand the acquisition of personal damage insurance competencies, as well as have knowledge of computer tools and customer service concepts. These include, but are not limited to, establishing insurance coverage for clients, calculating premiums and determining payment terms, providing information on group and individual insurance plans, covered plans, benefits paid and other features of the plan, insurance policies, track claims, and how to respond to customer inquiries.

#### Certification

Successful completion of this program will prepare students to write the *Autorité des marchés financiers* (AMF) exams for Automobile, Household and Legislation Insurance.

# **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.

# Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;
- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### Obtaining the Attestation of Collegial Studies (ACS)

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

#### **CASUALTY INSURANCE – LCA.BF**

#### 410-AFT-ID The Profession and the Training Process

45 hours

Subjects – The history of insurance. The different types of roles and functions. General characteristics of the daily work tasks. Main insurance products. Insurance stakeholders. Skills needed to work in the insurance field. Professional ethics. The tasks associated to the roles and functions. The representative certification process. Eligibility requirements associated with obtaining certification. The possibilities or different practice modes in the field of insurance. Introduction to key insurance organizations (*Le bureau des services financiers, La Chambre de l'assurance de dommages*). The representative's role. The registrants. General rules applying to representatives. The ethics of casualty insurance representatives and claims adjusters.

#### **410-NF1-ID Introduction to Computers**

45 hours

Subjects – Desktop and Windows™ system files. Personalization of the work environment. Work methods and management tools. Introduction to an electronic mail application (agenda management). Introduction to software specialized for the insurance field (automating operations). Creating Microsoft PowerPoint™ documents. Introduction to navigation tools and the Internet.

#### 410-TDT-ID Word Processing I

60 hours

Subjects – Creation of Microsoft Word™ documents. Use of basic page layout elements: margins, fonts, file manipulation, editing functions, special effects, formatting, headers and footers, and table of contents. Mail merge. Spell check. Development of applications and forms related to the field of casualty insurance. Personal information forms. Expense forms, memos, business letters, etc.

#### 410-RCR-ID Preparation of Reports and Correspondence

45 hours

Subjects – Preparing various types of documents (letters, reports, memos, etc.). Understanding the key sections of a business document. The fundamental vocabulary of business reports and documents. The structure and the elements of a report. Page layout elements. Correction and verification tools. Grammar rules and spelling. Headers and footers. Spell check. Correct use of punctuation. Preparing and writing reports. Production of standard documents specific to various situations (i.e. communication with an insured person's succession, a claim, insurance proposal form, condo union questionnaire, notary insurance proof, creditors and/or dealers, endorsements).

410-CEL-ID Spreadsheet I 60 hours

Subjects – Creation of Microsoft Excel™ documents. The work environment: the entry screen and menu bar. Default parameters. Edit commands, special effects applications, cell formatting, printing, creating graphics. Develop applications and forms related to the casualty insurance field, such as the cost of rebuilding a house, sales reports, expenses reports, invoicing, budgeting, annuity calculator, etc.

#### 410-GBD-ID Database Management Systems I

60 hours

Subjects – Basic notions of a Microsoft Access™ manager. The work environment: the entry screen and menu bar. Creating a database and its tables. Software entry: modifying, deleting and saving items. Sorting. Creating and modifying a query using one condition. Selecting and creating screen formats. Creating, modifying, and printing reports. Develop applications and forms related to the casualty insurance field, such as how to create and maintain customers, insurance products, etc.

#### 410-ASA-ID Automobile Insurance

75 hours

Subjects – History, evolution and functioning of automobile insurance. Automobile insurance plans outside Quebec. Automobile insurance plans in Quebec. Components of the automobile insurance contract. Guarantees, exclusions and provisions specific to various forms of automobile insurance designed for vehicle owners, drivers, mechanics, non-owners and landlords. Rules and practices in automobile insurance. Automobile insurance proposals and underwriting rules.

#### 410-ASH-ID Household Insurance

90 hours

Subjects – History, evolution and functioning of household insurance. Principal household insurance products. Legal aspects and special conditions for household insurance. Guarantees, exclusions and provisions specific to the various household insurance



formulas designed for homeowners, tenants, co-owners, non-homeowners and landlords. Rules and practices in household insurance. Household insurance proposals and associated terms and conditions, pricing and underwriting.

#### 410-DAD-ID Legal Concepts and Legislation in Casualty Insurance

75 hours

Subjects – Definition. Sources of Canadian Law. Legislation relating to casualty insurance. Nature and scope of the provisions in the Civil Code of Québec relating to the contract. The insurance contract. The provisions relating to the contract. The general rules of the contract. The types of contracts. The various clauses and sections of an insurance contract. The interpretation of contracts. Provisions relating to civil liability. The different regimes of proof. The different types of civil liability. Contracts and guarantees in casualty insurance. The provisions relating to the contract of casualty insurance. The insurance policy. The entry into force of the contract. Cancellation and termination of the contract. The provisions relating to the guarantees in casualty insurance. The aggravation of risk. The rules of interpretation of insurance contracts. Settlement of claims and valuation of losses. The law on insurance. The control of private insurance in Quebec. The Automobile Insurance Act. Other laws and regulations. The ethics of casualty insurance representatives and claims adjusters. The duties and obligations of the representatives

# 410-RSP-ID Claims Adjustment

60 hours

Subjects – The adjuster and his functions. Adjustment claims in automobile insurance. Claims in property insurance. The application of guarantees for a property insurance policy. Obligations of the insured. The obligations and responsibilities of the agent and the broker. The stages of expertise of a car accident. The expertise of a claim in property insurance (theft, water damage, fire). Civil liability. Damage estimation (assessment of injury, proof of loss, depreciation). Charters used to estimate damage. The structure of a settlement proposal in automobile insurance, property insurance and fire. Taxes and calculation of compensation. The final report of the settlement. Follow-up of a claim settlement file. Recommendations for the underwriting service of the insurer. Arbitration and mediation. Civil proceedings in common law. The stages of a prosecution and pleading. Fraudulent claims. Guiding principles and rules for claims settlement. Natural disasters.

#### 410-PVM-ID Promotion, Sales and Marketing

60 hours

Subjects – Marketing. Market studies. Purchase process. Factors that influence consumers' purchase behavior. Consumption habits. Process of promoting products and services. Promotion strategies. Advertising media. Advertising and public relations. The sale. The sales process. The presentation of products. Negotiations. The win-win philosophy. Professional image. Standards and professional ethics. Customer service and after sales service.

410-SCP-ID Customer Service 60 hours

Subjects – Analysis of the client's automobile, home and personal insurance needs in accordance with their specific situations. Presentation of relevant information and features of the insurance policy to the client. Choice of products according to the client's needs. Conditions of eligibility and subscription to insurance plans. Requests for changes, renewal of policies, claims and customer service follow-up.

#### 410-TAR-ID Pricing and Risk Analysis

60 hours

Subjects – Establishment of insurance amounts based on specifics of the policy. Establishment of the values of the insurable assets. Pricing. Calculation of basic premiums. Discounts and premiums. Risk assessment and eligibility.

# 410-PIN-ID Integration Project

45 hours

Subjects – Revision and application of the technical elements seen during the training program in preparation for the certification examinations in home, auto and casualty insurance law. Application of the knowledge, know-how and skills developed during training.

N.B. Please note that this program description is for illustrative purposes only. It may therefore be modified in whole or in part without notice in order to adapt it to new ministerial prerogatives or the labor market.



Program leading to an Attestation of College Studies (ACS)

FB-CDI-PQ-GFI-0418

	Course Code	Course Title	Hours
COURSES	410-1T1-ID	Introduction to Information Technology	60
	410-0ED-ID	Introduction to Business Organization and Business Law	60
	410-ECM-ID	Economy and Marketing Fundamentals	60
	410-1FS-ID	Introduction to Taxation	60
	410-CP1-ID	Accounting I	60
	410-PFP-ID	Personal Financial Planning	60
	410-CP2-ID	Accounting II	60
	410-ULC-ID	Using Accounting Software	60
	410-CP3-ID	Accounting III	60
	410-CAG-ID	Introduction to Management Accounting	60
	410-1FN-ID	Introduction to Finance	60
	410-DA1-ID	Development of Computerized Applications	60
CERTIFICATION	CPA1	Payroll Compliance Legislation	60
	CPA2	Payroll Fundamentals 1	60
	CPA3	Payroll Fundamentals 2	60
	·	TOTAL COURSE HOURS	900
WORKPLACE	410-PE1-ID	End of Studies Project 1	120
	410-PE2-ID	End of Studies Project 2	180
		TOTAL PROGRAM HOURS	1200
		TOTAL NUMBER OF UNITS: 36 1/3	

#### **Program Objectives**

The Financial Management program was conceived so that students could acquire the competencies needed for a career in management, accounting, payroll or financial analysis. A large and important part of the program focuses on accounting. The program allows students to consolidate their computer knowledge in order to enter the work force well-prepared. Finally, this Attestation of College Studies differentiates itself from others due to the addition of the Canadian Payroll Association's Payroll Compliance Practitioner (PCP) certification courses.

By the end of this program, the graduate will have developed the skills necessary to integrate into different sectors of the Quebec economy, whether it be in a small, medium or large enterprise. These professionals will possess the competencies required to calculate, prepare and distribute documents associated with accounts, invoices, inventory reports, account statements and other financial statements. All will be practiced both manually and through computerized systems. The graduate will be able to log in or enter in routine transactions on the computer, verify, correct errors and reconcile accounts payable and accounts receivable transactions, payroll, orders and bank statements. Furthermore, the graduate will be able to compile data and documents for budgetary purposes, prepare statements or periodic reports, calculate material costs, overhead and other expenses, respond to requests for information and maintain good relationships with clients, prepare financial statements, and automate accounting and financial operations using computerized tools.

#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.



#### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;
- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### Obtaining the Attestation of College Studies (ACS)

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

#### FINANCIAL MANAGEMENT - LEA.AC

#### 410-1T1-ID Introduction to Information Technology

60 hours

Subjects – Desktop and Windows ™ file system. Fundamentals of Microsoft Word™ software - creating documents and using basic page layout elements such as margins, fonts, file manipulation, editing functions, special effects, formatting, headers and footers, and table of contents. Spell check. Basics of a presentation software, creating Microsoft PowerPoint™ documents, using artwork gallery images, inserting sound effects. Page layout concepts. Introduction to browsers and the Internet. Setting up an email account using a public provider. Reading, organizing and sending messages.

#### 410-0ED-ID Introduction to Business Organization and Business Law

60 hours

Subjects – Company functions. Main management activities (planning, organization, management and control). The business environment (internal and external environment, mutual influences). Problem management and the decision-making process. The legal mechanisms of the company (sole proprietorship, partnership, corporation, cooperative). Learn how to form a company. Structures of the legal system in Quebec. Acquisition of terminology specific to the legal foundations of the business world. Legal implications of main business transactions.

#### 410-ECM-ID Economy and Marketing Fundamentals

60 hours

Subjects – Introduction to economics and microeconomic problems: demand, supply and price determination. Study of the company in its environment. Controlled variables (marketing mix: price, product, promotion, distribution and public relations). Uncontrolled variables (political and legal, economic and competitive, social, technological, environmental). The market: market analysis, information research, marketing of a product. Consumer behavior.

#### 410-1FS-ID Introduction to Taxation

60 hours

Subjects – Types of income. Components of total income, net income and taxable income. Tax treatment of an individual's interest, dividend and capital gains income. Calculation of rental income for an individual. Main deductions for each income category. Refundable and non-refundable tax credits. Tax calculation for an individual taking into account various deductions and tax credits. Use of a tax return software. Prescribed forms.

#### 410-CP1-ID Accounting 1 60 hours

Subjects – Basic concepts in financial accounting. Accounting cycle. Chart of accounts. Journal entries relating to the business operations of a sole proprietor. Recordkeeping in the general journal and appropriate auxiliary journals. Posting to the general ledger and auxiliary ledgers. Calculation and registration of provincial and federal sales taxes. Preparation of a trial balance. Adjusting entries. Preparation of a worksheet. Closing and reversing entries. Preparation of financial statements for a commercial enterprise in proper form.

#### 410-PFP-ID Personal Financial Planning

60 hours

Subjects – Personal financial management: budgeting, status of net value, management of personal debts, income and expense statement. Retirement and estate planning. Tax planning and tax Strategies. Investment management: risk/return relationship, diversification, risk aversion, investment horizon, types of investments, investment tools. Mutual funds advantages and



disadvantages, fund categories and selection of a fund for investment purposes. Understanding the Registered Retirement Savings Plan, including tax considerations, self-directed RRSP, spousal RRSP, Home Buyer's Plan. Risk management types, life insurance, and determining insurance needs.

410-CP2-ID Accounting 2 60 hours

Subjects – Accounting entries relating to the business operations of a partnership. Registration in the appropriate ledgers and journals. Petty cash. Bank reconciliation. Accounts receivable. Purchases. Fixed assets. Depreciation. Replacement of fixed assets. Intangible assets. Adjusting entries. Accounting simulation. Preparation of the financial statements for a partnership.

#### 410-UCL-ID Using Accounting Software

60 hours

Subjects – Detailed study of an accounting software (general module, accounts receivable module, accounts payable module). Computerized accounting cycle. Accounting simulation, including recording of journal entries, posting, correction of errors and production of financial statements.

410-CP3-ID Accounting 3 60 hours

Subjects – Accounting entries relating to the business operations of a corporation. Processing accounting transactions relating to liabilities (operating lease, lease acquisition, notes payable, bonds payable, etc.). Share capital transactions. Preparation of the cash flow statement. Preparation of the financial statements for a corporation.

#### 410-CAG-ID Introduction to Management Accounting

60 hours

Subjects – Inventory management. Evaluation of inventory (FIFO, LIFO, etc.). Cost classification (fixed, variable, direct costs, indirect costs, etc.). The breakdown of costs (allocation of overhead). Accounting entries relating to the business operations of a manufacturing company. Recording transactions in the appropriate ledgers and journals. Preparation of accounting entries and the manufacturing costs statement using a General Accounting system. Posting of manufacturing cost activities into a cost accounting system. Posting of manufacturing cost activities into a uniform and continuous cost accounting system. Business decision-making through a cost-profit-volume analysis. Calculation of differences between standard costs and actual costs, and use of these differences to analyze business performance.

#### 410-1FN-ID Introduction to Finance

60 hours

Subjects – Analysis of financial statements using ratios. Financial forecasting using trend analysis: vertical analysis of results, horizontal analysis of results. Cash budgeting. Preparation of financial statements (income statement, balance sheet, statement of retained earnings). Accounts receivable management. The role of accounts receivable, distinction between allowance for doubtful accounts and bad debts, and estimation methods.

#### **410-DA1-ID Development of Computerized Applications**

60 hours

Subjects – Fundamentals of a Microsoft Excel ™ spreadsheet. Programmed functions, statistical functions, financial functions, analysis functions, logic functions, and data functions. Analysis of scenarios specific to the business world. Automation of current financial transactions, such as cash budgets, provisional financial statements, depreciation schedule, payroll, billing, loan calculator. Graphic presentations.

# **CPA1 Payroll Compliance Legislation**

60 hours

Subjects – Description of payroll objectives and its stakeholders. Identification of the employer/employee relationship. Application of federal and provincial pay legislation, including the Canada Pension Plan, the Employment Insurance Act, the Income Tax Act, the Employment Standards Legislation, the Workmen's Compensation Laws and specific legislation for the Quebec region. Disclosure of payroll compliance requirements to different stakeholders.

# **CPA2 Payroll Fundamentals 1**

60 hours

Subjects – Calculation of a regular employee salary. Calculation of an irregular employee salary. Calculation of employment termination payments. Preparation of a Record of Employment (ROE). Communicating all aspects of an employee's payroll requirements to different stakeholders.

#### **CPA3 Payroll Fundamentals 2**

60 hours

Subjects – Calculation of payments from an organization to federal, provincial and third party stakeholders. Preparation of accounting documents for payroll. Preparation of end of year documentation. Communication of all aspects of an organization's payments, as well as accounting and year-end requirements, to various stakeholders (internal, external, and governmental).



#### 410-PE1-ID End of studies project 1

120 hours

Subjects – Application of the technical elements seen during the program. Application of the knowledge, know-how and skills developed during training. Adoption of the rules of professional ethics related to the practice of the profession. The project can take the form of an internship in a company.

#### 410-PE2-ID End of studies project 2

180 hours

Subjects – Application of the technical elements seen during the program. Application of the knowledge, know-how and skills developed during training. Adoption of the rules of professional ethics related to the practice of the profession. The project can take the form of an internship in a company.

#### N.B.

- 1) Please note that this program description is for illustrative purposes only. It may therefore be modified in whole or in part without notice in order to adapt it to new ministerial prerogatives or the labor market.
- 2) Please note that the passing grade for the Canadian Payroll Association certification courses is 65%. You must also obtain a grade of 65% in Accounting 1 in order for the course to be recognized by the Association as an equivalence.

Payroll Compliance Practitioner (PCP) certification requires the completion of four core courses as well as one year of related work experience.

- Payroll Compliance Legislation: Get introduced to all legislation influencing payroll compliance requirements.
- Payroll Fundamentals 1: Apply legislation to calculate and document all types of individual payments.
- Payroll Fundamentals2: Learn about third-party remittances, including accounting, technical and year-end requirements.
- Introduction to Accounting: Transfer your credit from a post-secondary course covering basic accounting practices and principles. Search our list of accepted courses.
- Work Experience Requirement: Full certification requires one year of weighted payroll job experience. Completing the courses makes you a PCP Candidate.
- Certification Declaration: Submit your Certification Declaration to receive your PCP once you complete the course and work experience requirements.



# SPECIALIST IN APPLIED INFORMATION TECHNOLOGY – LCE.3V OPTION: LEGAL ADMINISTRATIVE ASSISTANT

Program leading to an Attestation of College Studies (ACS)

FB-CDI-PQ-AAMJ-0418

	Course Code	Course Title	Hours
MAIN CORE COURSES	412-1T1-ID	Introduction to Information Technology	60
	412-TT1-ID	Word Processing I	60
	412-TT2-ID	Word Processing II	60
	412-0AR-ID	Tools for Reports Writing	60
	412-CE1-ID	Spreadsheet I	60
	412-BD1-ID	Database Management Systems I	60
	412-BD2-ID	Database Management Systems II	60
	412-LDP-ID	Presentation Software	60
	412-1NT-ID	Internet Technology I	60
	412-1NF-ID	Computer Graphics Fundamentals	60
OPTION COURSES	412-CEJ-ID	Spreadsheet II	60
	412-MPJ-ID	Introduction to the Legal Environment	60
	412-APC-ID	Civil Law Deeds	60
	412-ACN-ID	Notarized Deeds	60
		TOTAL COURSE HOURS	840
WORKPLACE	412-PF1-ID	End of Studies - Project I	120
	412-PF2-ID	End of Studies - Project II	120
		TOTAL PROGRAM HOURS	1080
		TOTAL NUMBER OF UNITS : 34 2/3	

## **Program Objectives**

The Specialist in Applied Information Technology (Option: Legal Administrative Assistant) ACS program aims to train qualified professionals who are able to assume, at the entry level of the labor market, all the tasks specific to an administrative assistant in a legal environment. The program offers graduates employment opportunities in law firms, notary offices, corporate legal services, real estate companies, cadastral offices, federal and provincial governments, municipal governments and the courts.

Upon completion of the program, graduates will be able to take on a variety of administrative tasks in a legal environment, such as preparing and writing computerized letters and legal documents including deeds, wills, affidavits, and briefs. Furthermore, graduates will be able to review and proofread documents and correspondence to ensure they comply with legal procedures. They will be able to establish and maintain filing systems in accordance with established principles for the proper management of documents and legal procedures, and control the security of confidential documents. Graduates will be able to successfully coordinate the flow of information internally and liaise with other departments or agencies, and may attend court hearings, meetings or conferences to take notes and write minutes.

#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.

#### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;



- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### **Obtaining the Attestation of College Studies (ACS)**

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

# SPECIALIST IN APPLIED INFORMATION TECHNOLOGY – LCE.3V OPTION: LEGAL ADMINISTRATIVE ASSISTANT

#### 412-1T1-ID Introduction to Information Technology

60 hours

Subjects – Desktop and Windows ™ file system. Difference between software and operating systems. Definition of computer functions. Management of files and directories. Use of the Internet and the Web (advanced search, quality information from reliable sources, etc.). How to set up an email account using a public provider (read, organize, and send messages). Introduction to ergonomics, priority management (ranking, telephone calls, organization of the day and office priorities, working method, report preparation). Customer service. Communication, professionalism and ethics in the workplace.

#### 412-TT1-ID Word Processing I

60 hours

Subjects – Fundamentals of Microsoft Word™, a word processing software. Typing techniques. How to use basic page layout elements such as margins, fonts, file manipulation, editing commands, special effects, formatting, headers and footers, table of contents. Spellcheck. Legal terminology.

#### 412-TT2-ID Word Processing II

60 hours

Subjects – Advanced notions of Microsoft Word™. How to use advanced page layout elements such as table merges, producing envelopes and labels, forms, macro commands, columns, graphic functions, and inserting images. Legal terminology. Typing techniques. Rules for presenting a report in proper and due form.

#### 412-0AR-ID Tools for Reports Writing

60 hours

Subjects – Advantages and disadvantages of different writing support tools. Support tools on the Web. Direct mail and merging documents. Dynamic table of contents. Report writing. Spelling and grammar corrections. Letters, memos, grammar guide, organization of a meeting (notice of meeting, planning a calendar and agenda, meeting simulation, note taking and preparation of minutes).

412-CE1-ID Spreadsheet I

60 hours

Subjects – Fundamentals of the Microsoft Excel™ spreadsheet. Default settings. Editing commands, application of special effects, cell formatting, printing, creation of graphics. Applications for the legal sector (preparation of an expense account, purchase of office supplies, calculation of salaries, etc.).

#### 412-BD1-ID Database Management Systems I

60 hours

Subjects – Fundamentals of Microsoft Access™, a database manager. Design of a database and its tables. Entering, editing, deleting and saving items. Creating and modifying a query using a condition. Selection and design of screen formats, creation, modification and printing of reports. Applications in the legal field (client, appointments, etc.).

#### 412-BD2-ID Database Management Systems II

60 hours

Subjects – Advanced knowledge of Microsoft Access™. Design and creation of legal databases (clients, appointments, lawyers' schedules, forms, etc.). Design and use of tables. Creating queries using multiple conditions. Design and adaptation of reports. Integration of the different software of Microsoft Office™ suite in the same application.

# **412-LDP-ID Presentation Software**

60 hours

Subjects – Fundamentals of Microsoft PowerPoint™, a presentation software. Document creation – how to use images from the artwork bank, insertion of sound effects, etc. Advanced layout concepts: creating, opening, saving a Portable Document Format document (PDF), universalizing the file exchange format, presenting and using the browser, modifying objects, using pencils and markers, management of bookmarks, articles and links. Reach the target audience. Professional presentation. Applications to the



legal sector (training activities, waiting room presentations, etc.).

## 412-1NT-ID Internet Technology I

60 hours

Subjects – Basics of Microsoft Outlook™, an email software. Main suppliers and services offered. Professional e-mail writing. Attachments. Computerized signature. Management of e-mails, folders, agenda (schedule conflicts) and priorities. Tracking tasks (reminders). Convocation and invitation to meetings. Labels on the Web. Search engines, loading files from the Internet, image importing. Introduction to creating, editing, and saving Web pages.

#### 412-1NF-ID Computer Graphics Fundamentals

60 hours

Subjects – Fundamentals of Microsoft Publisher™, an infographic software. Screen page design, style design, pictorial organization mode. Editing a composition. Positioning objects. Using images and objects. Matching graphics. Mounting grids and color palettes. Graphic design of reports. Legal applications: production of posters and leaflets.

412-CEJ-ID Spreadsheet II 60 hours

Subjects – Advanced notions of Microsoft Excel ™. Automation of tasks. Protection of data and workbooks. Statistical functions, financial functions, analysis functions, logical functions, search functions and data functions (filters and sorting). Legal applications such as statistics (customer profile, etc.) and accounting operations related to legal acts (billing, wages, etc.).

#### 412-MPJ-ID Introduction to the Legal Environment

60 hours

Subjects – Distinction of legislative powers. Distinction of the various levels of the judicial system. Information on the laws and the organization of the judicial system. Bilingual legal terminology. Presentation of working tools: Civil Code of Québec, Code of Civil Procedure etc. Legal research.

412-APC-ID Civil Law Deeds 60 hours

Subjects – Rules specific to the written procedure for acts preceding instruction: legal steps and deadlines. Preparation and formatting of the back of the procedures. Judicial stamp. Filing of an act at the registry. Filing of applications (in court, introductory proceedings, amendment or withdrawal of pleadings, etc.) and registration. Preparation and presentation of the expense statement.

412-ACN-ID Notarized Deeds 60 hours

Subjects – Notarial deeds and special formalities. Rules for formatting notarial deeds. Authentic deeds, semi-authentic deeds and private deeds. Bureau of the Publicity of Rights (role and functioning). Advertising (effects and modalities). Types of notarial procedures: the will, the mandate of incapacity, the power of attorney, the succession, the marriage contract, the contract of real estate sale, the mortgage deed, etc. Registration of the records in the appropriate registers. Billing.

#### 412-PF1-ID End of Studies Project I

120 hours

Subjects – Application of the technical elements seen during the program. Application of the knowledge, know-how and skills developed during training. Adoption of the rules of professional ethics related to the profession. The project can take the form of an internship in a professional environment.

#### 412-PF2-ID End of Studies Project II

120 hours

Subjects – Application of the technical elements seen during the program. Application of the knowledge, know-how and skills developed during training. Adoption of the rules of professional ethics related to the profession. The project can take the form of an internship in a professional environment.

N.B. Please note that this program description is for illustrative purposes only. It may therefore be modified in whole or in part without notice in order to adapt it to new ministerial prerogatives or the labor market.



# SPECIALIST IN APPLIED INFORMATION TECHNOLOGY – LCE.3V OPTION: MEDICAL OFFICE ASSISTANT

Program leading to an Attestation of College Studies (ACS)

FH-CDI-PQ-AAMM-0418

	Course Code	Course Title	Hours
MAIN CORE COURSES	412-1T1-ID	Introduction to Information Technology	60
	412-TT1-ID	Word Processing I	60
	412-TT2-ID	Word Processing II	60
	412-0AR-ID	Tools for Reports Writing	60
	412-CE1-ID	Spreadsheet 1	60
	412-BD1-ID	Database Management Systems I	60
	412-BD2-ID	Database Management Systems II	60
	412-LDP-ID	Presentation Software	60
	412-1NT-ID	Internet Technology I	60
	412-1NF-ID	Computer Graphics Fundamentals	60
CONCENTRATION	412-CEM-ID	Spreadsheet II	60
	412-MPM-ID	Introduction to the Medical Environment	60
	412-PDM-ID	Production of Medical Documents	60
	412-GDM-ID	Medical File Management	60
		TOTAL COURSE HOURS	840
WORKPLACE	412-PF1-ID	End of Studies - Project I	120
	412-PF2-ID	End of Studies - Project II	120
		TOTAL PROGRAM HOURS	1080
		TOTAL NUMBER OF UNITS: 34 2/3	

## **Program Objectives**

The Specialist in Applied Information Technology (Option: Medical Office Assistant) ACS program aims to train qualified professionals who are able to assume, at the entry level of the labor market, all tasks specific to an administrative assistant in a medical environment. It provides graduates with employment opportunities in doctor's offices, hospitals, medical clinics, and public or private organizations that manage health data.

By the end of this program, the student will know how to fix and confirm doctor's appointments, receive and transmit messages to medical staff and patients, capture and format medical reports and electronic medical correspondence, prepare spreadsheets and documents for review. Furthermore, he will be able to interview patients to complete forms, documents and case histories. The graduate will be able to successfully establish and maintain confidential medical records and documents, prepare provisional agendas for meetings, keep, transcribe and distribute minutes, and prepare financial statements and billing. He will be able to establish and maintain various administrative support procedures, such as document management and filing, order supplies, maintain inventory, and define the routines and modes of operation of the office.

#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.

# Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;



- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### **Obtaining the Attestation of College Studies (ACS)**

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

# SPECIALIST IN APPLIED INFORMATION TECHNOLOGY – LCE.3V OPTION: MEDICAL OFFICE ASSISTANT

# 412-1T1-ID Introduction to Information Technology

60 hours

Subjects – Desktop and Windows™ file system. Difference between software and operating systems. Definition of the functions of a computer. Management of files and directories. Use of the Internet and the Web (advanced search, quality information from reliable sources, etc.). How to set up an email account using a public provider (read, organize, and send messages). Introduction to ergonomics, priority management (ranking, telephone calls, organization of the day and the office, working method, report preparation). Customer service. Communication, professionalism and ethics at work.

#### 412-TT1-ID Word Processing I

60 hours

Subjects – Fundamentals of Microsoft Word™, a word processing software. Typing techniques. Using basic page layout elements such as margins, fonts, file manipulation, editing commands, special effects, format, headers and footers, and table of contents. Spellchecking. Medical terminology. Medical transcription.

#### 412-TT2-ID Word Processing II

60 hours

Subjects – Advanced notions of a Microsoft Word™. Using advanced page layout elements such as merging tables, producing envelopes and labels, forms, macro commands, columns, graphic functions, and inserting images. Legal terminology. Medical terminology. Medical transcription. Typing techniques. Rules for presenting a report in proper and due form.

#### 412-0AR-ID Tools for Reports Writing

60 hours

Subjects – Advantages and disadvantages of different writing support tools. Support tools on the Web. Direct mail and merging documents. Dynamic table of contents. Report writing. Spelling and grammar corrections. Medical transcription. Letters, memos, grammar guide, organization of a meeting (notice of meeting, planning calendar and agenda, meeting simulation, note taking and minutes preparation).

412-CE1-ID Spreadsheet I 60 hours

Subjects – Fundamentals of the Microsoft Excel™ spreadsheet. Default settings. Editing commands, application of special effects, cell format, printing, creation of graphics. Applications for the medical sector (Preparation of an expense account, purchase of medical supplies, calculation of salaries, laboratory results, etc.).

# 412-BD1-ID Database Management Systems I

60 hours

Subjects – Fundamentals of Microsoft Access™, a database manager. Designing a database and its tables. Entering, editing, deleting and saving items. Creating and modifying a query using specific conditions. Selection and design of screen formats, creation, modification and printing of reports. Applications in the medical field (patients, appointments, laboratory results, medical supplies, etc.).

#### 412-BD2-ID Database Management Systems II

60 hours

Subjects – Advanced knowledge of Microsoft Access™. Design and creation of medical databases (patients, pathologies, appointments, doctors' schedules, forms, patient pathology, laboratory report for a patient, complete medical report, etc.). Design and use of tables. Creating queries using multiple conditions. Design and adaptation of reports. Integration of the different software of Microsoft Office™ suite in the same application.



#### 412-LDP-ID Presentation Software

60 hours

Subjects – Fundamentals of Microsoft PowerPoint™, a presentation software. Document creation such as the use of images from artwork bank, insertion of sound effects, etc. Advanced page layout concepts including creating, opening, saving a Portable Document Format document (pdf), universalizing the file exchange format, presenting and using the browser, modifying objects, using pencils and markers, management of bookmarks, articles and links. Reaching the target audience. Professional presentation. Applications to the medical sector (pre-natal courses, vaccination clinic, waiting room presentations, etc.).

#### 412-1NT-ID Internet Technology I

60 hour

Subjects – Basics of Microsoft Outlook™, an email software. Main suppliers and services offered. Professional writing of e-mails. Attachments. Computerized signature. Management of emails, folders, agenda (scheduling conflicts) and priorities. Tracking tasks (reminders). Convocation and invitation to meetings. Labels on the Web. Search engines, loading files from the Internet, image importing. Introduction to creating, editing, and saving Web pages.

## 412-1NF-ID Computer Graphics Fundamentals

60 hours

Subjects – Fundamentals of Microsoft Publisher™, an infographic software. Screen page design, style design, pictorial organization mode. Editing a composition. Positioning objects. Using images and objects. Matching graphics. Mounting grids and color palettes. Graphic design of reports. Medical applications such as the production of posters and leaflets (prevention, medication, vaccination, etc.).

# 412-CEM-ID Spreadsheet II

60 hours

Subjects – Advanced notions of Microsoft Excel™. Automation of tasks. Protection of data and workbooks. Statistical functions, financial functions, analysis functions, logical functions, search functions and data functions (filters and sorting). Medical applications such as statistics (illnesses, patient profile, etc.) and accounting operations related to medical acts (billing, wages, etc.).

#### 412-MPM-ID Introduction to the Medical Environment

60 hours

Subjects – Types of health facilities and their internal structure. Associations and professional orders (Physicians, pharmacists and other health professionals). Ethics and professional ethics such as applicable laws, rules of confidentiality and professional secrecy. Medical specialties. Professionalism (image, dress, confidentiality, etc.). Rules of verbal and written communication (clarity, empathy, crisis management, priorities, etc.). Knowledge of medical terminology including the nervous and sensory systems, endocrine system, cardiovascular system, digestive system, urinary system, and reproductive system.

#### **412-PDM-ID Production of Medical Documents**

60 hours

Subjects – Terminology and bilingual medical abbreviations. Classifying drugs. Types of documents to be produced and their specificity: consultation report, pathology report, autopsy report, medical expertise report (CNESST, SAAQ, insurance companies, etc.), summary of medical files, etc. Medical transcription. Template design (memos, memos, letters, etc.).

# 412-GDM-ID Medical File Management

60 hours

Subjects – Patient records and identification systems. Active and inactive files. Records management in hospital and non-hospital medical care. Observation notes, medical notes, consultation requests, hospital records, clinical records, archiving, health insurance cards, etc. Special cases, i.e. inter-provincial forms, foreign patients, Royal Canadian Mounted Police (RCMP) and the army, CNESST, medical claims (RAMQ, visit codes, etc.), SIMDUT, etc. Creating appropriate tables and links. Retention schedule for medical records.

# 412-PF1-ID End of Studies - Project I

120 hours

Subjects – Application of the technical elements seen during the program. Application of the knowledge, know-how and skills developed during training. Adoption of the rules of professional ethics related to the practice of the profession. The project can take the form of an internship in a professional environment.

# 412-PF2-ID End of Studies - Project II

120 hours

Subjects – Application of the technical elements seen during the program. Application of the knowledge, know-how and skills developed during training. Adoption of the rules of professional ethics related to the practice of the profession. The project can take the form of an internship in a professional environment.

N.B. Please note that this program description is for illustrative purposes only. It may therefore be modified in whole or in part without notice in order to adapt it to new ministerial prerogatives or the labor market.



FB-CDI-PQ-TJ-0418

	Course Code	Course Title	Hours
COURS	310-DPJ-ID	Introduction to Law and the Legal Profession	45
	310-TT1-ID	Word Processing 1	60
	310-TJB-ID	Bilingual Legal Terminology	45
	310-TT2-ID	Word Processing 2	60
	310-BDL-ID	Database and Application Software	45
	310-EGJ-ID	Ethics and Legal Financial Management	45
	310-1MD-ID	Law Review and Methodology	45
	310-FD0-ID	Legal and Obligations Basis	60
	310-DPF-ID	Human Rights and Family Law	60
	310-RJU-ID	Computerized Legal Research	60
	310-RJ1-ID	Legal Drafting 1	45
	310-DEP-ID	Provincial Trade Law	45
	310-PC1-ID	Civil Proceedings 1	60
	310-RJ2-ID	Legal Drafting 2	45
	310-MRC-ID	Alternative Dispute Resolution	45
	310-DPP-ID	Criminal Law, Rules of Court and Evidence	60
	310-RMS-ID	Matrimonial Property and Estates	45
	310-PC2-ID	Civil Proceedings 2	60
	310-DEF-ID	Federal Trade and International Law	45
	310-LDT-ID	Labour Law Procedures and Legislation	45
	310-ETP-ID	Examination of Ownership Titles	45
	310-PAF-ID	Administrative Procedures	45
	310-PDL-ID	Contentious Right and Practice	45
	310-PDN-ID	Notarial Procedures and Law	45
		TOTAL COURSE HOURS	1200
WORKPLACE	310-STA-ID	Internship	510
		TOTAL PROGRAM HOURS	1710

#### **Program Objectives**

CDI College's Paralegal Technology ACS program aims to train qualified professionals who will enter the labor market as a Paralegal Technician. Graduates will be able to work in a variety of legal settings, including private practice in a law firm or a notary's office. They may also work in the public service as a law researcher or clerk in ministries, municipalities and courthouses.

Upon successful completion of the program, these professionals will have gained expertise in civil, criminal and administrative law and will be able to perform paralegal tasks specific to each setting. They will also have acquired the transversal skills required by the profession. In particular, they will be able to communicate clearly through legal terminology. They will have developed their ability to analyze and summarize, as well as their sense of professional ethics. They will show rigor and thoroughness in the execution of their tasks. Finally, they will be able to manage their time according to schedules that may sometimes be atypical.

#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.



#### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;
- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### **Obtaining the Attestation of College Studies (ACS)**

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

#### PARALEGAL TECHNOLOGY - JCA.1F

#### 310-DPJ-ID Introduction to Law and the Legal Profession

45 hours

Subjects – Characterization of the role of notaries, lawyers, bailiffs, clerks, stenographers, judges and legal secretaries. Information on the role of the paralegal in different legal work environments. Presentation of working tools such as the Civil Code of Québec, the Code of Civil Procedure, etc. How to use a Table of Contents to research these working tools. Distinction of legislative powers. Distinction of the various levels of the judicial system. Information on the laws and the organization of the judicial system. Basic notions in legal terminology.

#### 310-TT1-ID Word Processing 1

60 hours

Subjects – Analysis of the work situation. Link between training and the demands of the workplace. The Microsoft Word™ document platform such as the input screen, menu bar, and toolbars. How to use default settings including margins, tabs, styles, fonts, etc. Text entry. The options in the "File" menu. The buttons on the toolbar. Open, save and print files. Copy, move and delete a file. Editing commands such as cut, copy and paste text. Find and replace text. Applying special effects: bold, italic, colors, etc. The options of the "Format" menu. Headers and footers. Tabulation. Tables and forms. Spellcheck.

#### 310-TJB-ID Bilingual Legal Terminology

45 hours

Subjects – Learning French and English legal vocabulary. Interpretation of French and English legislation. Comparison of French and English legislation. Introduction to Common Law. Summary of French and English judgments. Interpretation of case law in both French and English.

#### 310-TT2-ID Word Processing 2

60 hours

Subjects – Analysis of the work situation. Link between training received and the demands of the workplace. Creating Microsoft Word™ documents. Inserting references. Style and formatting. Creating and modifying a table. Document merge and mail merge, envelopes and labels. Automatic correction option. Document protection. Creating forms. Macro commands. Creating a presentation. The toolbar and the "Graph" function bar. Insertion and layout of images. Legal texts.

# 310-BDL-ID Database and Application Software

45 hours

Subjects – The work environment: the input screen and the menu bar. Database design such as tables, forms, and reports. Creating sub forms. Creating tables in a spreadsheet. Entering, editing, deleting and saving articles. Sorting. Creating and editing reports. Printing reports. Creation of legal tables, forms and sub forms, using basic terminology. Nominal entry relating to users. Searching within an existing database.

#### 310-EGJ-ID Ethics and Legal Financial Management

45 hours

Subjects – Distinction between the Code of Ethics of different practitioners within the legal field. Understanding of regulations related to the Code of Ethics. Application of the Code of Ethics to practical cases. Application of ethics at work. Definition of professional secrecy. Extent of professional secrecy. Drafting of fees (service contract). Distinction of the different accounts owned by a practitioner. Creation of accounts and updating them. Invoice preparation. Preparing a timesheet with the



appropriate software. Keeping a timesheet up to date. Summary of the tasks performed in client accounts. Information on the different rates of legal fees applicable in Québec.

#### 310-1MD-ID Law Review and Methodology

45 hours

Subjects – Distinction between positive and natural law. Prioritization of the sources of positive law. Characterization of the sources of positive law. Differentiation between legislative, executive and judicial power. Basics of elections, Parliament and the Government of Québec. Distinction between the bill, the annual law and the revised law. Canadian Constitution. Procedure for adopting a provincial law. Search for the appropriate law according to the facts presented. Understanding of the publication, numbering and citation of the bill, the annual act and revised federal statutes. Procedure for adopting a federal law. Basics of elections, Parliament and the Federal Government. Sharing of legislative powers. Constitutionality of laws. Summons of Québec and federal regulations. Functions and jurisdiction of the courts. Reference of a judgment. Research method for jurisprudence and doctrine. Characteristics of a judgment and doctrine. Creation of a table of judgments and a bibliography.

# 310-FD0-ID Legal and Obligations Basis

60 hours

Subjects – Obligations in general. The terms of the obligation. The execution of the obligation. Transmission and transfer of the obligation. Restitution of benefits. The extinction of the obligation. The contract. Extra-contractual liability. Exemptions from liability. Some other sources of the obligation (business management, receipt of the undue and unjustified enrichment). Basics of the Consumer Protection Act. Basic concepts of named contracts (sale, donation, charter, transportation, work contract, money order, deposit, loan, bond, annuity, insurance, gambling, betting and transaction). Definition of heritage. The notion of property. Distinction between real rights and personal rights. The acquisitive prescription. Basic concept of co-ownership, superficiary property, usufruct and use, emphyteusis, easements, land registration, trust and the administration of the property of others. Basics on priorities and mortgages. Explaining a collocation state.

#### 310-DPF-ID Human Rights and Family Law

60 hours

Subjects – The existence of a legal personality. The conditions of the existence of the legal personality. The attributes of the legal personality. Individualization of natural persons, such as name, domicile and civil status. Disabilities distinction between marriage, civil union and de facto spouses (Divorce Act versus the Civil Code of Québec). Establishment of the marriage bond. The effects of marriage. Annulment of a marriage. Definition of the separation of body. Causes of legal separation. Proceedings in legal separation (the application, the evidence, the provisional measures, the adjournments and the reconciliation). Effects of body separation. The end of the separation of body. The dissolution of the marriage. Causes of divorce (Divorce Act). The effects of divorce. The formation, the effects, the nullity and the dissolution of the civil union. Sources of parentage (blood filiation, medically assisted procreation and adoption). Proof of the source of the filiation link. The means of contesting the bond of descent. Basics on parental authority and youth protection. Declaration of family residence. The family patrimony. Distinction between the safeguard order, interim measures and the final judgment. Manual calculation of alimony. Calculation of the shareable value of the family patrimony. Compensatory allowance.

#### 310-RJU-ID Computerized Legal Research

60 hours

Subjects – Complete a legal research form. Presentation of the various computerized legal databases. Research on the various computerized legal databases. Research for the appropriate legislative texts. Doctrine research. Presentation of research results and legal reasoning.

310-RJ1-ID Legal Drafting 1 45 hours

Subjects – Determination of the procedure to be drafted according to the law applicable to the facts. Writing of formal notices. Writing a letter that accompanies the invoice sent to a client. Writing a letter to a client indicating an overdue account. Application of French in the office. Writing a cover letter. Writing a resume. Writing official emails. Transmission of electronic documents. Writing a fax slip. Notification of documents by fax. Writing a contract.

#### 310-DEP-ID Provincial Trade Law

45 hours

Subjects – Act respecting the legal advertising of sole proprietorships, partnerships and legal persons. Charter of the French language. Regulations on corporate names and fees payable for the registration of a corporation. Types of businesses. Registration requirement. Business Corporations Act. Transitional measures. Companies Act vs. Business Corporations Act. The constitution of a society. The declarations. The dissolution of the society. Business Register. The corporate name. The formation of a corporation. Reservation of a name at the enterprise registrar. Share and share capital. The private corporation. The book



of corporations. Resolutions, minutes, and certified extracts. The responsibility of the directors. The positions of leaders. The role of the shareholders. The unanimous shareholder agreement. Meetings of directors and shareholders. Procedures and voting at meetings. The modification statuses. Transactions involving share capital. Declaration of dividends and solvency test. Updating the book of the corporation. The dissolution of a corporation. The non-profit corporation. Cooperative. Securities Act. Act respecting the transfer of securities and obtaining intermediated securities. Stock Exchange listing.

#### 310-PC1-ID Civil Proceedings 1

60 hours

Subjects – The court of first instance. Guiding principles of the procedure. Jurisdiction and territorial jurisdiction of the courts. Common rules applicable to all judicial remedies. Abuse of procedure. Notification and service of pleadings. Application instituting proceedings. Assignment and response of the defendant. The management of the instance. Protocol of the proceeding. Preliminary means of protest. Contestation on the merits. Preparation of the file and registration for instruction and judgment. Treatment of registered cases as a result of defendant's default. Incidents of the instance. The constitution and the communication of the proof. Examination for preliminary investigation and expertise. General rules relating to judgment. Court hearings and counting of time. The non-contentious procedure. Special rules applicable to family matters. Drafting of main pleadings and endorsements. Analysis of the rules of civil procedure.

#### 310-RJ2-ID Legal Drafting 2

45hours

Subjects – Use of an e-mail software. Updating an agenda. Calculation of limitation periods. Registration of the limitation period in the agenda. Analyzing the mandate of the practitioner for different types of files (civil, matrimonial, and commercial). Determination of the work to be done following the analysis of a file. Follow-up on scheduled deadlines. Install a folder ranking. Follow-up actions in each folder. Determination of the procedure to be drafted. Organization of procedures and acts in each case.

#### 310-MRC- Alternative Dispute Resolution

45 hours

Subjects – Identification of alternative methods of conflict resolution (arbitration, negotiation, settlement conference, and mediation). Determination of the power of an arbiter. Identification of the role and power of the judge in a settlement conference. Identification of the role of a mediator. Determination of the qualifications required to be a mediator. How to search for a qualified mediator according to the needs of the client. Family mediation. Determination of the needs of the professional and the client through active listening. Drafting of an amicable settlement (out of course). Determination of the document to be drafted when an agreement occurs. Writing a disclaimer. Legal research for the preparation of the bargaining plan. Writing a negotiation plan. Simulation of a negotiation. Application of the techniques used in negotiation. Appropriate use of communication techniques.

## 310-DPP-ID Criminal Law, Rules of Court and Evidence

60 hours

Subjects – Criminal law in Canada. Canadian Charter of Rights and Freedoms and the Charter of Human Rights and Freedoms. Criminal law (levels of jurisdiction, fundamental principles, and classification of offenses). Elements of the offense: *actus reus* and *mens rea*. The general intention vs. the specific intention. The offense of absolute liability vs. strict liability. The charges. Offenses against provincial laws and municipal by-laws (Highway Safety Code, Code of Criminal Procedure). State of infraction. The defenses. Penal disabilities. Offense against the person. Offenses against the right of property. Offenses under the Act regulating certain drugs and other substances. Jurisdiction of the courts of first instance in criminal matters. Preparation of the pursuit. Judicial process. Progress of the trial. Judgment and execution of the sentence. The penal registry. The municipal court.

#### **310-RMS-ID Matrimonial Property and Estates**

45 hours

Subjects – Matrimonial regimes. Qualification of assets in the case of a separation for each matrimonial regime. Administration of property and liability for debts, the dissolution of the partnership of acquits regime. Separation of property. Community regimes. Disposition of assets. The estate. Intestate succession. Maintenance obligation. Rights of the state. Nature of the will. Competencies needed to analyse a will. Types of wills. Limits on the freedom to make out a will. Conditions on the validity of a will. Testamentary transactions and legatees. Types of legacies. Principle of representation in a testamentary succession. Revocation of a will or legacy. Lapse and nullity of a legacy. Evidence and probate of a will. Liquidation of succession. Debt payments and legacies by particular title. End of the liquidation. Distribution of the estate, reports, effects, and distribution nullity. Gift *inter vivos* vs. gift *mortis causa*. Marriage contract. Institute and object. Obligations and liabilities of a trustee. Life insurance.



#### 310-PC2-ID Civil Proceedings 2

60 hours

Subjects – Appeal in retraction of a judgment. Statement of appeal and application for an appeal. A brief and statement of appeal. Course of call. Stopping. Rule of Procedure of the Court of Appeal in Civil Matters. Drafting pleas and endorsements. The execution of judgments. Seizure of property. Unseizable property. Sale under judicial authority. Distributing the proceeds of the execution. State of collocation. Seizure before judgment made.

#### 310-DEF- Federal Trade and International Law

45 hours

Subjects – A company incorporated under federal law. Legislative authority. Modes of constitutional interpretation in a federal society. Registration. Merger, sale of shares, and dismemberment. Cheque or bill of exchange and promissory note. Shareholder rights and remedies. Bankruptcy and insolvency. A holding proposal. A consumer proposal. Private international law (the conflict between laws in private international law, the actual statue, the contract of employment, the assignment of debt, the status of proceedings in private international law, the recognition and enforcement of foreign decisions and jurisdiction of foreign authorities).

#### 310-LDT-ID Labour Law Procedures and Legislation

45 hours

Subjects – Shared jurisdiction in labor law. Fundamental rights. The right of association. Labor Code. Accreditation. Definition of legal powers and obligations of a labour union. Negotiation process. Collective agreements. Grievance arbitration. Disciplinary sanctions. Employment contract. Act respecting labor standards. Role of the *Commission des normes du travail*. Penal and civil remedies. Role of the Committee on Standards, Equity, Health and Safety. Occupational Health and Safety Act (rights and obligations). Precautionary cessation of work. Act respecting industrial accidents and occupational diseases. Compensation.

#### 310-ETP-ID Examination of Ownership Titles

45 hours

Subjects – Drafting of a cadastral designation. Drafting of an easement provision. Identification of the lot number and the cadastre (tax account or call to the municipality). Distinction between renovated and old lots (part). Analysis of a deed of sale. Analysis of a mortgage deed. Registrations analysis of the Land Register. Understanding of written provisions from a land-surveyor and plans. Land register research. Drafting title chains as per research done Identification of errors in long deeds drafting. Identification of Land Register service fees. Registration of an act in the Land Register. Determination of the acts registered in the *Registre des droits personnels et réels mobiliers* (RDPRM). Registration of acts at the RDPRM. Determination of the costs of using the RDPRM. RDPRM Research.

## **310-PAF-ID Administrative Procedures**

45 hours

Subjects – Public law vs. private law. Primacy of the law, prerogatives, privileges, immunities, and privative clauses. Role of the Commission on Human Rights and Youth Rights. Regulatory powers of the administration in enabling legislation. Characteristics of an act or quasi-judicial power. Administrative Justice Act. Administrative courts. Restrictive clauses of jurisdiction. The Administrative Tribunal of Quebec. Appeal in judicial review. *Habeas corpus*. Injunction. Declaratory judgment. Attributes of the municipality and cities. Possible recourse against municipal administration.

#### 310-PDL-ID Contentious Right and Practice

45 hours

Subjects – Formal demand. Drafting of an originating motion. Legal mortgage notice. Address notice. Act of Full Release. Cancellation of registration on the Land Register. Prior notice to exercise mortgage law. Demand for forced abandonment and sale under judicial control. Statement of expenses. Public announcement of property sale under judicial order. General and specific sales terms and conditions under judicial order. Drafting of a bailiff report. Drafting of a property sale report under judicial order. Determination of the effects of the sale. Taking a payment. Drafting of a notice of exercise of a mortgage right. Sale by the creditor. Taking possession for administration purposes. Drafting of a legal mortgage of the construction. Registration to the RDPRM. (Register of personal and movable real rights). Voluntary abandonment (private deed). Notice of delivery of property. Request for retention of a legal mortgage.

#### 310-PDN-ID Notarial Procedures and Law

45 hours

Subjects – Authentic deeds, semi-authentic deeds, and private deeds. Parties to the deed. Special formalities. Bureau of the publicity of the rights (role and functioning). Advertising (effects and modalities). Property registration. The cancellation of inscription in different registers. Types of notarial procedure. Conducting a search. The will. The mandate in case of incapacity. The power of attorney (proxy). Opening of an estate. Probating of wills and letters of verification. Means of contesting deeds.



Accountability. Document appointing the testamentary executor. Renunciation from the testamentary executor. Inventory of the safety deposit box. Procedure for the sale of the property of others. Report and distribution of the sale proceeds. Sale under judicial order. Marriage and common-law union contract. Information to be collected when selling property. Calculation of the transfer tax, taxes and other accounts on a pro rata basis. The property sale contract. Easements. Cadastral description. Mortgage deed. Deed of easement. Documents registration at the appropriate registries. Registration costs at the registry. Invoicing a client.

310-STA-ID Internship 510 hours

Subjects – Link between training and workplace requirements. Inclusion of essential skills developed throughout the training. Introduction of ethical rules related to the practice of the profession. Oral and written communication skills. Reports outlining observations and the work situation analysis in the legal community. Self-assessment of the work carried out and behaviour in the workplace. Ethical behaviour when dealing with various parties from the legal community. The professional's assessment of the paralegal regarding their ability, work produced and behaviour demonstrated during the stage.

N.B. Please note that this program description is for illustrative purposes only. It may therefore be modified in whole or in part without notice in order to adapt it to new ministerial prerogatives or the labor market.



# 3D MODELING ANIMATION ART & DESIGN - NTL.0Z

Program leading to an Attestation of College Studies (ACS)

FB-CDI-PQ-CMAD-0418

	Course Code	Course Title	Hours
PART 1:	574-NCC-ID	Color & Design	45
BASIC 2D CONCEPTS	574-DT1-ID	Drawing I	45
DASIC 2D CONCELL 13	574-ADA-ID	Life Drawing I	45
	574-TRI-ID	Photoshop I	45
	574-DT2-ID	Drawing II	45
	574-CPS-ID	Storyboarding	45
	574-1AN-ID	2D Animation Foundations	60
PART 2 :	574-NM3-ID	3D Modeling Foundations	45
BASIC 3D CONCEPTS	574-TDT-ID	Texture Mapping (Photoshop II)	45
BASIC 3D CONCEI 13	574-MSD-ID	Hard Surface and Organic Modeling	45
	574-MEE-ID	Material and Lighting	45
	574-TET-ID	Lighting and Texture	45
	574-ETA-ID	Advanced Lighting and Texture	45
	574-CDA-ID	Background Layout and Design	45
	574-MEJ-ID	Interior Spaces and Worlds	45
	574-TA3-ID	3D Animation Foundations	60
PART 3 :	574-ARR-ID	3D Character Rigging	60
ADVANCED 3D CONCEPTS	574-A3A-ID	Advanced 3D Animation	60
ABVANCED 3D CONCER 13	574-DP1-ID	Character Design I	45
	574-DP2-ID	Character Design II	45
	574-SCU-ID	Sculpture	45
	574-RPD-ID	Brush Based Techniques	45
	574-MDP-ID	Character Modeling	60
	574-TML-ID	Low Polygon Modeling	45
	574-CNJ-ID	Level Design	60
PART 4 :	574-P01-ID	Portfolio I	45
PORTFOLIO AND DEMO	574-P02-ID	Portfolio II	90
TOKITOLIO AND DLIVIO	574-EDN-ID	Digital Editing	45
	574-LSM-ID	Maya Scripting	45
	574-PF1-ID	End of Studies Project	270
		TOTAL PROGRAM HOURS :	1710
		TOTAL NUMBER OF UNITS : 59,33	· · · · · · · · · · · · · · · · · · ·

#### **Program Objectives**

CDI College's 3D Modeling Animation Art and Design ACS program trains professionals that will able to occupy, at the entry level of the labor market, positions such as 2D/3D Animator, 2D/3D Modeller, 2D/3D Illustrator, Game Designer, Level Designer, Texture Artist and Tester, among others. The program is divided in two parts - an artistic part that allows students to develop their creativity and artistic sense, and a technical one, allowing students to acquire skills in design, modeling, and animation. Projects are carried out in connection with labor market expectations where students are asked to recreate similar environments and develop the aptitudes necessary for success in the field.

When working in the field, graduates may be asked to analyze various projects, design a prototype, model graphic elements, integrate textures, colors and lighting, animate graphic elements and/or update the final product. Graduates may be involved in all of these tasks, or in a few key steps of the process.



Many of these professionals work in computer animation studios and companies specializing in multimedia production, electronic games, and special effects. They also sometimes work in companies that design software. Graduates can also work as freelancers.

Given the rapid evolution of technology in this field, new applications are constantly being developed. This can add new employment opportunities in movie studios, for cell phone producers, and toy and electronics manufacturers.

#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.

#### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;
- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### **Obtaining the Attestation of College Studies (ACS)**

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

#### 3D MODELING ANIMATION ART & DESIGN - NTL.0Z

574-NCC-ID Color & Design 45 hours

Subjects – Elements and principles of conception and design. The language of design. The composition. The design process. Negative space and positive space. Abstraction. How to design according to different styles. Fundamentals of color theory. Color palettes. Theory of color - advanced concepts. Sizing and harmonies. Neutral chromatic colors. Spatial perception Mismatch. Analysis and application of colors. Subtractive colors and additive colors. Hue, value, and saturation.

574-DT1-ID Drawing I 45 hours

Subjects – Straight lines and different shapes. Calculating the size of objects and characters according to specific proportions. Rules of proportion. Principles of perspective. Perspective based upon one point, two points and three points. Shading techniques and light. Calculation of size and shading. Shape styles. Analysis and observation. Basic concepts of texture. Composition.

574-ADA-ID Life Drawing I 45 hours

Subjects – Basic forms used in the composition of the body. Human proportions. Principles of proportion and placement. Hands, bones and muscles. Placement of living models. Drawing the human body. Drawings from a living model. Profile drawings. Drawing the bones and muscles of the feet. Anatomy of upper limbs, including the skeleton, muscles and skin. Anatomy of the lower limbs, including the skeleton, muscles and skin. Drawing different poses. Anatomy of the trunk, i.e. anterior view. Anatomy of the trunk, i.e. posterior view. Drawing of the trunk muscles, i.e. anterior and posterior views. Drawing the muscles of the face and the structures of the head. The muscles and structures of the body.

574-TRI-ID Photoshop I 45 hours

Subjects – Configuring the tools and interface of an image editing software. Common tools and selections. Brushes, masks and layers, and the buffer tool. Creation of brushes (different forms of the brush tool). Image acquisition such as scanners and digital cameras. Adjusting photographs and red-eye correction. Use of different filters. The trace selection tool. Embed text in a graphic using the text tool. Layer styles.



574-DT2-ID Drawing II 45 hours

Subjects – Drawing styles, from stylized to realistic. Drawing process. Structures and forms. Symmetry and asymmetry in a drawing. Overall appearance of a drawing. How to integrate different techniques and styles when drawing characters. Drawing environments. Drawing sets and accessories according to the instructions. Production of a simple visual history using characters, sets, and accessories. Adding mood elements to a drawing.

574-CPS-ID Storyboarding 45 hours

Subjects – Goals, role and the importance of a storyboard. Composition of a storyboard. Application of perspective in the development of a storyboard. Terminology and labeling rules specific to a storyboard. Camera movements, scenes, panels, actions, and dialogues. Continuity of images in a storyboard. Development of a character. Character templates. Different shots in a storyboard such as foreground and background. The elements of a sketch. Drawing a sketch according to a script. Selection of jacks. Cadence. Developing a draft storyboard from a sketch. Developing a production storyboard from a draft storyboard. The continuity, editing and final presentation of storyboards.

#### 574-1AN-ID 2D Animation Foundations

60 hours

Subjects – Field of the drawing. Character poses. Backgrounds. Cadence and cadence charts. Pose-to-pose animation and animation in a straight line. Pressure and stretching of the image. Illustration of weight and volume. Illustration of anticipation. Overlapping images. Movement, action, special effects, and wave. Animation of complex cycles. Physical properties of water and movement. Interpolation techniques. Simple animation of characters. Panoramic effects of the backgrounds. Walking position and pace of walking. Strobe effects. Perspective and the location of a character's feet. Movement of the hips and opposite shoulders. Translation of an animation from one perspective to another.

#### 574-NM3-ID 3D Modeling Foundations

45 hours

Subjects – Features and tools specific to the modeling software. File management. Terminology and nomenclature specific to the modeling sector. Design of a character. Modeling techniques. Geometric shapes used in modeling. A 3D coordinate system. Typical materials used in modeling. Applying textures to a surface. Creation of a skeletal structure. Fundamentals of animation. Integration of light and shading to the model. Rendering the model. Preparing the model for animation. Sketch production.

#### 574-TDT-ID Texture Mapping (Photoshop II)

45 hours

Subjects – Selection tools. Layers. Applying effects to a layer. Masks. Different editable channels. Handling the alpha channel. Precise calibration of colors. Advanced selection techniques. Creating textures. Applying textures to an image. Theory of digital color. Color correction using different palettes. Choice of filters and processing algorithms.

#### 574-MSD-ID Hard Surface and Organic Modeling

45 hours

Subjects – Review of modeling techniques. Modeling a simple object (i.e. a box). Geometric types and shapes. Integrating created elements into a decor or background. Modeling techniques based on polygons. The "spline" curves. Modeling hard surfaces using polygons and "spline" curves. Modeling of mechanical objects using polygons and "spline" curves. Modeling organic objects using polygons and "spline" curves. Choosing the appropriate textures and materials according to the type of objects. Adding special effects to an object. Integration of modeled objects to a background.

# 574-MEE-ID Material and Lighting

45 hours

Subjects – Materials, textures and editors of materials and textures. Texturing plating strategies. Analysis and selection of textures and materials according to the characters, environment and storyboard. Techniques for creating base mappings and special mappings. Contact information. Techniques for creating tiles and environment mappings. Techniques for creating reflections and transparencies. Decal application to create special elements. Lighting and light effects. Creation of mood lighting. Lighting and shading settings. Surfaces having reflection and radiance.

#### **574-TET-ID Lighting and Texture**

45 hours

Subjects – Mapping of textures by bitmap. Mapping procedural textures. Acquiring a model to apply textures. Mapping and multilayer images to produce industrial textures. Positioning of cameras and lighting and the impact on the final product. Principles of cinematography. Natural textures related to UVW mapping techniques. Organic textures related to UVW mapping techniques. Accessory textures for UVW mapping techniques. Lighting technique. Rendering of the character with appropriate textures and lighting.



#### **574-ETA-ID Advanced Lighting and Texture**

45 hours

Subjects – Revisions of character rendering lighting techniques. Different atmospheres created by lighting effects and advanced lighting techniques. Development of scenes that demonstrate lighting and conditions according to the time of day. Development of interactions between different surfaces using lighting techniques and specialized textures. Production of advanced textures. HDRI. Global illumination. Creating advanced shadows. Effects of the camera. The rendering tools.

#### 574-CDA-ID Background Layout and Design

45 hours

Subjects – Terminology and abbreviations. Revised principles of perspective, camera angles and drawing techniques. Design of sets and backgrounds. Synthetic "matte-painting" decors. Elements essential to a décor design or background. Use of color, atmosphere and lighting techniques and shading when designing sets. Acquisition of reference material for the production of sets. Creating the illusion of depth. Exploration of atmospheric perspective in a background design. Dynamic perspective and panoramas. Design and production of exterior and interior decorations. Modification and adaptation of a decoration according to various changes such as the time of day, the season, or weather conditions. Choice of textures and materials according to types of decorations and accessories. Impact of various shots, angles and movements of the camera on the design and modeling of sets, backgrounds and accessories. Using 3D models as scenery elements. Pattern modeling process and backgrounds. Adding special effects to a decor. Introduction of particles, water, mist, shading, reflections and chips in the sets and backgrounds.

#### 574-MEJ-ID Interior Spaces and Worlds

45 hours

Subjects – Principles of design and modeling. Fundamentals of modeling for game environments. The illusion of depth. How to use "matte painting". Ambience creation techniques. Foregrounds and backgrounds. Respect of the central theme of the environment. Perspective and scale concept. Choice and methods of applying textures. Impact of camera angles on the modeling for game environments. Special effects.

#### 574-TA3-ID 3D Animation Foundations

60 hours

Subjects – Animation software, interface, and tools. Graphic editor. Timeline. Attribute Editor. Transformation tools. Animation process. Revision and application of the principles of animation. Edit an animation using the curve functions. Application of stretching and pressure techniques. Interpolation of key frames. Lattice and nonlinear transformations. Incorporation of notions of weight and cadence into an animation. Overlap and extension. Integration of anticipation, action and reaction and exaggeration in an animation. Principles of direct and inverse kinematics. Rotation of pivot points using kinematics. Linear motion animation. Notions of staging. Analysis of a displacement by walking and decortication of the walking cycle. Animation of a walking cycle. Additions of personality elements in a walk animation. Notions of balance in the line of action.

#### 574-ARR-ID 3D Character Rigging

60 hours

Subjects — Rotoscoping images. Pictures of decorations. Images of key phrases. Benchmark images for synchronization. Digitization of textures. Scanning soundtracks. Basic skeletal configuration. Revision of the joints and movements of the body. Creation of skeletal structures of various members and characters. Articulation of the limbs. Direct kinematics and inverse kinematics. Point constraints. Vector constraints. Orientation constraints. Rigid and smooth bond. Weight settings. Edition of the geometry of the model and skeletal structures. Grafting skeletal structures to model geometry which creates detailed facial expressions. Walking cycle. Optimization of configurations using scripts. Synchronization of animation and sound. Library of movements.

#### 574-A3A-ID Advanced 3D Animation

60 hours

Subjects – Character rendering lighting techniques. 3D animation techniques. Different atmospheres created by lighting effects and advanced lighting techniques. Design of a character for animation purposes. Developing a scenario. Production of drafts of the character, background, and accessories. Determination and justification of the number of appropriate polygons. Modeling of the character and accessories. Preparation of an un-textured model. Modeling joints. Production of appropriate skeletal structures. Creating textures and materials. Applying textures and materials using UV mapping. Added lighting and illumination techniques. Methods and techniques of animation control. Added glare and other special effects at the surface level. Animation of the characters taking into account the scale of the scene. Configuring animation and rendering settings. Preparation of the final version.

#### 574-DP1-ID Character Design I

45 hours

Subjects – Anatomy and drawings of the head and neck, man/woman, human torso, arms, pelvis, lower limbs. Drawings suggesting movement. Anatomy of the animal form. Drawings of the animal form in motion.



#### 574-DP2-ID Character Design II

45 hours

Subjects – Drawing techniques. Anatomical notions. Reference points of the human body. Representation of different human gestures and their interactions with objects and scenery. Representation of the movement in the drawings. Animal anatomy. Drawing of animal gestures. Proportions appropriate anatomical parts. Drawing of clothing on a character.

574-SCU-ID Sculpture 45 hours

Subjects – History of sculpture. Sculpture styles. The mediums. Sculpting tools. Human anatomy. Armature. Sculpture of various anatomical parts (hands, feet and head). Human facial expressions. Complete body model. Modeling characteristics and non-human expressions. Integration of fine details in a sculpture. Design and production of a character model. Production of models. Finish.

#### 574-RPD-ID Brush Based Techniques

45 hours

Subjects – Rendering software. The art of lighting and light. Types of lighting. One, two and three-point lighting. Creating shadows on a 3D model. Application of materials and textures. Textures and projections. Improved textures using UV spaces and mappings. Preparation and organization of rendering. Image formats. Render resolution. Compression settings. Types of antialiasing. Checking the quality of the images.

# **574-MDP-ID Character Modeling**

60 hours

Subjects – Design of a character. Hierarchical structure of characters. Limits of movement for each part of the skeleton, such as scale and rotation. Shapes and rotations. Nuance with shading and lights. Modeling of the hand and its joints. Texturing of the hand. Modeling the head and face of a character. Texturing the head of a character. Body modeling. Texturing of the body. Texturing of the skin and clothing. Facial expressions. Distortion and exaggeration to produce special effects. Manipulation of subdivisions of surfaces. Placement of joints for movement and poses of actions. Fluid modeling of the joints. Control of the movement of the different components of the characters such as direction, rotation, and orientation. Painting and rendering techniques.

#### **574-TML-ID Low Polygon Modeling**

45 hours

Subjects – Functions and tools of standard software and modeling environments. File types. Organization of objects. Optimization of objects. Transforming and editing objects for 3D modeling with a few polygons. Shapes and terminology of forms specific to 3D modeling. Creating and editing Spline curves. Modeling with NURBS. UV mapping and coordinates. Creation, edition and application of materials and textures. Consideration of camera angles and rendering of the model. Low-polygon modeling. Techniques for editing mesh structures. Using symmetry in modeling. Adding special effects.

574-CNJ-ID Level Design 60 hours

Subjects – Level design software. Types of games. Solo and multiplayer games. Translation of specifications into game levels or missions. Theory of game level design. Artificial intelligence. Building game levels. Principles or attributes of a good game. Environments and scenery. Triggers. Zones and portals. Choice of textures according to the type of game. Importing textures. Choice of accessories. Design of a character specific to the game style. Level optimization. Importing music and other audio elements.

574-P01-ID Portfolio I 45 hours

Subjects — Aspects of a professional portfolio. Personal review. Assessment of its strengths and weaknesses. Project management. Management of time. Learning about the constraints of a project such as budget, time, and quality. Copyright. Selection of the different elements that will be included in the portfolio. Creation of a simple 3D animation in a suitable environment with décor using learned techniques such as character design, design and design of the environment and elements of décor, modeling a model, modeling characters and objects, applying textures, colors, lighting and shading, rendering and animating characters. Portfolio presentation.

574-P02-ID Portfolio II 90 hours

Subjects – Aspects of a professional portfolio. Project management. Time management. Learning about the constraints of a project such as budget, time, and quality. Selection of the different elements that will be included in the portfolio. Learning how to create a short 3D animation film in an appropriate environment, with décor, using mastered techniques and procedures. Portfolio presentation.



574-EDN-ID Digital Editing 45 hours

Subjects – Production of storyboards and sketches. Sequential development of the history. Interface and tools of *Final Cut Pro*. Importing digital files. The canvas, the timeline and other editing tools. Creating appropriate sequences. Capturing images. Edition palettes. Transition effects. Application of special effects. Layers. Added sound and audio frames. Composite images. Alpha channels. Codecs. Preparation of the final output of the publishing project.

574-LSM-ID Maya Scripting 45 hours

Subjects – Basic programming for artists. The Maya SDK. Introduction to scripting language. Expressions. Data types. Variables. Particle control by using expressions. Scripts. Advanced scripts. Programming tools.

#### 574-PF1-ID End of Studies - Project

270 hours

Subjects – Application of the technical elements seen during the training. Application of the knowledge, know-how and skills developed during training to the workforce. Adopt rules of professional ethics related to the practice of the profession. This project can also take the form of an internship in a company.

N.B. Please note that this program description is for illustrative purposes only. It may therefore be modified in whole or in part without notice in order to adapt it to new ministerial prerogatives or the labor market.



Program leading to an Attestation of College Studies (ACS)

FB-CDI-PQ-DG-0418

	Numéro du	Course Title	Hours
	cours		
COURSES	570-NCC-ID	Fundamental Principles of Colour and Design	45
	570-ADA-ID	Anatomy – Analysis and Drawing	45
	570-T1M-ID	Image Processing	45
	570-1L1-ID	Computer Illustration	60
	570-DT1-ID	Traditional Drawing	45
	570-TYP-ID	Typography	45
	570-PHN-ID	Digital Photography	45
	570-C0N-ID	Conceptualization	60
	570-T1A-ID	Advanced Image Processing	45
	570-DDP-ID	Publishing Design	45
	570-TYA-ID	Advanced Typography	45
	570-DEL-ID	Electronic Design	45
	570-TD1-ID	Printing Techniques	60
	570-TPE-ID	Design of Packaging Products	45
	570-DEC-ID	Corporate Branding	45
	570-DEP-ID	Advertising Design	45
	570-CM1-ID	Multimedia Concepts I	60
	570-DEA-ID	Advanced Electronic Design	45
	570-DW1-ID	Web Design I	45
	570-P01-ID	Portfolio I	45
	570-NAP-ID	Advanced Concepts of Advertising Design	45
	570-CM2-ID	Multimedia Concepts II	60
	570-DW2-ID	Web Design II	45
	570-P0D-ID	Portfolio II	90
		TOTAL PROGRAM HOURS	1200
		TOTAL NUMBER OF UNITS : 43	

#### **Program Objectives**

The objective of the Graphic Design ACS program is to train professionals that will be capable of occupying the positions of graphic designer, illustrator, advertising and promotional designer, web and multimedia designer, editor and layout designer, photo re-toucher, artistic director or project manager. Although not specialized in these trades, the graduate will be able to occupy the positions of photographer, video editor, audio editor and web developer (HTML5 and CSS3).

Graphic designers mainly design and produce graphic and visual materials to effectively communicate information for print, advertising, film, packaging, posters, signage and interactive media products such as websites and compact discs. They work in graphics and advertising companies, institutions that have an advertising or communications department, and multimedia production centers. They can also work on their own as freelancers.

The training offered by the Graphic Design ACS program is composed of three important elements. First, the technology component allows students to master the tools and technologies needed for their work. Second, the conceptual component allows students to understand and deepen their approach to various artistic techniques. Furthermore, they will be able to approach artistic production from a commercial, marketing or entrepreneurial perspective and develop control over their creativity. Finally, the technical component allows students to learn and apply the different rules related to their fields of intervention, and develop good practices in accordance with the expectations of the workplace. Projects and courses are designed to prepare students for all requests that may be made by an employer (as a regular employee) or a client (a self-employed person).



#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.

#### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;
- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies:
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### Obtaining the Attestation of College Studies (ACS)

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

#### **GRAPHIC DESIGN - NTA.1U**

#### 570-NCC-ID Fundamental Principles of Colour and Design

45 hours

Subjects – Fundamental principles and terminology of design. Design process. Pictorial composition and iconic reading (gestalt). Formal elements and notion of space. Formats, diagonals, lines and points of force, and focal points. Principles of subordination and hierarchy, unity, repetition, scale, similarity, and balance. Theory of color perception. Color composition. Additive and subtractive syntheses. Chromatic scale. Harmony of colors and visual impact. Impact of the media on color.

#### 570-ADA-ID Anatomy - Analysis and Drawing

45 hours

Subjects – Fundamentals of anatomical drawing. Base forms used in the composition of the human body. Terminology used in anatomy. Anatomy of the human hand and drawing from various angles. Anatomy of the upper limbs and elbow, and drawing in various poses. Drawing of shoulders seen from front and back. Skeleton and muscles of the arms and shoulders. Using shadows to enhance the details and shapes of the drawing. Anatomy of the human foot and drawing from various angles. Anatomy of the lower limbs and drawing in various poses. Anatomy of the knee and ankle, drawing while standing and using shadows to improve the details and shapes of the drawing. Anatomy of the trunk and geometric shapes used for drawing. Anatomy of the abdomen and pelvis, geometric shapes and the use of shadow in drawing. Anatomy of the face, muscles, neck and head, geometric forms and use of shadow in the design. Principles of perspectives and scales of proportion. Lateral views. Integration of anatomy into a global design. Drawing of muscles and muscular system. Drawing of various poses from a human model. Correction with respect to proportions.

#### 570-T1M-ID Image Processing

45 hours

Subjects – Introduction to Adobe Photoshop image processing software. Configuration and environment of the software. Drawing tools and text tools. The selections. Scanning and image capture technologies. Transferring images to a computer. Graph creation. Techniques for adjusting brightness and color. Retouching and repairing photos of conventional or raw files. Image manipulation techniques. Techniques for creating composite images. Preparation of images for printing, for Internet or multimedia. Color modes, pixel depth,s and resolution. General methodology. Professional quality project and presentation

#### 570-1L1-ID Computer Illustration

60 hours

Subjects – Introduction to the Adobe Illustrator illustration software. The vector image. Configuration and workspace. Creation and backup of documents. Creation and drawing of basic shapes and Beziers curves. Contours and fills. Color palette and transformation palette. Custom brushes. Sample and custom sample library. Gradients. Custom perspective grid and isometric perspective. Transformation of objects, i.e. through rotation, inclination, volume, light, and shadow. Selection and addition of text, character types, text formatting, column creation and text rate adjustment. Adjusting text around a graph. Mix of objects, shapes and colors. Clipping mask and opacity creation. Masks of images with shapes. Styles of graphics, filters and special effects. Creations in 3D. Web graphics. Layout and preparation for printing. Export for different media.



#### **570-DT1-ID Traditional Drawing**

45 hours

Subjects – Drawing styles and techniques. Development of your own style of drawing. Drawing lines and basic shapes. Perspective notions in a drawing. Observation and drawing of living beings. Shading techniques. Variations of light and effects on shadow patterns. Balanced composition in drawing. Drawing of textures, such as metals, glass and its reflective properties, and wood and its textures. Freehand drawing of different objects.

570-TYP-ID Typography 60 hours

Subjects – History of typography and calligraphy. Evolution of typography. Terminology. Straight lines and different shapes. Units of measurement. Classification of types. Character palette and paragraphs. Kerning. Family of classic and modern characters. Anatomy of typographic characters. Readability and style. Presentation, composition and layout. Effectiveness of the drawing. System grids. Type of design. InDesign definition of a model. Digital environment. Development of a typographic project.

# 570-PHN-ID Digital Photography

45 hours

Subjects – Basic principles of photography. The photographic genres. The pictorial composition. The frame. Angles and axes of shooting. Using an SLR (reflex) digital camera in automatic and manual modes in RAW format. Focusing, depth of field, light temperature and white balance, light reading, aperture, overexposure and underexposure, shutter speed, focal length, ISO factor. Creative modes and presets. Shooting in natural and artificial lighting. Photo of day and night. Photo studio and the use of the flash. Work organization, methodology, image processing in RAW format and creation of a final image. Creation of a photographic presentation.

#### 570-CON-ID Conceptualization

60 hours

Subjects – Importance of conceptualization in the creative process of graphic design. Definitions and terminology. Difference between concept and idea. Process, principles, and steps of systemic design. Ideation process. Training in creativity. Articulation of ideas and the elaboration of abstract concepts. Creation and collective creativity. Formal elements and visual components in the design of a project. Case studies.

#### 570-T1A-ID Advanced Image Processing

60 hours

Subjects – Using a Raster image manipulation software. Fine selection and import of images from another graphics application. Masks and extractions. Filter and distortion and effect correction with filters. Special effects and special filters. Composite images. Using filters and layers. Palette of specific colors and fit. Use of shapes and styles. Use of textures and color attributes. Opacity mapping techniques. Adjusting hues and saturation. Design of a composite image. Advanced photographic retouching and varied exports.

# 570-DDP-ID Publishing Design

45 hours

Subjects – Computer-assisted publications. Publication software. Particularity of the publications supposing a certain period. Layout according to the types of publication, single-page or multi-page. Use of style sheets and formatting. Integration of elements in a publication. Table creation and graphics. Use of typography. Implications and considerations for the use of color. Inks and special situations. Print production and transition from electronic media to print media. Production of a final impression. Different output formats. Assembly of the final material of a production.

#### 570-TYA-ID Advanced Typography

45 hours

Subjects – Distinction between composition and typing. InDesign fonts. Setting fonts, styles, sheets and tabs. Kerning, widow/ orphan word break for a professional disposition. White space, contrast, alignment and indentation. Layout techniques. Special formats of typographic projects. Grids and special characters in typography. Logo, capital letters, and ligatures. Tables and layout options. High resolution display.

# **570-DEL-ID Electronic Design**

45 hours

Subjects – Introduction to InDesign software, configuration, optimization and use. Basic concepts of the layout and processing of typographic content. Formal elements and drawing tools. Image and text box. Manipulation and transformation of objects. Import, edit and format content. Use of templates. Paragraph and character styles. Special characters. Table of contents and cross references. Creation and management of books. Professional and business documents. Multi-document project. Prepress and printing techniques. Electronic publishing techniques. Advanced features of layout software. Presentation of a project.



#### **570-TD1-ID Printing Techniques**

60 hours

Subjects – Role of a graphic designer in the production of documents for printing. History of printing. The types of print frames. The resolution and lineament. Various printing techniques (digital, offset, typographic, flexographic, screen printing, etc.). Prepress. Image resolution, dot gain, and total ink ratio. Black backed. The support white. Four-color process management. Spot colors (PMS). Types, quality, structure, and paper sizes. Binding and finishing. Traditional and technological printing.

#### **570-TPE-ID Design of Packaging Products**

45 hours

Subjects – The history of packaging. Nature and utility of packaging product design. Labels, basic and various forms of packaging. Folding cardboard, tubes, trays and other forms of packaging. Rigid boxes, corrugated containers. Display stands at the points of sale. The cutting dye. Technique and methodology for preparing files for printing according to the chosen technique. Design and color considerations in the packaging. Environmental issues and trends in packaging. Cultural and legal considerations. Packaging legislation.

# **570-DEC-ID Corporate Branding**

45 hours

Subject – Origins of brand identity. Perception in corporate identity. Definition of a corporate identity. Image and brand identity. Vision, meaning, differentiation and values. Methodology and process of defining a corporate image. Definition of mandate. Understanding of a company, market and competition studies, target market segments, and desired image. The logotype, the signature and the symbol. Typography, color and shapes. Letterhead, envelopes, business card, brochure, packaging, website, advertising, vehicles, uniforms and new media. Graphic charter and specifications of use.

#### 570-DEP-ID Advertising Design

45 hours

Subject – Advantages and disadvantages of different media. Current trends. Introduction to advertising and advertising design. Marketing mix. Creativity in advertising. Knowledge and understanding of the market and the target audience. False perceptions in advertising. What's important in an ad, what works and what does not work. Source of ideas and where to look for ideas. Appearance and effectiveness of an ad, i.e. visual elements, formats, styles, typography, and graphics. Text in an ad. Choice of media and advertising campaign. Moral and cultural considerations.

#### 570-CM1-ID Multimedia Concepts I

60 hours

Subject – Introduction to the use of an interactive multimedia creation software. Basic principles of animation. Animation in ActionScript3 and HTML5. Drawing tools. Animations by simple and complex key frames. Two-dimensional animations. Matrix and vector images. Interpolation of shapes, alpha channel, colors, and movements. Use of symbols, sound, buttons, and navigation components. Produce an animation using sequences. Control the playback of a simple animation or one composed of sequences. Import and control library contents and external content (sound, image, video). Optimization of the loading process and performance. Publication of documents.

# 570-DEA-ID Advanced Electronic Design

45 hours

Subject — Print production and electronic prepress. Image manipulation software. Color management. Layout. Dynamic publishing. Proof copy in electronic form. Digital and variable data printing. Creation of proofs and single-page and multi-page prepress documents. Resolution. Acquisition of digital images. Importing scanned images. Professional software for creating documents in PDF format. Types and formats of files. File management, preparation for printing and web deployment. Post print and finish.

570-DW1-ID Web Design I 45 hours

Subject — History and introduction to the "World Wide Web". Networks, domains, servers, and languages. Basic concepts of HTML and XHTML. Browsers and servers. Tags and attributes. Structure of an HTML file. Insert text and images onto a page. Basic styling of a page and text using CSS. Hierarchy of contents and headlines. The concept of container. How to set up, position and display containers on the screen. Basic composition grid. HTML5 and semantic tags. Tables and forms. Navigation and hyperlinks. Using images and wallpapers. Planning and designing a site. Cutting and assembly of an interface. Notions of accessibility and referencing. On-line activation.

570-P01-ID Portfolio I 45 hours

Subject – Characteristics of a professional portfolio. Format and expected level. Labeling elements of a portfolio. Repairing a portfolio. Assessment of its strengths and weaknesses and the overall quality of the portfolio. Maintenance of a portfolio.



Copyright laws and ethics. Legal implications of the use of unauthorized documents. What to protect and how to protect your work. Transportation considerations or electronic shipping. Personal promotion resources. Identification of clients and potential employers. Identification of employment counselors, professional publications, professional organizations, trade shows, and seminars. Interview simulation and portfolio presentation.

#### 570-NAP-ID Advanced Concepts of Advertising Design

45 hours

Subject — Marketing strategies. Popular trends in marketing. Marketing and Society: Social Responsibility, Ethics, Cultural, Demographic and Economic Issues Influencing Marketing. Collection of market information and market studies. Understanding the market and consumers. Target market and market segments. Consumer behavior. Influence of target markets on the design process. Segmentation and positioning. Brand strategies and building strong brand images. Impact on design trends and changes in lifestyle. Means to generate new ideas. Development of new products and life cycle strategies of a product. Positioning a product. Price considerations. Distribution of a product. Channels of marketing and means of communication. Current trends in media placement and promotion. Marketing and the Internet. Influence of technologies on marketing and consumer behavior. International and cultural issues and adaptation of marketing. Design Marketing and Promotional Bond.

# 570-CM2-ID Multimedia Concepts II

60 hours

Subject – Fundamental notions of audio. Introduction to sound editing software (Adobe Audition). Create mono and stereo audio files. Perform sound editing. Adjust the amplitude and the balance. Copy & paste sound samples. Creating multitrack audio montages. Audio capture. Improvement of an audio file. Filters and effects. Backup, compression and exporting. Basics of video editing. Introduction to video editing software (Adobe Premiere). Tools and techniques of assembly. Improved sources. Color correction. Transitions, filters and audio & video effects. Export and import audio tracks. Backup, compression and export. Introduction to animation software and special effects video (Adobe After Effects). Animation, color adjustments, deformations and transformations, extraction, use of the green screen, compositing, use of cameras and lighting in a 3D environment. Related uses of the three software. Exporting multimedia elements for use in interactive production.

570-DW2-ID Web Design II 45 hours

Subject – Environment of a "wysiwyg" type web editor (Adobe Muse), interface, tools, and functionalities. A website tree. Creation of pages. General structure and alpha version. The page templates. Insertion and management such as text and images, hyperlinks, clickable maps, tables, video and multimedia elements and interactive elements. Management of styles in CSS. Forms creation. Creation and use of SSI (Server-side includes). Creation of fluid sites. Use and management of SPRY elements.

570-P0D-ID Portfolio II 90 hours

Subject – Professional portfolio - quality level and professional standards. Marketing perspectives of a portfolio. Adaptating the portfolio according to the recipient. Selection of the elements that will be part of the final portfolio. Identification of possible shortcomings in selected parts and creation of new ones, if necessary. Assembly. Development of a web portfolio and a portable portfolio. Resume writing and cover letter. Presentation techniques. Preliminary presentation of the portfolio and collection of comments. Official presentation of the portfolio to the public.

N.B. Please note that this program description is for illustrative purposes only. It may therefore be modified in whole or in part without notice in order to adapt it to new ministerial prerogatives or the labor market.



#### WEB DESIGN AND PROGRAMMING-LCA.CO

Program leading to an Attestation of College Studies (ACS)

FB-CDI-PQ-DW-0418

	Course Code	Course Title	Hours
COURSES	420-T1M-ID	Image Processing (Photoshop)	45
	420-NCC-ID	Fundamental Principles of Color & Design	45
	420-1L1-ID	Computer Illustration (Illustrator)	60
	420-CW1-ID	Web Design & Development I	45
	420-C1U-ID	User Interface Design	45
	420-T1A-ID	Advanced Image Processing (Photoshop II)	45
	420-C11-ID	Interactive Content I	60
	420-TYP-ID	Typography	45
	420-NMW-ID	Layout Fundamentals for Websites	45
	420-NFP-ID	Fundamentals of Programming	60
	420-PHN-ID	Digital Photography	45
	420-C12-ID	Interactive Content II (Advanced Flash)	60
	420-TAV-ID	Audio and Video Techniques	45
	420-CW2-ID	Web Design & Development II	60
	420-P1N-ID	Integration Project	60
	420-CBD-ID	Database Fundamentals	45
	420-LS1-ID	Script Language I	45
	420-TTD-ID	Data Processing Technologies	45
	420-DWD-ID	Development of a Dynamic Web Site	60
	420-TCS-ID	Server-Side Technologies	45
	420-LS2-ID	Script Language II	60
	420-CMW-ID	Marketing Concepts for the Web	45
	420-P0F-ID	Portfolio Production	90
	<u> </u>	TOTAL PROGRAM HOURS	1200
		TOTAL NUMBER OF UNITS: 42 1/3	

#### **Program Objectives**

The Web Design ACS program aims to train professionals capable of occupying, at entry-level, position such as web designer, web developer (front-end and back-end), web programmer and webmaster. These professionals can work for a variety of companies. For example, they can be hired by private companies, IT consulting firms, and government agencies. They can also work as freelancers.

The Web Design program is comprised of three main components: creativity, technique and programming. The creative component allows students to become familiar with the different conceptual, aesthetic and creative approaches, and allows them to master common graphic design and multimedia tools. The technical component allows students to learn the theory, techniques and languages required to complete various types of websites. Lastly, the programming component allows students to master different programming languages necessary for interactivity between websites (JavaScript, JQuery, PHP, etc.), the creation and management of databases and the processing of data and side—server technology.

Throughout the program students will complete several assignments, exercises, practical projects (including an integration project) and the preparation of a portfolio. Projects are related to labor market conditions and recreate a similar environment to allow students to develop the skills and aptitudes required for the workforce. By the end of the program, graduates will have the skills necessary to be involved in the production chain of a website. They will be able to propose solutions concerning content organization, design, interactivity programming, and business solutions.

#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.



#### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;
- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies:
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### Obtaining the Attestation of College Studies (ACS)

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

#### WEB DESIGN AND PROGRAMMING - LCA.CO

#### 420-T1M-ID Image Processing (Photoshop)

45 hours

Subjects – Introduction to Adobe Photoshop image processing software. Configuration and environment of the software. Drawing tools and text toosl. Selections. Scanning and image capture technologies. Transferring images to a computer Graph creation. Techniques for adjusting brightness and color. Retouching and repairing photos of conventional or raw files. Image manipulation techniques. Techniques for creating composite images. Preparation of images for printing, for the Internet or multimedia. Color modes, pixel depths, and resolution. General methodology. Professional quality projects and presentation techniques.

#### 420-NCC-ID Fundamental Principles of Color & Design

45 hours

Subjects – Fundamental principals and terminology of Design. Design process. Pictorial composition and iconic reading (gestalt). Formal elements and notion of space. Formats, diagonals, lines and points of force, and focal points. Principles of subordination and hierarchy, unity, repetition, scale, similarity, and balance. Theory of color perception. Color composition. Additive and subtractive syntheses. Chromatic scale. Harmony of colors and visual impact. Impact of the media on color. Creativity and the creative individual. How ideas are formed and how these are articulated to form a concept. Training in creativity.

#### 420-1L1-ID Computer Illustration (Illustrator)

60 hours

Subjects – Introduction to the Adobe Illustrator illustration software. The vector image. Configuration and workspace. Creation and backup of documents. Creation and drawing of basic shapes, Beziers curves. Contours and fills. Color palette and transformation palette. Custom brushes. Sample and custom sample library. Gradients. Custom perspective grid and isometric perspective. Transformation of objects such as by rotation, inclination, volume, light, and shadow. Selection and addition of texts, types of characters, formatting of text, creation of columns, and adjustment of the flow of text. Adjusting text around a graph. Mix of objects, shapes, and colors. Clipping mask and opacity creation. Masks of images with shapes. Styles of graphics, filters and special effects. Creations in 3D. Web graphics. Layout and preparation for printing. Exporting for different media.

#### 420-CW1-ID Web Design & Development I

45 hours

Subjects – History of the Internet. General operations of the global network (IP, DNS, domains, servers, http, etc.). Learning languages such as HTML, XHTML, HTML5. Tags and attributes. Basic structure of an HTMLI file. Prioritization of information. Management of text and headlines, creation of hyperlinks, insertion of images, tables, forms as well as audio, video, and multimedia elements. Basics of creating navigation interfaces. Stylize pages of a site using Cascading Style Sheets (CSS). Good practice in coding and referencing. Putting websites online.

# 420-CIU-ID User Interface Design

45 hours

Subjects – Definition of an interface. Adapting the interfaces to their functions. The semantic web. Microdata. Importance of content. Layout grids. Bootstrap. Accessibility, Canadian law, and available tools. Visitors with blindness or motor disorders.



#### 420-T1A-ID Advanced Image Processing (Photoshop II)

45 hours

Subjects – Using a matrix image manipulation software. Fine selection and importing of images from another graphics application. Masks and extractions. Filter and distortion and effect correction with filters. Special effects and special filters. Composite images. Using filters and layers. Palette of specific colors and fit. Use of shapes and styles. Use of textures and color attributes. Opacity mapping techniques. Adjusting hues and saturation. Design of a composite image. Advanced photographic retouching and varied exports.

#### 420-C11-ID Interactive Content I

60 hours

Subjects – Make and manage transitions and animations of images and objects using HTML5 and CSS3. Properties of transitions. Duration and acceleration. JavaScript and triggering. Trigger delay. Shortened notation. Implementation of the transition specification based on browsers and their versions. Perform text and background color transitions, moving text, and sizing elements. Animate textual or graphic menus. Create tooltips. Animation of the CSS properties. Animate SVG. Animation of images. Duration, delays, JavaScript Events, interpolation, acceleration and deceleration, iterations, and transformation of elements. How to use animation libraries. Implementation and material requirements.

420-TYP-ID Typography 45hours

Subjects – History of typography and calligraphy. Evolution of typography. Terminology. Straight lines and different shapes. Units of measurement. Classification of types. Character palette and paragraphs. Kerning. Family of classic and modern characters. Anatomy of typographic characters. Readability and style. Presentation, composition and layout. Effectiveness of the drawing. System grids. Type of design. Define templates in InDesign. Digital environment. Development of a typographic project based on the original idea.

#### 420-NMW-ID Layout Fundamentals for Websites

45 hours

Subjects – Effectiveness for layout of a web page using different layout styles. Frames, tables, and other organizational structures. Different screen sizes and resolutions. Hierarchical organization of a site. Types of website organization such as task-oriented, alphabetical, and chronological. Accessibility of the site. Main features and examples of websites. Erection of an e-commerce site. Shopping baskets, addresses, payment methods, order form, confirmation, and order tracking. Section for messages. Writing search engines. Marketing of the site. Privacy policy. Email and subscription to the site. Security of a site. Prevention of phishing, hoaxes, and spam. Technology and resources needed to support the research sites. Organization of research results. Optimization of the loading time of the images. Display constraints on mobile devices. Display on mobile device screens. Input controls on mobile devices.

# 420-NFP-ID Fundamentals of Programming

60 hours

Subjects – Life cycle of the development of a program. Programming terms. Design and coding. Programming tools. Introduction to Visual Basic, IDE, Controls and Events. Numbers, characters, and data formatting on the screen. Decisional structures. Relational and logical operators. Structures, i.e. "If .. then" and "If .. then .. else". Case structures. Procedures and functions. Modular design. "Do" and "For" loops... "Next". List processing with loops. Tables, sorting, and research. Sequential files. Access to data in a batch file. Selection checks. Basic controls. Tables and objects. Events. Heritage.

# 420-PHN-ID Digital Photography

45 hours

Subjects – Basic principles of photography. Photographic genres. The pictorial composition. Framing. Angles and axes of shooting. Using an SLR (reflex) digital camera in automatic and manual modes in RAW format. Focusing, depth of field, light temperature and white balance, light reading, aperture, overexposure and underexposure, shutter speed, focal length, and ISO factor. Creative modes and presets. Shooting in natural and artificial lighting. Photo of day and night. Photo studio and use of the flash. Work organization, methodology, image processing in RAW format, and creation of a final image. Creation of a photographic presentation.

# 420-C12-ID Interactive Content II (Advanced Flash)

60 hours

Subjects – Create and manage animations using JavaScipt, JQuery and AJAX. Transition and animation of simple elements and components. Transition classes, custom transition classes, and CSS transitions. Simultaneous use of transitions and animations. Duration and explicit duration. JavaScript hooks. Transitions on initial renderings and between elements. Transition modes. List, input and output transitions, displacement, and scaling. Reusable and dynamic transitions. Simple and dynamic state transitions. Organization and prioritization of transitions in components. The mixins. Animation with and without build tools. Using animation libraries.



#### 420-TAV-ID Audio and Video Techniques

45 hours

Subjects – Fundamental notions of audio. Introduction to the sound editing software, Adobe Audition. Creating audio files such as monos and stereos. Perform sound editing. Adjust the amplitude and the balance. Copy/paste sound samples. Creation of multitrack audio montages. Audio capture. Improvement of an audio file. Filters and effects. Backup, compression, and exportation. Basic concept of video editing. Introduction to video editing software, Adobe Premiere. Tools and techniques of assembly. Improved sources. Color correction. Transitions, filters, audio and video effects. Exporting and importing audio tracks. Backup, compression and export. Introduction to animation software and special effects video, Adobe After Effects. Animation, color adjustments, deformations and transformation, extraction, use of the green screen, compositing, use of cameras and lighting in a 3D environment. Related uses of the three software. Exporting multimedia elements for use in interactive production.

#### 420-CW2-ID Web Design & Development II

60 hours

Subjects – Revision of HTML5 and CSS3. Declination of a website according to the screen format and devices used. Breaking points. Media-queries. The mobile approach. Good practices in web design for mobile devices. Responsive design. Using flex containers and managing their items. Flex grids. Using containers and flex grids in the production of a responsive website.

## 420-P1N-ID Integration Project

60 hours

Subjects – Identifying the needs of a personal website. Plan and structure of the site. Planning, design, and development of a personal website. Identifying the needs of a corporate website. Plan and structure of the site. Planning, design, and development of a corporate website. Identifying the needs of an e-commerce website. Plan and structure of the site. Planning, designing, and development of an e-commerce website.

#### 420-CBD-ID Database Fundamentals

45 hours

Subjects – Notions of database systems. Relational databases. Introduction to SQL. Database design. Normal form. Objects in SQL. Reserved words and data types. Scalar functions and operators. Creation and modification of objects. Referential constraints and integrity. Queries. Statements, such as "Select" and "Where". Under requests and operators. "Group by" statement. Aggregated functions and other common functions in SQL. Joint operators. Changing the contents of a table. Inserting rows. Updated, deletion and modifications. Grouped indexes and ungrouped indexes. Correspondence between indices and transaction statements. "Like" operator. Query optimization. DDL views and statements. Creations of indexed views. Trigger. "After" and "Instead of" functions. Logging transactions. Locks and data lock settings. Select statements with locks. Authentication of a user. Security and user accounts. Privileges and permissions.

### 420-LS1-ID Script Language I

45 hours

Subjects – The role of the developer. Execution of programs and types of languages. Programming logic and algorithms. JavaScript and its programming structure. Comments. Events, functions, values, and types. Creation, storage and uses of string and numeric variables. Conditions, comparison operators, and logical operators. The "if", "else", "else if", "switch" and "ternary" structures. Creation and use of the "while", "do while" and "for loops". Creation and use of functions and methods. Creation and use of objects and tables. Uncover script. Analysis of typical cases and group programming workshops.

### **420-TTD-ID Data Processing Technologies**

45 hours

Subjects – Syntax history and use of XML. XML transfer and export from a database. XML management using CSS, XLS and XHTML. History and JSON syntax. Revision of JavaScript objects. Introduction to the most used APIs.

### 420-DWD-ID Development of a Dynamic Web Site

60 hours

Subjects – Identifying the needs of the website to be created. Planning the structure and layout of its pages. Preparation, design, and development of a site. Iterative process. Finalization of the website and submission of the project. Presentation of the final product.

### 420-TCS-ID Server-Side Technologies

45 hours

Subjects – Introduction to the Client - Server script. Installation and configuration of Apache, MySQL and PHP. Structure and syntax of PHP. Learning about PHP, such as constants and variables, passing variables (URLs, forms, sessions and cookies). Decision/Repetition control structures. Tables, searching, and sorting. PHP alternative syntax. MySQL structure and syntax. PHP and MySQL and how they work together. Connection to the MySQL server. Queries in the databases. Creating tables and using tables for displaying data. Forms and input elements. Processing of data from forms. Inserting, deleting, and editing a record in a database.



GD Library. File types supported by PHP. GD in PHP. Loading images. Converting image file types. Validation of the data of the user. Verification of format errors in a PHP script. Key relational databases and standardization. Creation of a database with MySQL. PHP for email. PHP Sessions and Cookie Functions. Cookies in PHP. Rules for CMS. Using a database to manage a CMS. Coding of a CMS. Transaction pages. User interface, functionality, and management. E-commerce and shopping baskets. Features of an e-commerce site. Preparing databases for a bulletin board system. Coding of a bulletin board system. Administration of a forum including the accounts and the management of the users as well as the files Log and utility. User Authentication. Interpretation and analysis of a website's data. Debugging the PHP code.

### 420-LS2-ID Script Language II

60 hours

Subjects – Learning about AJAX, such as recovery and processing of text and XML. Learning about JQuery, such as general concepts, syntax, objects, properties and methods, interaction with HTML and CSS, JQuery/DOM conversion, DOM modification using JQuery, effects, associate data with elements, and events. Selectors and filters. Manipulation of attributes. Selectors and advanced filters. Browse the DOM with JQuery. Chaining methods. Event management. The forms. JQuery animation. Additional use of AJAX and JQuery.

## 420-CMW-ID Marketing Concepts for the Web

45 hours

Subjects – Marketing principles and strategies. Marketing and the Web. Electronic marketing and strategies. Electronic marketing planning process. Creation of an electronic marketing plan. Challenges of the globalization of electronic marketing. Electronic payment and security issues. Technological needs and preparation. Telecommunication costs. Challenges of using wireless. Code and ethics. Copyright, trademark, patent, license and privacy policies. Governance online. Fraud. Sources of marketing information. Social media. Client and server-side data collection. Databases in marketing and database warehouse. Consumer characteristics online. Social context for the exchange on the Internet. Three main sectors of the market (business, consumers and governments). Major market segments. B2B (inter-company) and B2C (retail) markets. Integrated marketing communication. Internet advertising, i.e. knowing trends and formats. Product strategies for online oarketing. Point of view of the buyer and the seller. Payment methods. Distribution channels. Intermediate channels. Consumers online. Differentiation strategies. Positioning strategies. Offer of products online. Creating a value for the consumer. Promotions. Marketing communication media. Digital media. Search engine. Communities online. Social networks. Effective Internet shopping. Relationship Marketing. Branding in electronic media. Realization of an advertising project.

### 420-P01-ID Portfolio Production

90 hours

Subjects – Characteristics of a professional portfolio. Ranking elements of a portfolio. Format and expected level. Labeling elements of a portfolio. Preparation of a portfolio. Assessment of the strengths, weaknesses, and quality of the portfolio. Maintenance of a portfolio. Copyright laws and ethics. Legal implications of using unauthorized documents. What to protect and how to protect your work. Transportation considerations or electronic shipping. Personal promotion resources. Identification of clients and potential employers. Identification of employment counselors, professional publications, professional organizations, trade shows, and seminars. Interview simulations and final presentation of the portfolio.



### **NETWORK AND INTERNET SECURITY SPECIALIST – LEA.AE**

Program leading to an Attestation of College Studies (ACS)

FT-CDI-PQ-GRSS-0418

	Course Code	Course Title	Hours
INTRODUCTION PHASE	420-1NC-ID	Introduction to Computers	45
	420-PBS-ID	Business Skills for Systems Professionals	60
PHASE 1:	420-AP3-ID	Managing and Maintaining PCs (A+)	90
COMPONENTS AND	420-GDR-ID	Network Management	75
PHYSICAL RESOURCES	420-NP1-ID	Phase 1 – Integration Project	15
PHASE 2:	420-XPR-ID	Configuration of a Network Workstation Computer	75
OPERATING SYSTEMS	420-AS1-ID	Administration and Maintenance of a System	75
	420-WDS-ID	Designing Network Security	60
	420-LUX-ID	Advanced Operating System	75
	420-NP2-ID	Phase 2 – Integration Project	15
PHASE 3:	420-1T1-ID	Introduction to Internetworking	60
INTERCONNECTIVITY	420-CN1-ID	Interconnecting Network Devices	75
TECHNOLOGIES	420-WPN-ID	Planning a Network Infrastructure	75
	420-W1D-ID	Planning Directory Services	75
	420-NP3-ID	Phase 3 – Integration Project	15
PHASE 4:	420-SS1-ID	Security+	75
NETWORK AND	420-W1S-ID	Implementing Network Security	75
INTERNET SECURITY	420-W1N-ID	Implementing a Network Infrastructure	75
	420-EXC-ID	Implementing and Administering an Internet System	75
	420-NP4-ID	Phase 4 – Integration Project	15
		TOTAL COURSE HOURS	1200
WORKPLACE	420-1MT-ID	Internship	195
		TOTAL PROGRAM HOURS	1395
		TOTAL NUMBER OF UNITS : 49 2/3	

### **Program Objectives**

The Network and Internet Security Specialist ACS program trains students for a career in network design, implementation, management, network security or technical support. A Computer Network Administrator can intervene at any stage of network creation. The versatility of the Computer Network Administrator is an important element when facing problems that are often different and that must be resolved quickly. This sense of urgency requires availability on the part of the administrator and the ability to work well under stress.

The Computer Network Administrator can work in large companies that have their own IT department or as a consultant in small to medium-sized businesses. In a small business, he is, most of the time, the sole person responsible for the proper functioning of the computer network. Ultimately, this training will allow the graduate to manage the computer park within a company. The CDI College Network and Internet Security Specialist program was created to meet the needs of the job market and prepare students for internationally recognized certifications.

#### **Teaching Method**

This program is offered as an individualized teaching program; meaning that the teaching method is based on the student's individual progress. The student conducts his learning independently through readings, learning guides, video capsules, work, practical exercises and/or other material adapted to this type of teaching. The student must present himself in class on a daily basis according to a pre-established schedule. Individualized teaching allocates maximum time for each course, but nothing prevents a student from progressing at a quicker pace.

Qualified teachers are present to support the student throughout his training. The teacher coaches each student individually, answers questions, explains the subjects and supervises the student's progress. This method allows each student to focus on



subjects with which he has difficulty with or wishes to gain more knowledge of. This formula is intended for students who prefer to learn independently and at their own pace, who understand faster than others, or who do not like to study in a traditional lecture format.

#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.

### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;
- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### Obtaining the Attestation of College Studies (ACS)

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

#### **NETWORK AND INTERNET SECURITY SPECIALIST – LEA.AE**

#### **420-1NC-ID Introduction to Computers**

45 hours

Subjects – This course covers the main hardware and software components of a computer. File management, personalization of a workstation, document creation and Internet use for communication and research. Identification of the components of a computer. Using the Windows operating system. Creating Microsoft Word™, Microsoft Excel™, and Microsoft PowerPoint™ documents. Research on the Internet. Using an email. Sending and receiving files over the Internet.

### 420-PBS-ID Business Skills for Systems Professionals

60 hours

Subjects – Personal management skills development, i.e. time management, stress management, and project management. Communication skills, such as meetings, teamwork, conflict resolution, and presentations.

### 420-AP3-ID Managing and Maintaining PCs (A+)

90 hours

Subjects – Understanding the operations of a microcomputer. Identification and description of the different components of a computer. Software and hardware issues. Analysis, configuration, update and troubleshooting of Windows PCs. Industrial Standard A+ for IT Support Technicians.

## 420-GDR-ID Network Management

75 hours

Subjects – Understanding network types, standards and protocols. Identification and description of network hardware, cabling and topologies. Planning and implementation of local area networks and wide area networks. The OSI reference model and the layers that compose it. The TCP/IP architecture. Upgrade, maintain, and debug a network. Wireless networks. Understanding of computer security. Network virtualization. Cloud Computing.

### 420-NP1-ID Phase 1 - Integration Project

15 nours

Subjects – Integration of the concepts seen in phase 1. Installation and configuration of a computer, a network and software. Solving software, hardware and network problems.

### 420-XPR-ID Configuration of a Network Workstation Computer

75 hours

Subjects – Windows installation and configuration. Administration and management of users and the system. Networking and interconnection with other systems. System optimization and problem-solving.

### 420-AS1-ID Administration and Maintenance of a System

75 hours

Subjects – Optimal installation of Windows Server on a workstation. Presentation of Hyper-V virtualization. Virtual machine creation. Introduction to PowerShell language. Installation and configuration of the servers. Configuring Roles and Features (DHCP, DNS, File Server). Active Directory Installation and Administration. Creating and managing group policies. Server



monitoring. Hard disk management.

### 420-WDS-ID Designing Network Security

60 hours

Subjects – Active Directory Domain Service (AD DS) overview. Domain controller in read only. Automated account management. Implementation of a security policy (PSO, service account). Group policies (preferences, folder redirection, software deployment). DHCP, IPAM functionality. Configure DNS. Deployment and support of Windows Deployment Services (WDS). Configure remote access. Implement Network Access Protection (NAP). Audit and encryption of data. WSUS server.

### 420-LUX-ID Advanced Operating System

75 hours

Subjects – Installation, administration and support of a Linux operating system. Available documentation. Tree, directories, and file location. Handling and editing files. Administration of user accounts, groups, and access permissions. Introduction to the development of Bash script. Shell environment and physical environment. Installation, management, and compilation of applications. Linux system configuration with backup and archiving of data. Using the Linux system tools.

### 420-NP2-ID Phase 2 - Integration Project

15 hours

Subjects – Integration of concepts seen in phase 2. Comparison of different operating systems. Installation and configuration of a Windows/Windows Server environment. Creating a multiple boot environment. Management and problem-solving with Windows, Windows Server and Linux.

#### 420-1T1-ID Introduction to Internetworking

60 hours

Subjects - Description of the TCP/IP and OSI models. Introduction to IOS (operating system for network connection). Modes of access to equipment. Methods of configuration. Using the CLI (Command Line Interface: Basic Commands). Physical layer and data link (Ethernet, ARP, copper and optical media). IPV4 and IPV6 protocols. Different routers. IPV4 addressing, subnets, protocols, and routing table. Transport layer functions. Application layer protocols (HTTP, WWW, FTP, TFTP, SMTP, POP, and IMAP). Telnet.

### **420-CN1-ID Interconnecting Network Devices**

75 hours

Subjects – Designing of a local network. Configuration and security of a switch. Implementation and security of VLANs. Aggregation (Trunk). Configuring the basic settings of a router. Static routing. Basic configuration issues. Inter-VLAN router. Dynamic routing protocols. OSPF protocol. Establishment of access control lists. DHCP configuration. Address and port translation with NAT and PAT.

#### 420-WPN-ID Planning a Network Infrastructure

75 hours

Subjects – Windows server in core mode (command line). Configuration tool called 'sconfig'. Role of an Active Directory in an enterprise. Advanced DNS (DNSSEC), DHCP, and IPAM services. Types of files managed by Windows. ISCSI and NFS storage. BranchCache configuration and deployment for file access. Resources for Dynamic Access Control. Deployment and management of an AD infrastructure. Approval relationships between domains. Role Sites and AD Services. AD replication. AD CS Certificate Services. AD RMS Rights Management. AD FS Federation Services.

### **420-W1D-ID Planning Directory Services**

75 hours

Subjects – Introduction to PowerShell scripting language. Windows administration tasks with PowerShell. Cmdlets under PowerShell. Windows registry databases (HKCU and HKLM). Certificate management. Administration of a Windows client computer. Collection of information on systems. File search. Gathering information through WMI classes. Management of software, installations, executions, and updates. Management of devices and remote stations. Cmdlets for remote communication of the .NET Framework. Remote management and administration. Scripts. Introduction to Windows PowerShell ISE.

### 420-NP3-ID Phase 3 - Integration Project

15 hours

Subjects – Integration of the concepts seen in phase 3. Planning and design of a TCP/IP network. Implementation of a Windows Server network and an Active Directory infrastructure.

## 420-SS1-ID Security +

75 hours

Subjects – Recognition of security threats and their consequences. Identification of the origin of the security threats and main areas of vulnerability. Detection and neutralization of security threats to systems and networks. Implementation of procedures, practices, utilities, and security devices. Presentation of recovery methods after a system failure.

# 420-W1S-ID Implementing Network Security

75 hours

Subjects – General architecture of a virtualization system. Basic concepts of Hyper-V. Hyper-V virtualization architecture. Storage, network architecture, and server sizing. Configuration, installation, and administration of a virtualization platform. System Center Virtual Machine Manager (SCVMM). Migration of virtual machines with SCVMM. Backing up and restoring Hyper-V virtual machines.

#### 420-W1N-ID Implementing a Network Infrastructure

75 hours

Subjects – Presentation of a corporate email system. Install and configure the Microsoft Exchange Server™. Integration of Active Directory and use of DNS with Exchange. Preparing the front directory for installing Exchange. Consoles on Exchange Server.



License Management. Mailbox Services. Administration of databases via the *CAE* (Exchange Administration Center) and via the Management shell. Outlook Anywhere and Outlook Web App. Exchange ActiveSync. Operation of transport services. Edge Transport role. Administer user and resource mailboxes. Distribution group management. Manage address lists and offline address books. Securing and maintaining the email infrastructure.

### 420-EXC-ID Implementing and Administering an Internet System

75 hours

Subjects – SharePoint technologies (history, deployment models, related products, and news). Deployment planning, necessary components, and prerequisites. Server farm topology and migration from an earlier version. SharePoint installation. Security accounts. Command line tools. Central Administration Console. Service applications. Process of creating a Web application and their permissions. Site collections and solution deployment. Creating a web application using a script. Monitoring tools and optimization settings. Resources for troubleshooting.

### 420-NP4-ID Phase 4 - Integration Project

15 hours

Subjects – Integration of the concepts seen in phase 4. Design of a secure network according to a specific scenario. Installing and configuring a network using Windows Server, SharePoint, and a Windows client. Implementation of security in a network and network verification.

420-1MT-ID Internship 195 hours

Subjects – Application of the technical elements seen during the training. Application of the knowledge, know-how and skills developed during training to the workforce. This can take the form of an internship in a company.



## PROGRAMMER ANALYST / INTERNET SOLUTIONS DEVELOPER - LEA.9C

Program leading to an Attestation of College Studies (ACS)

FT-CDI-PQ-PAOI-0418

	Course Code	Course Title	Hours
INTRODUCTORY	420-1NC-ID	Introduction to Computers	45
PHASE	420-PBS-ID	Business Skills for Systems Professionals	60
PHASE 1:	420-SD1-ID	Systems Analysis and Design: Level 1	75
PROGRAMMING	420-PLD-ID	Programming Logic and Design	60
FUNDAMENTALS	420-PRF-ID	Programming Fundamentals	45
	420-PRT-ID	Programming Techniques	90
PHASE 2:	420-SD2-ID	Systems Analysis and Design: Level 2	75
DATABASES	420-DBC-ID	Database Concepts	45
	420-SQA-ID	Database Architecture	60
	420-SQD-ID	Database Design for SQL Server	75
	420-PR1-ID	Processing Information	60
	420-P12-ID	Phase 1 & 2 Integration Project	60
PHASE 3:	420-SD3-ID	Systems Analysis and Design: Level 3	45
DISTRIBUTED	420-DWA-ID	Developing Web Applications	75
PROGRAMMING	420-001-ID	Internet Programming	75
PHASE 4:	420-00J-ID	Object-Oriented Concepts	60
OBJECT-ORIENTED	420-0PJ-ID	Object-Oriented Programming	75
	420-A0J-ID	Advanced Object-Oriented Programming	75
PROGRAMMING	420-P34-ID	Phase 3 & 4 Integration Project	60
		TOTAL COURSE HOURS	1215
WORKPLACE	420-1AT-ID	Internship	195
		TOTAL PROGRAM HOURS	1410
		TOTAL NUMBER OF UNITS: 49 2/3	

#### **Program Objectives**

The Programmer Analyst/Internet Solutions Developer ACS program trains people who strive for a career in software application development and updating. Programmer Analysts develop applications in diverse environments such as on the Web and databases, and will master the techniques related to structured programming, as well as those related to object-oriented programming. More specifically, they will be responsible for functional analysis, programming, installation, testing, and maintenance of various computer applications. To accomplish these tasks, students will use the skills they've acquired in analysis and programming, including distributed programming, object-oriented programming, Internet programming and database programming. More specifically, it allows students to develop their ability to analyze the needs of users in order to design and implement the required information systems.

The Programmer Analyst can work in companies that have their own IT department, produce software, or offer various IT services. Tasks can include analysis and design, construction and testing, as well as the implementation and integration into targeted computing environments. In addition, the Programmer Analyst maintains existing software with the occasional addition of functional enhancements. He also plays the role of resource person for different users.

The main technologies taught throughout this program are Microsoft Visual C #, .NET, UML, Microsoft Project™, Microsoft Access™, Microsoft Office™, Microsoft Visio™, SQL Server, HTML, CSS, and PHP. During the final phase of the program, students complete their training by studying the programming language, Java. The training ends with an introduction to programming for Android mobile devices.



#### **Teaching Method**

This program is offered as an individualized teaching program; meaning that the teaching method is based on the student's individual progress. The student conducts his learning independently through readings, learning guides, video capsules, work, practical exercises and/or other material adapted to this type of teaching. The student must present himself in class on a daily basis according to a pre-established schedule. Individualized teaching allocates maximum time for each course, but nothing prevents a student from progressing at a quicker pace.

Qualified teachers are present to support the student throughout his training. The teacher coaches each student individually, answers questions, explains the subjects and supervises the student's progress. This method allows each student to focus on subjects with which he has difficulty with or wishes to gain more knowledge of. This formula is intended for students who prefer to learn independently and at their own pace, who understand faster than others, or who do not like to study in a traditional lecture format.

#### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.

#### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;
- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

#### Obtaining the Attestation of College Studies (ACS)

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

### PROGRAMMER ANALYST / INTERNET SOLUTIONS DEVELOPER - LEA.9C

### 420-1NC-ID Introduction to Computers

45 hours

Subjects – This course covers the main hardware and software components of a computer. File management, desktop customization, document creation using Microsoft Office™ suite (Word, Excel, PowerPoint, Visio and Project) and Internet use for communication and research are also studied.

### 420-PBS-ID Business Skills for Systems Professionals

60 hours

Subjects – Learning Personal Management Skills Development, such as time management, stress management, and project management. Customer service concepts (interpersonal relations, technical support, etc.). Communication skills (meetings, team work, conflict resolution, presentations, etc.).

## 420-SD1-ID Systems Analysis and Design: Level 1

75hours

Subjects – Introduction to the system development cycle. System analysis and design using the classical approach. Production of planning documents. Using tools to estimate project timelines (PERT and GANTT diagram). Design of algorithms using basic structures such as sequence, selection, and iteration. Development of simple applications. Introduction to Microsoft Visual Studio Development Software for Integrated Development Environment (IDE).

### 420-PLD-ID Programming Logic and Design

60 hours

Subjects – Creation of algorithms in order to use tables. Representation of logic by using pseudocodes and flow charts. Translation of algorithms into a programming language. Using the Visual C# language for problem-solving. Using the Microsoft



Visual Studio Code Debugging Tools.

#### **420-PRF-ID Programming Fundamentals**

45 hours

Subjects – Study of modular programming. Reusing the code. Use of the Visual C# .NET programming language. Translation of algorithms into a programming language. Use of error handling routines. Using various data structures.

#### **420-PRT-ID Programming Techniques**

90 hours

Subjects – Study of object-oriented programming. Classes and interfaces. Possibilities of an object-oriented programming language. Class management using inheritance, encapsulation, and polymorphism. User-friendly graphical interface design. Using the .NET framework. Use of various data structures. C # .NET Event management. Data management by using files.

### 420-SD2-ID Systems Analysis and Design: Level 2

75 hours

Subjects – Design, modeling and standardization of relational, object-oriented, and distributed databases. User-friendly graphical interface design.

## **420-DBC-ID Database Concepts**

45 hours

Subjects – Application of key concepts of a Database Management System (DBMS). Using Microsoft Access™ to create a database. Create queries, forms, and reports. Using interfaces for managing input and output data.

#### 420-SQA-ID Database Architecture

60 hours

Subjects – Design of a data model. Design and modification of a database with SQL Server and error correction. Creating scripts for data extraction and modification using Transact-SQL and XML. Transact-SQL language.

### 420-SQD-ID Database Design for SQL Server

75 hours

Subjects – Data management and use of triggers and stored procedures. Optimizing data access with indexes and joints. Designing a security plan for a database.

#### **420-PR1-ID Processing Information**

60 hours

Subjects – Using ADO.NET to connect to a database. Creating client-server applications with SQL Server and Visual C# .NET. Design and creation of multi-level solutions.

### 420-P12-ID Phase 1 & 2 Integration Project

60 hours

Subjects – Integration of concepts seen in phases 1 and 2 of the program. Application of the full development cycle of an application such as design, coding, debugging, and testing with Visual C#. Creating a client-server application with Visual C# as a client interface and Microsoft SQL Server as a data source.

### 420-SD3-ID Systems Analysis and Design: Level 3

45 hours

Subjects – Systems analysis and modeling using Unified Modeling Language (UML) diagrams. Class design using inheritance, encapsulation, and polymorphism. Studying the concepts of an object-oriented application.

### **420-DWA-ID Developing Web Applications**

75 hours

Subjects – Creation of Web applications using HTML, CSS and JavaScript. Using scripts to validate data integrity.

#### 420-001-ID Internet Programming

75 hours

Subjects – Creation of Web applications with the PHP scripting language that will connect and allow the manipulation of the data contained in a database. Managing the security of a Web application.

### 420-00J-ID Object-Oriented Concepts

60 hours

Subjects – Object-oriented programming concepts. Managing objects, classes, and attributes. Creating an application using an object-oriented programming language (Java).

### 420-0PJ-ID Object-Oriented Programming

75 hours

Subjects – Development of interfaces using object-oriented programming techniques. Class management using inheritance, encapsulation, and polymorphism. Creation and use of different advanced data structures.

## 420-A0J-ID Advanced Object-Oriented Programming

75 hours

Subjects – Introduction to mobile device application development using an object-oriented programming language (Java for Android).



## 420-P34-ID Phase 3 & 4 Integration Project

60 hours

Subjects – Integration of the concepts seen in phases 3 and 4 of the program. Design and development of applications in a graphical and hypermedia setting. Add functional enhancements to an application. Development of an interactive website. Developing an application for mobile devices.

420-1AT-ID Internship 195 hours

Subjects – Application of the technical elements seen during the training. Application of the knowledge, know-how and skills developed during training. This course must take the form of an internship in a professional environment.



### ASSISTANCE IN HEALTH CARE FACILITIES - 5816

Program leading to a Diploma of Vocational Studies (DVS)

FH-CDI-PQ-APES-0418

	Course Code	Course Title	Hours
COURSES	251472	The Occupation and Training Process	30
	251483	Client Needs	45
	251492	Infections and Contamination	30
	251502	Workplace Ethics	30
	251522	The Helping Relationship	30
	251532	Team Interaction	30
	251543	Physical Illnesses and Disabilities	45
	251554	Mental Health Approaches	60
	251568	Basic Care Procedures	120
	251572	First Aid	30
	251581	Palliative Care	15
	251591	Job Search Techniques	15
	251602	Care Unit Procedures	30
WORKPLACE	251617	Long-Term Basic Care and Services	105
	251624	Basic Mental Health Care and Services	60
	251635	Short-Term Basic Care and Services	75
		TOTAL PROGRAM HOURS	750
		TOTAL NUMBER OF UNITS: 50	

### **Program Objectives**

The Assistance in Health Care Facilities DVS program prepares graduates to practice as a beneficiary attendant in various private and public healthcare institutions. It offers a comprehensive and in-depth training so that graduates can distinguish themselves in the job market. More specifically, the program allows students to acquire not only technical skills in assisting patients, but also attitudes and skills related to the profession. Hands-on training, laboratory sessions, and internships in the workplace expose students to the reality of the job market.

### **Prerequisite**

Obtain a passing score on the entrance examination.

### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for Diploma of Vocational Studies (DVS), the applicant must meet one of the following conditions:
- 1) The person holds a Secondary School Diploma or recognized equivalent;
- 2) The person was at least 16 years old on September 30th of the school year in which they begin their training, and has obtained Secondary III-level credits in the language of instruction, second language, and mathematics in programs established by the Minister, or apprenticeships recognized as equivalent;
- 3) The person was at least 18 years old when they started their training and has passed the General Development Test (GDT) as well as the FRA3034-1 language courses or an equivalent recognized apprenticeship.
- N.B. The condition regarding concomitance is not applicable to this category.

#### The duration of this program is 750 hours:

Of these 750 hours, 510 are devoted to acquiring competencies directly related to the mastery of job tasks, and 240 hours are devoted to the acquisition of general competencies related to the work or professional activities. The curriculum is divided into



16 modules ranging in duration from 15 to 120 hours. These hours include time spent teaching, assessing learning, enrichment, and remedial instruction.

### **Obtaining the Diploma of Vocational Studies (DVS)**

In order to obtain the diploma, the student must have a passing grade in each module.

#### **ASSISTANCE IN HEALTH CARE FACILITIES – 5816**

#### 251-472 The Occupation and Training Process

30 hours

Subjects – Information regarding the job. Information on the training project. Assessment of the professional career choice.

251-483 Client Needs 45 hours

Subjects – Awareness of the various stages of child development. Characteristics of the teenager and the young adult. Familiarization with different aspects of adult life. Familiarization with the process of normal aging. Recognizing the whole person when administering care. Recognizing the potential of a person.

#### 251-492 Infections and contamination

30 hours

Subjects – Recognition of the means put forward in public health. Mode of transmission of micro-organisms. Common communicable diseases. Infection prevention measures. Recognize ways to prevent contamination. Recognize the body's defense mechanisms.

251-502 Workplace Ethics 30 hours

Subjects – Knowledge of the laws affecting the practice of the profession. Knowledge of the requirements of the profession in terms of professional behavior. Assessment of attitudes towards professional behavior.

### 251-522 The Helping Relationship

30 hours

Subjects – Awareness of various aspects of verbal and non-verbal communication (role-play). Familiarization with the principles and basic techniques of communication. Familiarization with the special approach techniques for different types of beneficiaries.

251-532 Team Interaction 30 hours

Subjects – Implementation of communication principles and techniques in the workplace. Recognition of factors influencing teamwork. The consensus problem-solving approach.

### 251-543 Physical Illnesses and Disabilities

45 hours

Subjects – Recognition of observations made and precautions to be taken in the presence of the following types of diseases: diseases of the musculoskeletal system, the nervous system, the cardiorespiratory system, the urinary and reproductive system, the digestive system, and the immune system. Recognition of observations to be made and precautions to be taken in relation to alterations of the sensory system.

#### 251-554 Mental Health Approaches

60 hours

Subjects – Adopt relational approaches for people with mental health problems, cognitive deficits, or intellectual disabilities.

# 251-568 Basic Care Procedures

120 hours

Subjects – Use of hygiene and asepsis procedures: washing hands, wearing gloves, gowns, masks. Execution of the techniques relating to the bed. Execution of the techniques related to the activities of daily life of the person, such as personal hygiene, food, elimination, clothing, hydration, and mobilization. Principles of safe movement of beneficiaries (PDSB).

251-572 First Aid 30 hours

Subjects – General intervention procedure in an emergency situation. Application of first aid procedures in cases of changes in consciousness, bleeding, allergic reaction, medical problems, fractures, and wounds. Cardiopulmonary resuscitation procedure. Defibrillation.



251-581 Palliative Care 15 hours

Subjects – Considering the needs of the person at the end of their life and of those close to them – i.e. stages of mourning. Consideration of his attitudes towards palliative care. Establishing a relationship of trust with the person at the end of their life.

### 251-591 Job Search Techniques

15 hours

Subjects - Introduction to job search techniques. Writing a resume. The job interview. Simulation of job interviews.

#### 251-602 Care Unit Procedures

30 hours

Subjects – Pre-operative and post-operative care, post-mortem care, documentation in the workplace.

## **251-617 Long-Term Basic Care and Services**

105 hours

Subjects – Introduction to working with a semi-autonomous elderly person who has had a significant loss of autonomy. Progressive integration into the care team.

#### 251-624 Basic Mental Health Care and Services

60 hours

Subjects – Participation in interventions by the care team.

#### 251-635 Short-Term Basic Care and Services

75 hours

Subjects – Patient assistance in medical treatments. Preoperative or postoperative patient assistance. Surveillance rounds. Patient assistance for elimination care, feeding, and mobilization care. Reception, transfer, and leave of the beneficiary.



	Course Code	Course Title	Hours
COURSES	754-412	Determine their Suitability for the Occupation and the Training Process	30
	754-424	Apply Concepts of Oral Anatomy	60
	754-424	Apply Concepts of Oral Affatolity  Apply Concepts Related to Lesions and Oral Diseases	45
	754-443	Apply Principles and Procedures of Hygiene et Asepsis	45
	754-452	Apply Concepts of Pharmacology	30
	754-464	Apply Concepts Related to Oral Treatments	60
	754-475	Apply Concepts Related to Dental Materials	75
	754-482	Take Occupational Health and Safety Precautions	30
	754-492	Apply First-Aid Techniques	30
	754-503	Communicate in the Workplace and Work in a Team	45
	754-511	Apply the Rules of Professional Ethics	15
	754-527	Prepare Materials Required for Various Dental Treatments	105
	754-538	Apply Techniques of Chair-side Assistance in Operative Dentistry	120
	754-545	Perform Administrative Tasks	75
	754-558	Perform Tasks Related to Prevention and Treatment Planning	120
	754-561	Plan a Job Search	15
	754-578	Apply Dental Laboratory Techniques	120
	754-588	Apply Techniques of Chair-side Assistance in Specialized Dentistry	120
WORKPLACE	754-598	Assist in Operative Dentistry, Orthodontics and Pedodontics	120
	754-606	Assist in Dental Surgery and Prosthodontics	90
	754-614	Assist in Endodontics and Periodontics	60
	754-626	Perform all Dental Assistance Tasks Required in a Dental Office	90
		TOTAL PROGRAM HOURS	1500
		TOTAL NUMBER OF UNITS: 100	

### **Program Objectives**

The Dental Assistance DVS program prepares students to practice as a dental assistant in private or public establishments of the health network. It offers an intensive training that allows graduates to enter the job market quickly. The student acquires knowledge that is both theoretical and practical. Much of the learning is done in laboratories to promote successful integration into the job market.

### **Prerequisite**

Obtain a passing score on the entrance examination.

## Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for Diploma of Vocational Studies (DVS), the applicant must meet one of the following conditions:
- 1) Secondary School Diploma or recognized equivalent;
- 2) The person is at least 16 years of age and has obtained Secondary IV credits in the language of instruction, second language and in mathematics, or has a recognized equivalent;
- 3) Be at least 18 years of age and possess the prerequisites prescribed by section 465 of the Education Act;
- 4) The person has obtained Secondary III units in the language of instruction, second language and mathematics in programs established by the Minister and will continue his general education concurrently with his/her professional training in order to obtain Secondary IV units that he lacks (i.e. the language of instruction, second language, and mathematics).



### The duration of this program of study is 1500 hours:

Of this total number of hours, 1140 are devoted to acquiring competencies directly related to the mastery of various job tasks, and 360 hours are devoted to the acquisition of general competencies related to work or professional activities. The curriculum is divided into 22 modules ranging in duration from 30 to 120 hours. This includes time spent teaching, assessing learning, enrichment, and remedial instruction.

### Obtaining the Diploma of Vocational Studies (DVS)

In order to obtain the diploma, the student must have a passing grade in each module.

#### **DENTAL ASSISTANCE - 5644**

## 754-412 Determine their Suitability for the Occupation and the Training Process

30 hours

Subjects – Knowledge of the dental assistant profession reality and the training program. Confirmation of the professional orientation choice.

#### 754-424 Apply Concepts of Oral Anatomy

60 hours

Subjects – Identification of the bones and muscles of oral anatomy and their respective functions. Knowledge of the process of tooth development. Classification and morphology of the teeth.

### 754-433 Apply Concepts Related to Lesions and Oral Diseases

45 hours

Subjects – Explanation of the cavity process in teeth. Identification of the main lesions of the dental pulp, oral mucosa and periodontitis. Understanding morphological changes in the digestive system and their causes. Association of the main oral problems with diseases of the body's systems.

### 754-443 Apply Principles and Procedures of Hygiene et Asepsis

45 hours

Subjects – Definition of the terminology. Identifying the links between main contagious diseases and micro-organisms. Identification of the personal and professional hygiene measures to be used in a dental office. Identification of control methods against contamination of equipment and materials. Methods of cleaning, disinfection, and sterilization. Knowledge of the regulations concerning biomedical waste.

### 754-452 Apply Concepts of Pharmacology

30 hours

Subjects – Definition of the terminology and interpretation of abbreviations. Knowledge of the main drugs used in dental care and their effects. Local anesthesia methods.

#### **754-464 Apply Concepts Related to Oral Treatments**

60 hours

Subjects – Identification of the main treatments in operative dentistry, surgery, pedodontics, endodontics, periodontics, and orthodontics.

### 754-475 Apply Concepts Related to Dental Materials

75 hours

Subjects – Knowledge of different dental materials. Identification of the properties and uses of different dental materials and products.

### 754-482 Take Occupational Health and Safety Precautions

30 hours

Subjects – The bill respecting health and safety at work and the role of CNESST. Definition of specific terminology. Explaining the importance of prevention in a dentist's office.

### 754-492 Apply First-Aid Techniques

30 hours

Subjects – Administering first aid in a dental office. Observing and taking respiratory rhythms. Revision of anatomy, cardiac, and respiratory systems.

#### 754-503 Communicate in the Workplace and Work in a Team

45 hours

Subjects – Knowledge of basic communication principles, telephone communication techniques, and concepts of customer service. Knowledge of the principles of teamwork and communication within a team.



#### 754-511 Apply the Rules of Professional Ethics

15 hours

Subjects – Knowledge of the laws governing the practice of dentistry. Familiarization with the professional behaviors required in the work of a dental assistant.

#### 754-527 Prepare Materials Required for Various Dental Treatments

105 hours

Subjects – Preparation of the materials needed to perform various dental treatments. Preparation of the necessary equipment to carry out treatments in dental surgery, orthodontics, pedodontics, surgery, prosthodontics, endodontics, and periodontics.

### 754-538 Apply Techniques of Chair-side Assistance in Operative Dentistry

120 hours

Subjects – Preparation of the treatment room and equipment needed. Application of assistance techniques related to different treatments. Maintenance of the materials and the equipment needed in the treatment room.

#### 754-545 Perform Administrative Tasks

75 hours

Subjects – Scheduling appointments using a management system adapted to a dental clinic. Keeping patient records. Payment of services and posting to the books. Inventory management.

### 754-558 Perform Tasks Related to Prevention and Treatment Planning

120 hours

Subjects – Preparation for X-rays. Polishing and fluoride application. Sealing of teeth. Educate patients about good habits for effective oral health. Patient education on the use of dental and orthodontic appliances.

754-561 Plan a Job Search 15 hours

Subjects – Familiarization with job search techniques. Resume writing and cover letters. Familiarization with interview techniques.

#### **754-578 Apply Dental Laboratory Techniques**

120 hours

Subjects – Molds and models used by dentists. Preparation of crowns, wax rings, mouth-guards and night protection. Cleaning and polishing of teeth.

### 754-588 Apply Techniques of Chair-side Assistance in Specialized Dentistry

120 hours

Subjects – Preparation of the treatment room and the materials needed. Knowledge how to assist dentists during specialized procedures (chair-side assistance). Maintenance of the materials and equipment needed in the treatment room.

## 754-598 Assist in Operative Dentistry, Orthodontics and Pedodontics

120 hours

Subjects – Preparation of the treatment room and the materials needed. Proper reception of the patient. Assisting the dentist with dental surgery, orthodontic, and pediatric dentistry. Proper maintenance of the equipment and the treatment room.

### 754-606 Assist in Dental Surgery and Prosthodontics

90 hours

Subjects – Preparation of the treatment room and materials needed. Receiving the patient. Assisting the dentist for surgery and prosthodontic care. Maintenance of the equipment and the treatment room.

#### 754-614 Assist in Endodontics and Periodontics

60 hours

Subjects – Preparation of treatment room and materials needed. Receiving the patient. Assisting the dentist for endodontic and periodontal care. Maintenance of the equipment and the treatment room.

#### 754-626 Perform all Dental Assistance Tasks Required in a Dental Office

90 hours

Subjects – Familiarization with the workplace. Participating in the daily tasks of a dental assistant. Integration within a dental team.



FH-CDI-PQ-SASI-0418

	Course	Course Title	Hours
	Code		
D	750.000		20
PHASE I: THEORY	752-332	Determine Their Suitability for the Profession and Training	30
	752-342	Become Familiar with a Comprehensive Approach to Health	30
	752-353	Communicate in a Care Team	45
	752-367	Apply Basic Care Procedures	105
	752-372	Establishing a Helping Relationship	30
	752-382	Become Familiar with the Legal and Ethical Aspects of the Profession	30
	752-393	Apply Care Procedures Related to the Musculoskeletal System	45
	752-664	Prevent and Control Infection	60
	752-412	Help a Client Meet His or Her Nutritional Needs	30
	751-572	Administer First Aid	30
PRACTICUM I	752-405	Provide Basic Care to Clients who are Experiencing Loss of Autonomy	75
PHASE II: THEORY	754-714	Participate in Drug Therapy	60
	752-424	Apply Care Procedures Related to the Nervous and Sensory Systems	60
	752-432	Apply Care Procedures Related to the Endocrine System	30
	754-865	Refer to their Knowledge of the Cardiovascular and Respiratory Systems	75
		when Providing Care	
	752-444	Apply Care Procedures Related to the Digestive System	60
	752-454	Apply Care Procedures Related to the Urinary and Reproductive Systems	60
	752-463	Intervene with a Client with Cognitive Deficits	45
PRACTICUM II	754-795	Provide Specific Care	75
PHASE III: THEORY	752-472	Intervene with a Client in Palliative Care	30
	752-483	Intervene with a Client with a Mental Health Problem	45
	752-532	Intervene with a Mother and her Newborn	30
	752-552	Intervene with a Child or Adolescent with a Health Problem	30
PRACTICUM III	752-498	Provide Geronto-Geriatric Care	120
	752-505	Provide Care to Clients with Mental Health Problems	75
	754-828	Provide Care in a Medical Unit	120
	752-518	Provide Care to Clients Undergoing Physical Rehabilitation	120
	752-526	Provide Care in a Surgical Unit	90
	752-542	Provide Care to Mothers and Newborns	30
	752-562	Provide Care to Children and Adolescents	30
	752-577	Provide Care to a Diverse Clientele	105
	•	TOTAL PROGRAM HOURS	1800
		TOTAL NUMBER OF UNITS: 120	

### **Program Objectives**

The Health, Assistance and Nursing DVS program prepares students to practice the profession of nursing assistant in various private and public institutions within the health network. Given the constant changes in health policy and important staffing needs, this area offers many opportunities for full-time and part-time employment. All indicators confirm that this sector will continue to grow. In addition to offering an extensive theoretical training, the program emphasizes practical learning in laboratories, as well as in hospitals during internships.



#### **Prerequisites**

Obtain a passing score on the entrance examination.

## Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for Diploma of Vocational Studies (DVS), the applicant must meet one of the following conditions:
- 1) Secondary School Diploma or recognized equivalent;
- 2) The person is at least 16 years old by September 30<sup>th</sup> for the school year in which he is starting his training, has obtained Secondary V credits in the language of instruction, and has received Secondary IV credits in a second language and mathematics program established by th Ministry of Education, or by a recognized equivalent;
- 3) The person is at least 18 years old at the time of entry into the program and has the functional prerequisites, which are successful completion of the General Development Test (GDT), as well as Secondary V credits in the language of instruction from a program of study established by the Ministry of Education, or has a recognized apprenticeship;
- 4) The person has obtained Secondary III credits in the language of instruction, second language and mathematics in a program of study established by the Ministry of Education. The person must also continue his general education concurrently with his professional training in order to obtain the following credits, Secondary V in the language of instruction, Secondary IV in the second language, and mathematics in a program established by the Ministry of Education.

### The duration of this program of study is 1500 hours:

Of this total number of hours, 840 hours are devoted to acquiring the competencies related to the mastery of job tasks, and 960 hours are devoted to the acquisition of general competencies related to work or professional activities. The curriculum is divided into 31 modeuls ranging from 30 to 120 hours. This includes time spent teaching, assessing learning, enrichment, and remedial instruction.

#### Obtaining the Diploma of Vocational Studies (DVS)

In order to obtain the diploma, the student must have a passing grade in each module.

### **HEALTH, ASSISTANCE AND NURSING – 5825**

### 752-332 Determine Their Suitability for the Profession and Training

30 hours

Subjects – Establish a status report of the profession, learn about your training project, recognize the importance of your involvement in the learning offered, and in the success of your study program. Confirming your professional orientation.

#### 752-342 Become Familiar with a Comprehensive Approach to Health

30 hours

Subjects – Situate health in a broader context of personal well-being, recognize the unique and multidimensional character of the person, recognize the attitudes, behaviors, and values that reflect the humanization of care. Ability to understand the contribution of the nurse and the auxiliary nurse in the care process, ability to assess the contribution of the nurse and the auxiliary nurse in realizing the therapeutic nursing plan.

### 752-353 Communicate in a Care Team

45 hours

Subjects – Adopt behaviors that favor the understanding of and the proper functioning of a work team. Provide information on care provided. Recognize the importance of ensuring continuity of care. Become aware of one's strengths and limitations in communication.

### **752-367 Apply Basic Care Procedures**

105 hours

Subjects – Move or restrain a person. Provide care related to hygiene, comfort and dressing. Provide care related to diet and hydration. Provide care related to elimination. Taking the vital signs of a person. Providing care after death.



#### 752-372 Establishing a Helping Relationship

30 hours

Subjects – Adopt an attitude of openness towards others, appreciate indicators of the emotional state of a person. Show respect and empathy for someone. Awareness of the strengths and limitations in how they relate to others.

#### 752-382 Become Familiar with the Legal and Ethical Aspects of the Profession

30 hours

Subjects – Recognize the legal aspects related to the practice and the general activities of the nursing assistant. Recognize the rights of the person being cared for. Recognize the duties and obligations of the nurse and the auxiliary nurse. Personally situate oneself in relation to an ethical dilemma.

### 752-393 Apply Care Procedures Related to the Musculoskeletal System

45 hours

Subjects – Establish the connections between physiology and the musculoskeletal system. Establish links between alterations and the musculoskeletal system. Select supportive care related to alterations of the musculoskeletal system. Perform a mandate related to the musculoskeletal system. Write observational notes.

#### 754-664 Prevent and Control Infection

60 hours

Subjects – Detect signs of inflammation and infection. Specify infection control odes, and how to properly wash hands. Importance of wearing gloves. Handle contaminated materials and body fluids. Use antimicrobial agents. Provide care to treat a wound.

### 754-714 Participate in Drug Therapy

60 hours

Subjects – Laws governing pharmacotherapy. Links between drugs or other substances and their effects on the body. Calculation of doses for a drug or substance, preparation and administration of the drug and verification of self-medication.

#### 752-405 Provide Basic Care to Clients who are Experiencing Loss of Autonomy

75 hours

Subjects – Work planning and communication of information related to the care provided. Personal assistance with respect to hygiene, comfort, dressing, mobilization, nutrition, hydration, and elimination. Maintain the room and communicate information effectively about the care given and the condition of the person.

### 752-412 Help a Client Meet His or Her Nutritional Needs

30 hours

Subjects – Establish connections between diet and a person's state of health. Check the connection between the meal and a person's diet. Encouraging a person to eat. Prevention of problems related to food.

### 752-424 Apply Care Procedures Related to the Nervous and Sensory Systems

60 hours

Subjects – Role and anatomical structures of the nervous system. Role and anatomical structures of the sensory system. Clinical manifestations related to pain. Assistance and specific care related to the alterations of the nervous and sensory systems.

## 752-432 Apply Care Procedures Related to the Endocrine System

30 hours

Subjects – Establish the links between physiology and the endocrine system. Select supportive care based on alterations to the endocrine system. Write observational notes.

### 752-865 Refer to their Knowledge of the Cardiovascular and Respiratory Systems when Providing Care

75 hours

Subjects – Anatomical structure and the role of the heart, its vessels, and its system. Assistance and specific care related to alterations of the respiratory and cardiovascular systems.

#### 752-444 Apply Care Procedures Related to the Digestive

60 hours

Subjects – Anatomical structure of the digestive system and the role of organs. Assistance and specific care related to alterations of the digestive system. Preoperative and postoperative care. Perform a mandate associated with the digestive system. Write observational notes.

### 752-454 Apply Care Procedures Related to the Urinary and Reproductive Systems

60 hours

Subjects – Anatomical structure of the urinary and reproductive systems. Assistance and specific care related to alterations of the urinary and reproductive systems.



#### 754-795 Provide Specific Care

75 hours

Subjects – Detection of clinical manifestations related to different disturbed needs. Assistance care and specific care. Administration of drugs.

#### 752-463 Intervene with a Client with Cognitive Deficits

45 hours

Subjects – Identify the needs of a person with cognitive deficits. Appreciate the functional autonomy of a person with cognitive deficits. Promote the independence of a person with cognitive deficits. Select ways to mitigate disruptive behavior.

#### 752-472 Intervene with a Client in Palliative Care

30 hours

Subjects – Establish links between the terminal phase, its clinical manifestations, and the reactions of a dying person. Identify the needs of a person in palliative care. Ensure the comfort of a person in palliative care. Ensure the support of those around the palliative care patient.

#### 752-483 Intervene with a Client with a Mental Health Problem

45 hours

Subjects – Recognizing manifestations of anxiety and manifestations related to mental health issues. Means and methods of intervention.

## 752-498 Provide Geronto-Geriatric Care

120 hours

Subjects – Planning your shift. Entering into a relationship with the patient. Assisting the person with performing daily tasks. Give specific care to the person. Effectively communicate information about the care given and the condition of the person.

751-572 Administer First Aid 30 hours

Subjects – Provide first aid in case of discomfort, urgency, distress, obstruction, respiratory arrest, cardiac arrest, injury, hemorrhage, shock, intoxication, and allergy.

#### 752-505 Provide Care to Clients with Mental Health Problems

75 hours

Subjects – Planning your shift. Entering into a relationship with the patient. Assisting the person with performing daily tasks. Give specific care to the person. Effectively communicate information about the care given and the condition of the person.

### 754-828 Provide Care in a Medical Unit

120 hours

Subjects – Planning the work needed. Observing the state of the person. Providing patient support. Providing specific care. Effectively communicate information about the person's condition.

### 752-518 Provide Care to Clients Undergoing Physical Rehabilitation

120 hours

Subjects – Planning your shift. Entering into a relationship with the patient. Assisting the person with performing daily tasks. Providing specific care to the person. Effectively communicate information about the care given and the condition of the person.

#### 752-526 Provide Care in a Surgical Unit

90 hours

Subjects – Give preoperative and postoperative care to the person. Providing information about the care and condition of the person.

### 752-532 Intervene with a Mother and her Newborn

30 hours

Subjects – Establish links between pregnancy, the postpartum period, and clinical manifestations in the mother. Identify the needs of a mother. Meet the needs of a newborn. Ensure the comfort of a mother and her newborn.

### 752-542 Provide Care to Mothers and Newborns

30 hours

Subjects – Enter into a relationship with the mother. Assist the mother in performing daily task. Give specific care to the mother or her newborn. Effectively communicate information about the care given and the status of the mother or newborn.

#### 752-552 Intervene with a Child or Adolescent with a Health Problem

30 hours

Subjects – Meet the needs and ensure the comfort of a child or a teenager.



## 752-562 Provide Care to Children and Adolescents

30 hours

Subjects – Connect with the child or adolescent. Assist the child or adolescent with the performance of daily tasks Provide specific care to the child or adolescent. Provide information about the care provided and the condition of the child or adolescent.

### 752-577 Provide Care to a Diverse Clientele

105 hours

Subjects – Enter into a relationship with the person. Assist the person in performing daily tasks. Give specific care to the person. Effectively communicate information about the care given and the condition of the person.



### EARLY CHILDHOOD EDUCATION - JEE.13 (2018)

Program leading to an Attestation of College Studies (ACS)

FH-CDI-PQ-TEE-0718

	Course Code	Course Title	Hours
COURSES	322-HCP-ID	Professional Communication Skills	45
	322-PEE-ID	The Early Childhood Educator Profession	60
	322-SAE-ID	The Health of the Child	60
	322-DG1-ID	Child Development from 0 to 5 years old	60
	322-0BE-ID	Child Observation	60
	322-DG2-ID	Child Development from 5 to 12 years old	60
	322-SEC-ID	Safety in the Work Place	60
	322-DRS-ID	Developing Meaningful Relationships with the Child	60
	322-HCT-ID	Creative Abilities in the Work Place	60
	322-ADE-ID	The Child's Autonomy	60
	322-1E0-ID	Educational Intentions for Children from 0 to 2 years old	60
	322-1RC-ID	Interventions Relating to Behavior	60
	322-1E2-ID	Educational Intentions for Children from 2 to 5 years old	60
	322-1E5-ID	Educational Intentions for Children from 5 to 12 years old	60
WORKPLACE	322-ST1-ID	Practicum 1 : Initiation	135
	322-ST2-ID	Practicum 2 : Integration	240
		TOTAL PROGRAM HOURS	1200
		TOTAL NUMBER OF UNITS: 43,66	

### **Program Objectives**

The purpose of the Early Childhood Education ACS is to train qualified professionals who can perform, at entry level, the tasks related to the implementation of this program, i.e. educating children ages 0 to 12 by meeting their specific needs and offering educational services. The student learns to create an environment conducive to the physical, psychomotor, cognitive, emotional, social, and moral development of children. He also learns to design, organize, and animate educational activities for children.

The Early Childhood Educator has a triple mandate - education, prevention and basic care. As part of their day-to-day work, educators are called upon to awaken children's imagination, quickly solve difficulties that may arise and perform many tasks at once. Educators must be able to work as a team and have confidence in themselves, as they often have to deal with groups of children in the presence of other adults (colleagues, parents, and other stakeholders).

Job opportunities are multiple. The Early Childhood Educator can work in Early Childhood Centers (CPEs), daycares and various types of home and school child care centers. He may also be recognized as a family childcare provider by a coordinating office. Regardless of the workplace, the educator will be largely responsible for planning, organizing and facilitating the activities and management of their group of children. It is also a job where he will have to show great autonomy.

### **Prerequisites**

- The applicant must hold a Secondary School Diploma or recognized equivalent;
- Obtain a passing score on the entrance examination.

#### Conditions for admission to an Attestation of College Studies (ACS) program

- In order to be eligible for an ACS program, the applicant must have prior training that is deemed sufficient by the College and must also meet one of the following conditions:
- 1) the person's studies have been interrupted for at least 2 consecutive terms or 1 school year;



- 2) the person is covered by an agreement entered into between the college and an employer or by a government program of studies;
- 3) the person has pursued postsecondary studies for at least 1 year;
- 4) the person posesses a diploma of professional studies.

### **Obtaining the Attestation of College Studies (ACS)**

In order to obtain the attestation, the student must have an overall average of at least 60% in each course of the program.

### **EARLY CHILDHOOD EDUCATION - JEE.13 (2018)**

#### 322-HCP-ID Professional Communication Skills

45 hours

Subjects – Communication process, communicator profile, and qualities. Communication and animation techniques. Communication barriers. Creation of communication tools. Teamwork.

#### 322-PEE-ID The Early Childhood Educator Profession

60 hours

Subjects – Definition of the profession, role, and skills of the educator. Educational programs. Types of child care services in Quebec. Structure of a CPE, a day care center, a school daycare service, and a coordinating office. Laws and regulations. Regulated and unregulated environments.

#### 322-SAE-ID The Health of the Child

60 hours

Subjects – Maslow's hierarchy of needs. Food and allergies. Infectious diseases and transmission of infection. Hand washing and diaper changing techniques. Disinfection and the quality of the environment. Drug administration. Human resources and organizations in prevention (screening) and early intervention to counter negligence.

## 322-DG1-ID Child Development from 0 to 5 years old

60 hours

Subjects – Psychological concepts and theories. Physical, motor and sensory development, language development, intellectual development, socio-emotional development, moral and sexual development, development, and expression of emotions. Relationships with father, mother, children, educators. Attachment theory.

322-0BE-ID Child Observation 60 hours

Subjects – Types of observations (direct, indirect, participatory, retreated, free, systematic, perceived, and uncollected). Components to observe and identify. Objectives and elements to put in place during observations. Observation process (observation, analysis, hypothesis, evaluation, intervention, and evaluation). Observation internship and self-observation.

#### 322-DG2-ID Child Development from 5 to 12 years old

60 hours

Subjects – Psychological concepts and theories. Physical, motor and sensory development, language development, intellectual development, socio-emotional development, moral and sexual development, development and expression of emotions. Relationships with father, mother, children, educators. Attachment theory.

### 322-SEC-ID Safety in the Work Place

60 hours

Subjects – Hygiene rules and safety standards in the daycare environment. Interventions in case of shocks or accidents. Incident report. Assessment of the safety means. Ergonomic techniques, privileged movements, and adapted equipment. Physical and material organization of the environment.

## 322-DRS-ID Developing Meaningful Relationships with the Child

60 hours

Subjects – Qualities and skills of a worker. Observation of children's needs. Links and relations between child-child, child-educator, educator-parent, and child-parent. Schedules, routines, special moments, and adapted activities. Particularities of socio-emotional development and self-esteem.

### 322-HCT-ID Creative Abilities in the Work Place

60 hours

Subjects – Creative process and creativity factors. Attitudes to develop in order to take advantage of his creativity. Creation of educational material and work tools. Personal work related to creativity.



## 322-ADE-ID The Child's Autonomy

60 hours

Subjects – Educational program. Periods of workshops. Responsibilities table and encouragement list. Particularities of development of the autonomy of the child from 0 to 12 years old.

#### 322-1E0-ID Educational Intentions for Children from 0 to 2 years old

60 hours

Subjects – Needs and interests of children from 0 to 2 years old. Stages of playful development. Games and adapted toys. Transitional activities, psychomotor, sonic awareness, plastic expression, language stimulation, logico-mathematics, scientific awakening, drama, and social-affective. Layout of the premises and the playgrounds.

#### 322-1RC-ID Interventions Relating to Behavior

60 hours

Subjects – Principles of intervention in the nursery. Framework of interventions and types of interventions. Possible problems in a day care service and intervention plan. Conflict resolution process.

#### 322-1E2-ID Educational Intentions for Children from 2 to 5 years old

60 hours

Subjects – Needs and interests of children from 2 to 5 years old. Stages of playful development. Games and adapted toys. Transitional activities, psychomotor, sonic awareness, plastic expression, language stimulation, logico-mathematics, scientific awakening, drama, and social-affective. Development of the premises and playgrounds. Activity bank, project activities, and workshops.

## 322-1E5-ID Educational Intentions for Children from 5 to 12 years old

60 hours

Subjects – Planning in 14 points. Needs and interests of children from 5 to 12 years old. Stages of playful development. Games and adapted toys. Transitional activities, psychomotor, sonic awareness, plastic expression, language stimulation, logico-mathematics, scientific awakening, drama, and social-affective. Activity bank, project activities and workshops. Layout of the premises and playgrounds. Planning, organization and animation of activities for children from 5 to 12 years old.

#### 322-ST1-ID Practicum 1 - Initiation

135 hours

Subjects – Recognizing the important role of the educator. Application of the knowledge acquired during the theoretical training and application in the workplace. Observation of children's behavior. Observational notes and observation report writing. Ethics, confidentiality, and professionalism.

### 322-ST2-ID Practicum 2 - Integration

240 hours

Subjects – Application of the knowledge acquired during the theoretical training and application in the workplace. Communication with children, parents, and various stakeholders. Teamwork with the different partners. Ethics, confidentiality. and professionalism.

### N.B.

- 1) Please note that this program description is for illustrative purposes only. It may therefore be modified in whole or in part without notice in order to adapt it to new ministerial prerogatives or the labor market.
- 2) Program offered is subject to approval by the Ministère de l'Éducation et de l'Enseignement Supérieur.





# **NOTES**

