

# DIVISIONAL INTENSIVE PROGRAMS

# AUTOMOTIVE TECHNOLOGY - KEC



Challenge yourself in an interesting and technical field. The Automotive Technology Program will help you gain knowledge and develop skills in a dynamic environment, that includes current trends in the Automotive industry. You will learn how to inspect, service, and repair mechanical and electronic systems that are common on a modern vehicle. Upon completion you may qualify for any of the following options:

- Direct entry into the workplace
- Challenge level 1 apprenticeship exam
- Enter the second year of the automotive diploma courses at Red River College

## THIS PROGRAM INCLUDES

• ELECTRICAL SYSTEMS	• ENGINE FUNDAMENTALS	• LIGHT SERVICE AND REPAIR
• BRAKE SYSTEMS	• ENGINE RECONDITIONING	• SUSPENSION SYSTEMS
• CV ASSEMBLY	• ENGINE DIAGNOSTICS	• SHOP SAFETY
• DRIVETRAIN/ TRANSMISSION SYSTEMS	• ELECTRONIC SYSTEMS	• WHMIS TRAINING
	• FUEL SYSTEMS	

## CAREER OPPORTUNITIES

• AIRCRAFT INDUSTRY	• MOTOR VEHICLE MECHANIC	• TIRE/ALIGNMENT SPECIALIST
• AUTO PARTS SPECIALIST	• POWER EQUIPMENT	• TRUCKING COMPANIES
• MOTORSPORT COMPANIES		

## STUDENTS NEED TO SUPPLY

- CSA approved steel toed boots or shoes
- CSA approved clear safety glasses
- Work clothing or coveralls (covering arms, legs and body)

## APPRENTICESHIP PROGRAM OPTION

Students who maintain an average of 70% or higher at the end of the eight courses and have earned the required hours will be eligible for Level 1 apprenticeship status. This program is accredited by Manitoba Apprenticeship. Qualified students will also receive 900 credit hours towards the required 1800 per level. An additional 900 credit hours can be earned through part time employment and the High School Apprenticeship Program.

## GRADE 11 • 4 CREDITS

AT20SASS AUTOMOTIVE SYSTEMS AND SERVICE 20S

AT30SDFS DRIVE TRAIN FUNDAMENTALS SERVICE 30S

AT30SCFS CHASSIS FUNDAMENTALS & SERVICE 30S

AT30SEFS ENGINE FUNDAMENTALS & SERVICE 30S

Students will learn to safely perform preventive maintenance, basic automotive repairs, and detect problems through early warning signs. Students will learn engine reconditioning, drive train systems, brake systems, and wheel alignment. Classes combine knowledge-based theory and hands-on shop work.

## GRADE 12 • 4 CREDITS

AT40SAES AUTOMOTIVE ELECTRICAL  
SYSTEMS 40S

AT40SVS1 VEHICLE SYSTEMS PART 1 40S

AT40SVS2 VEHICLE SYSTEMS PART 2 40S

AT40SADS APPLIED DIAGNOSTIC  
STRATEGIES 40S

The focus of these courses is on current technology and advanced automotive systems. Students learn about engine and emission controls, airbag and antilock brake systems, automotive electrical system basics and diagnostic strategies to help them find system faults. Career preparation and school to work programming are presented.

# BAKING AND PASTRY ARTS - KEC

## GRADE 11 • 4 CREDITS

BP20SI INTRO BAKING AND PASTRY ARTS 20S  
BP30SBCDP QUICK BREADS, COOKIES, DONUTS AND PIES 30S

BP30SYDP YEAST DOUGH PRODUCTS 30S  
BP30SCFD CAKES, FILLINGS, ICINGS AND DECORATIONS 30S

The following topics will be covered: Sanitation and Safety, Baking Equipment and Ingredients, Quick Breads, Doughnuts/Fritters, Pancakes and Waffles, Cookies, Pies, Syrups/Creams/Sauces, Lean and Rich Yeast Dough Products, Custards/Puddings/ Mousse and Soufflés, Pastry Basics, Cake Mixing/Baking, Cake Assembly/Decorating, Fruit Desserts and Flambé. Strong math skills are recommended.

## GRADE 12 • 4 CREDITS

BP40STSP TARTS AND SPECIAL PASTRIES 40S  
BP40SMCDP MODERN AND CLASSIC DESSERTS AND PLATING 40S

BP40SABP ADVANCED BREAD PRODUCTS 40S  
BP40SABK ADVANCED BAKING AND PASTRIES 40S  
The emphasis of these courses is on the preparation of French Desserts and Pastries, Modern and Classic desserts including plating techniques. Also, advanced techniques on Artisan Bread Products, Chocolate and Sugar Decoration, Frozen Desserts and elegant Cakes are discussed. Teamwork, time management, and strong work ethic skills are practiced and evaluated to prepare students to enter the workforce.



Do you have a passion for creating sensational desserts, pastries, and baked goods? If so, this program is for you! This course is designed for students that have an interest in the Baking or Pastry Arts Profession. Here is the chance to learn the tricks of the trade to create your own delectable masterpieces. These courses are designed to prepare students to enter the work force with a general understanding and knowledge of ingredients, products and techniques. Balancing theory and hands-on practice in the Baking Lab, this program gives students the understanding, fundamental skills, and attitudes needed to progress and develop in a successful baking career. Students prepare desserts, pastries and other baked goods for the lunch cafeteria and dining room service. Students have the prospect to further their skills at Red River College in their one- year Baking and Patisserie Program after high school. The opportunities available in this trade area are unlimited as there are many ways students can improve their skills, including on the job training and through specialty classes and courses. Students interested must possess a good attitude, work ethic, and time management skills. Teamwork, participation and attendance are mandatory.

TRADE AREAS	SERVICE AREAS	POST-SECONDARY/ COLLEGE OPTIONS	RELATED CAREER OPTIONS
• BAKER	• BAKERS HELPER	• APPRENTICESHIP (ALBERTA, ONTARIO)	• FOOD BROKER
• BAKERY MANAGEMENT	• CUSTOMER SERVICE	• BAKING	• FOOD PHOTOGRAPHER
• CAKE DECORATOR	• PASTRY CHEFS HELPER	• CULINARY ARTS	• FOOD SCIENCE
• CATERER		• HOSPITALITY & TOURISM	• FOOD STYLIST
• CHEF INSTRUCTOR		• HOTEL & RESTAURANT MANAGEMENT	• HEALTH INSPECTOR
• FOOD TRUCK OWNER			• NUTRITIONIST/ DIETITIAN
• PASTRY CHEF			• PROFESSIONAL FOOD WRITER/BLOGGER
• PERSONAL CHEF			

### STUDENTS NEED TO SUPPLY

- Close-toed, non-slip shoes
- Dark pants

### STUDENTS MUST ADHERE TO:

A professional and sanitary dress code during lab time. Long pants and closed toed/non-slip shoes are mandatory for student safety. All jewellery (watches, bracelets, rings) on the hands/wrist must be removed. Professional chef hats and hairnets are supplied and are to be worn at all times in the lab. **Gel nails/press-on nails and nail polish are not permitted** as per the Manitoba Food Safety guidelines. We strive to create a professional, safe, and sanitary learning space for all.

### COURSE FEES:

There is a uniform fee of \$35.00 per year for students in gr. 11 and 12. Alternatively, students may purchase their own jacket to wear throughout the course of the program which will be laundered daily at the school. (approximate student jacket cost is \$70.00)

# CARPENTRY - KEC & MMC



If you enjoy working with your hands, have good eye-hand coordination, good basic math skills and some creativity, you may wish to consider Carpentry. Carpentry deals with the construction of buildings, furniture and cabinetry using wood products as the primary construction material. The carpentry course covers the proper use and safe operations of tools and equipment used in the industry. **Students can apply for this course at either Kildonan-East Collegiate or Murdoch MacKay Collegiate.**

## COMPLEMENTARY COURSES

To further the benefits of the Carpentry Program, consider taking: Applied Math and Physics.

## THIS PROGRAM INCLUDES

- ADVANCED MACHINE OPERATIONS
- BASIC SURVEYING
- BLUEPRINT READING
- CABINET MAKING
- CONCRETE AND WOOD FOUNDATIONS
- FLOOR AND WALL FRAMING
- INTERIOR AND EXTERIOR FINISHING
- ROOF FRAMING
- SHOP SAFETY
- STAIR CONSTRUCTION
- WHMIS

## CAREER OPPORTUNITIES

- ARCHITECTURAL DRAFTING
- BUILDING MATERIALS SALES
- CABINET & FURNITURE PRODUCTION
- CIVIL ENGINEERING
- COMMERCIAL CONSTRUCTION
- DRY WALLER
- EXTERIOR FINISHES
- FINISH CARPENTRY
- MANUFACTURING
- RESIDENTIAL CONSTRUCTION
- WINDOWS/DOORS
- PROJECT SUPERVISION/ MANAGEMENT

## STUDENTS NEED TO SUPPLY

- Imperial tape measure
- Pencils
- Binder or notebook
- Safety shoes or boots required
- The first set of CSA approved safety glasses are supplied. Students are responsible for a new pair if these are lost, stolen, or damaged. Tinted safety glasses are not allowed.

While not required, it is strongly recommended that students build their own tool pouch throughout the program. This would include: A hammer, speed square, chalk line, tape measure, nail puller, and utility knife.

## APPRENTICESHIP PROGRAM OPTION

This program is accredited for the level 1 technical in-school portion of the carpentry trade apprenticeship. Students who maintain an average of 70% or higher at the end of the eight courses and have earned the required hours will be eligible for Level 1 apprenticeship status.

## GRADE 11 • 4 CREDITS

CP20SCF CARPENTRY FUNDAMENTALS

CP30SF FRAMING

CP40SSC SURVEYING AND CONCRETE

CP40SCM CARPENTRY MILLWORK 40S

Students will study the practices, principles, and building code standards related to the construction of the superstructure of a building. This sequence of courses explores topics from surveying property to constructing the roof of a building, using tools and equipment, understanding efficient building design, and cabinet making. Students will work under conditions similar to those on a construction site.

## GRADE 12 • 4 CREDITS

CP30SCTE CARPENTRY TOOLS AND EQUIPMENT

CP30SIEF INTERIOR AND EXTERIOR FINISHING 30S

CP40SAF ADVANCED CARPENTRY 40S

CP40SAC APPLIED CARPENTRY 40S

The final semester of Carpentry focuses on finishing and fine woodworking skills. Students will learn advanced machine operations, an in-depth overview of roof construction, basic stair building, interior finishing (including drywalling and trim work), and how to support their construction decisions with the National Building Code. Additionally, students will learn and explore trade entry topics, including trade safety awareness, apprenticeship, and post- secondary opportunities in the construction trades.

# COLLISION REPAIR & REFINISHING TECHNOLOGY - KEC

## TECHNOLOGY - KEC

### GRADE 11 • 4 CREDITS

CR20SICR INTRO TO COLLISION REPAIR AND  
REFINISHING 20S

CR30SFCR FUNDAMENTALS OF COLLISION AND  
REFINISHING 30S

CR30SAMW AUTOMOTIVE METALS & WELDING

CR30SCP CORROSION PROTECTION 30S

Students will focus on auto body repair and refinishing techniques. They will be taught panel replacement, hydraulics usage, panel alignments and the fundamental skills required in the auto body trade. Students will also have the opportunity to learn modern spray techniques and application of refinishing materials.

### GRADE 12 • 4 CREDITS

CR40SDASR DAMAGE ANALYSIS & STRUCTURAL REPAIR 40S

CR40SCT COLOUR THEORY & CAREER PREPARATION 40S

CR40SWBPR WELD-ON BOLT-ON PANEL REFINISHING 40S

CR40SSPR SURFACE PREPARATION AND REFINISHING 40S

During the third year of the program, you will learn the fundamentals of chassis and frame repair, collision analysis and repair estimating. Advanced re-finishing techniques in the areas of partial and spot repairs are also covered. Students will focus on colour matching and mixing of water-based paints.



Auto body is a technical program that covers the metal repairs and painting procedures on automotive vehicles. You will have the opportunity to develop skills which will readily enhance your abilities to make auto body repairs to vehicles and to seek employment in auto body, welding related fields, estimating, parts management and the automotive industry. Completion of the eight program courses, with a 70% average, accredits students with their Level 1 in-school portion of their Motor Vehicle Body Repair trade apprenticeship. They are also credited with 900 hours towards the required 1800 hours of Level 1.

#### THIS PROGRAM INCLUDES

• BASIC PREPARATION	• OXY-ACETYLENE WELDING	• SHOP MANAGEMENT
• COLLISION REPAIRS	• PAINT APPLICATION	• SHOP SAFETY
• COLOUR MATCHING	• PAINT PREPARATION	• STRUCTURAL ALIGNMENT
• CUSTOM PAINTING	• SHEET METAL REPAIR	• WHMIS TRAINING
• ESTIMATING	• 3-DIMENSIONAL MEASURING	• RESISTANCE WELDING
		• MIG WELDING STEEL / ALUMINUM

#### CAREER OPPORTUNITIES

• AFTER MARKET SALES AUTobody WORK	• BUS MANUFACTURING	• PAINT TECHNICAL REP
• AUTOMOTIVE FIELD TECHNICIAN	• DETAILING	• PARTS MANAGEMENT
• AUTOMOTIVE RECYCLE INDUSTRY	• ESTIMATING	• WELDING INDUSTRY
	• GRAPHICS STRIPE	

#### STUDENTS NEED TO SUPPLY

- CSA approved steel toe boots or shoes. \*Mandatory for grades 11 and 12.
- CSA approved clear safety glasses. Tinted Safety glasses are not allowed.

\*Mandatory for all grades.

#### APPRENTICESHIP PROGRAM OPTION

This program is accredited for the Level 1 technical in-school portion of the Motor Vehicle Body Repair trade apprenticeship.

# CULINARY ARTS - KEC



Culinary Arts is one of the fastest growing industries in Canada and for this reason there is a tremendous shortage of well-trained entry-level cooks. The Culinary Arts Program is designed to prepare students to enter the labour force. Students spend a portion of their day on theory and the balance of the day in the kitchen. Food will be prepared daily for cafeteria service by the students in the program. Selections will include hot entrées, soups, sandwiches, salads, snacks, beverages and desserts.

## CAREER OPPORTUNITIES

This program may lead to work in cafeterias, hotels, restaurants, hospitals, catering companies, supermarkets, bakeries, or post-secondary education. Students who choose to major in culinary arts will be eligible for the apprenticeship program.

SALES	SERVICE AREA OPPORTUNITIES	POST SECONDARY/ COLLEGE PROGRAMS	TRADE
• BANQUET MANAGER	• BAKERS HELPER	• APPRENTICESHIP	• BAKER
• CATERING	• COOKS HELPER	• APPRENTICESHIP	• CHEF
• PURCHASING AGENT	• GENERAL	MILITARY	• COOK
• SALESPERSON	KITCHEN HELP	• BAKING	
• STOREROOM MANAGER	• SHORT ORDER COOK	• CULINARY ARTS	
	• WAITER/WAITRESS	• HOTEL & RESTAURANT MANAGEMENT	

## APPRENTICESHIP PROGRAM OPTION

The Culinary Arts program at Kildonan-East Collegiate is a fully accredited program with the province of Manitoba. The courses have been approved for accreditation of level 1 apprenticeship towards an interprovincial journeyman's red seal. The course is equivalent to the first year of the two-year apprenticeship program at Red River College. Students at Kildonan-East Collegiate who complete the apprenticeship program by achieving 70% on their test scores will be given credit for their first level of the red seal program at a college.

## STUDENTS MUST ADHERE TO:

A professional and sanitary dress code during lab time. **Long pants and closed toed/non-slip shoes are mandatory for student safety.** All jewellery (watches, bracelets, rings) on the hands/wrist must be removed. Professional chef hats and hairnets are supplied and are to be worn at all times in the lab. **Gel nails/press-on nails and nail polish are not permitted** as per the Manitoba Food Safety guidelines. We strive to create a professional, safe, and sanitary learning space for all.

## COURSE FEES

There is a uniform fee of \$35.00 per year. Alternatively, students may purchase their own uniform which will be laundered daily at the school.

## GRADE 11 • 4 CREDITS

CA20SCP COOKING PRINCIPLES 20S  
CA30SGM GARDE MANGER 30S  
CA30SPB PATISSERIE AND BAKING 30S  
CA30SVFS VEG, FUNGI, STARCHES & FARINACEOUS PRODUCT 30S

Students will receive both theory and kitchen experience throughout their school day. A wide range of topics will be covered including sanitation, knife skills, tools and equipment, salads, sandwiches, patisserie and baking, vegetable cookery, grains, and cooking methods.

## GRADE 12 • 4 CREDITS

CA40SSS STOCKS, SOUPS AND SAUCES 40S  
CA40SBD BREAKFAST AND DAIRY 40S  
CA40SMPFC MENU PLANNING & FOOD COSTING 40S  
CA40SMPFS MEATS, POULTRY, FISH & SEAFOOD 40S  
Students will spend one period per day in theory and three periods in the kitchen applying this theory to prepare food for service. Topics will include stocks, mother sauces, soups, breakfast cookery, poultry, seafood, techniques for cooking meats, menu planning, and food costing.

# ELECTRICAL TRADES TECHNOLOGY - KEC

**COURSE CREDITS ARE USED FOR LEVEL 1 APPRENTICESHIP ACCREDITATION**

## GRADE 11 • 4 CREDITS

ETT20SI INTRODUCTION TO ELECTRICAL TRADES TECH 20S

ETT30SETF ELECTRICAL TRADES DC FUNDAMENTALS 30S

ETT30SRW REISDENTIAL WIRING 30S

ETT30SEWM ELECTRICAL WIRING METHODS 30S

Students will be introduced to basic electrical concepts. They will begin to design and wire circuits. Students are introduced to safety, tools, equipment and electrical/electronic systems. Areas of safety include instrumentation, measurement, component recognition, value determination and fabrication.

Students will learn Ohm's Law as it relates to series, parallel and combination circuits. Students will also be introduced to Canadian Electrical Code (CEC) standards. They will learn to design, install, test and troubleshoot branch circuits, and become familiar with the tools, techniques, materials and devices associated with it.

Students will also be introduced to blueprint reading.

## GRADE 12 • 4 CREDITS

ETT40SETF ELECTRICAL TRADES AC FUNDAMENTALS 40S

ETT40SARW ADVANCED RESIDENTIAL WIRING 40S

ETT40SAETT APPLIED ELECTRICAL TRADES TECHNOLOGY 40S

ETT40SAEWM ADVANCED ELECTRICAL WIRING METHODS

In the Grade 12 Electrical Program you will learn advanced residential, advanced electrical wiring methods, intro to electric motor control and programmable logic control.



Electricity lights up our cities, factories, homes and provides power to all our modern appliances and entertainment equipment. It is also becoming a means of modern transportation in all-electric vehicles. If you have the desire to enter into a career with ever increasing opportunities, then the Electrical Program could be for you. In the Electrical Program you will learn how to install, maintain and repair many different forms of electrical wiring and equipment. Completion of the eight program courses, with a 70% average, accredits students with their Level 1 in-school portion of their electrical trade apprenticeship. They're also credited with 900 hours towards the required 1800 hours of Level 1.

## COMPLEMENTARY COURSES

If your career goal includes college or university; then the following academic subjects are strongly recommended: Math (Applied or Pre-Calculus), Physics and Computer Science. If your career goal is Apprenticeship, you should consider Applied or Pre-Calculus Math, and Physics 30s and/or 40s.

## THIS PROGRAM INCLUDES

- BASIC ELECTRICAL
- COMMUNICATIONS WIRING
- ELECTRICAL THEORY
- INTRO TO A/C, ELECTRIC MOTORS & GENERATORS
- INTRO TO MOTOR CONTROL
- MULTI-METERS AND TEST EQUIPMENT
- POWER DISTRIBUTION SYSTEMS
- REPAIRING ELECTRICAL APPLIANCES
- RESIDENTIAL, COMMERCIAL & INDUSTRIAL WIRING METHODS
- SHOP SAFETY
- SOLDERING AND WORKING ON PRINTED CIRCUIT BOARDS

## CAREER OPPORTUNITIES

- CONSTRUCTION ELECTRICIAN
- ELECTRICAL ENGINEER
- ELECTRICAL ESTIMATOR
- ELECTRICAL INSPECTOR
- ELECTRICAL INSTRUCTOR
- ELECTRICAL PLANNER
- ENTREPRENEUR
- INDUSTRIAL ELECTRICIAN
- POWER ELECTRICIAN
- POWER LINE TECHNICIAN
- PROJECT MANAGEMENT

## STUDENTS NEED TO SUPPLY

- The first set of CSA approved safety glasses are supplied. Students are responsible for a new pair if these are lost, stolen, or damaged. Tinted safety glasses are not allowed.
- A scientific calculator.
- Coloured pencils or markers for colour coding electrical drawings.

## APPRENTICESHIP PROGRAM OPTION

This program is accredited for the level 1 technical in-school portion of the electrical trade apprenticeship.

# FASHION TECHNOLOGY - MMC



This is a one-of-a-kind program for students interested in the world of fashion. The program takes place at **Murdoch MacKay Collegiate** where students learn both the theoretical and practical sides of industrial sewing techniques, fashion illustration, pattern making and garment construction. Fashion is ideal for creative students or anyone interested in developing their creativity through a practical, hands-on approach. This program builds skills related to: competence of industry standards, commitment, communication, and problem solving.

## THIS PROGRAM INCLUDES

- Design & Colour Theory
- Fashion Drawing
- Textiles
- Fashion History
- Sustainability & Ethics in the Fashion Industry
- Pattern Manipulations & Alterations
- Custom Flat Pattern Drafting
- Custom Fitting
- Basic Sering Skills
- Advanced Sewing Skills
- Custom Garment Design & Construction
- Clothing Line Production
- Planning & Participation in Photoshoots & Year-End Fashion Show

## CAREER OPPORTUNITIES

- Independent Designer
- Textiles Specialist
- Pattern Drafter
- Fashion Buyer
- Costume Designer for Film/Television
- Retail Store Manager
- Visual Merchandiser

## STUDENTS NEED TO SUPPLY

- Basic Drafting/Art Supplies: mechanical pencils, erasers, paper scissors, pencil crayons and coloured markers.
- Basic Sewing Supplies: fabric shears, pins, stich rippers, and garment bags
- Sewing Machinery and Fabric/Notions are Supplied for most Garment Construction

## Grade 11: 4 Credits

**Intro to Fashion Design & Technology 20S**  
**Pant Design & Construction 30S**  
**Semi-Formal Wear Design & Construction 30S**  
**Applied Textile Design 40S**

Students will learn and practice basic sewing techniques, safely preformed on a variety of industrial sewing machinery. Students will be introduced to the basics of pattern making, studying fitting/design features, closure types, and pocket styles ideal for woven fabrics. Classes allow students to apply skills from both sewing and pattern making towards the design and construction of multiple garments, inclusive of: skirts, pants, blouses, and simple dresses.

## Grade 12: 4 Credits

**Knitwear Design & Construction 30S**  
**Tailored Garment Design & Construction 40S**  
**Formal Wear Design & Construction 40S**  
**Applied Fashion Entrepreneurship 40S**

Students will have the opportunity to explore working with new fabrics and their unique qualities, inclusive of knits and formal fabrics. Students will learn advanced sewing techniques taught on domestic sewing machinery. More advanced pattern making skills will be developed in addition to learning to make custom patterns based on personal measurements. Students will complete an individual clothing line, inclusive of: knitwear, a tailored jacket, and formal gown, all displayed in a year-end fashion show.

# GRAPHIC DESIGN - KEC



Combine creativity with technology. Graphic Design is the art of arranging image and text to communicate a message. It may be applied in any media such as print, digital media, motion picture, television, and animation. Examples of graphic design include advertising, books, magazines, t-shirt graphics, logos, signs, packaging, posters, websites, television graphics, social media, and much more. This program uses a hands-on approach to teach the principles required to solve graphic design problems. Using industry-standard software and related programs, students develop the ability and confidence to create successful designs. The Graphic Design program has two main objectives: First, to provide students with theoretical concepts and practical skills utilized in the graphics industry. The second, to prepare students for a possible career in the communications industry.

## THIS PROGRAM

- ACROBAT
- ANIMATION
- CINEMA 4D
- CRITIQUES
- DESKTOP PUBLISHING
- DIGITAL IMAGE CREATION
- DRAWING
- FLASH
- FIELD TRIPS
- GUEST SPEAKERS
- ILLUSTRATOR
- INDESIGN
- INTERACTIVE MEDIA DESIGN
- LOGOS AND BRANDING
- MOTION GRAPHICS
- PACKAGING DESIGN
- PHOTOSHOP
- PORTFOLIO
- PRESENTATION DESIGN
- PRINCIPLES OF DESIGN
- PRINT DESIGN
- PRINT MAKING
- SIGNAGE
- TYPOGRAPHY
- WEB DESIGN
- WORK PRACTICUM

## CAREER OPPORTUNITIES

- ADVERTISING AGENCIES
- ART DIRECTOR
- CORPORATE COMMUNICATIONS DEPARTMENTS
- CYBER GRAPHIC DESIGNER
- DESIGNERS
- DESIGN STUDIOS
- DIGITAL PRODUCTION STUDIOS
- DIGITAL SERVICE BUREAUS
- ENTREPRENEUR
- FREELANCE DESIGNER
- ILLUSTRATOR
- INDUSTRIAL DESIGN
- MARKETING
- NEWSPAPERS AND MAGAZINES
- PACKAGING COMPANIES
- PRE AND POST PRESS
- PRINTING COMPANIES
- PRODUCTION ARTIST
- PRODUCTION COORDINATOR
- PUBLISHING HOUSE
- SIGN COMPANIES

## GRADE 11 • 4 CREDITS

GD20SFGD FUNDAMENTALS OF GRAPHIC DESIGN 20S

GD30SGDL GRAPHIC DESIGN AND LAYOUT 30S

GD30SIGD ILLUSTRATION FOR GRAPHIC DESIGN 30S

GD30SIGRD INTERACTIVE GRAPHIC DESIGN 30S

These courses consist of theoretical and practical presentations, lectures, demonstrations, assignments, sketchbook work, critiques, guest speakers, field trips and work experience to advance student skill and comprehension of Graphic Design. Through these experiences, students will continue to develop artistic and problem-solving skills. Students will also expand their technology skills through tutorials and practical assignments. These assignments will include design utilizing a variety of media including print, motion, and interactive media.

## GRADE 12 • 4 CREDITS

GD40SAIGD ADVANCED ILLUSTRATION FOR

GRAPHIC DESIGN

40S GD40SAIGRD ADVANCED INTERACTIVE FOR

GRAPHIC DESIGN 40S

GD40SAGDL ADVANCED GRAPHIC DESIGN AND LAYOUT 40S

GD40SGDP GRAPHIC DESIGN PORTFOLIO 40S

The final year of the Graphics Design program continues to enhance students' creative and technical abilities. Objectives include developing a professional attitude towards craftsmanship and the industry, increasing appreciation of design through awareness and understanding of its diverse manifestations, and strengthening students' technical abilities through work on real world projects. Students will be able to effectively problem solve, apply appropriate techniques, and discuss technical and aesthetic issues.

# HAIRSTYLING - KEC

## GRADE 10 • 4 CREDITS

HS20SI INTRODUCTION TO HAIRSTYLING 20S

HS20SBH BASIC HAIRSTYLING 20S

HS20SBHC BASIC HAIR CUTTING & THERMAL STYLING 20S

HS20SRSS RELATED SALON SERVICES 20S

Intro to Hairstyling is a hands-on program designed to explore basic hairstyling skills. Students are introduced to braiding, up-styles, roller setting, styling and blow-drying the hair. Students will also learn haircutting, haircolouring, chemical texture services, manicuring and facials.



## GRADE 11 • 4 CREDITS

HS30SIH INTERMEDIATE HAIR CUTTING & BARBER

TECHNIQUES 30S

HS30SHCO HAIR COLOURING 30S

HS30SIHA INTERMEDIATE HAIRSTYLING & ARTIFICIAL HAIRSTYLING 30S

HS30SCTS CHEMICAL TEXTURE SERVICES 30S

The 2nd year of Hairstyling is dedicated to reviewing basic hairstyling, haircutting, chemical texture services and hair colouring, transferring the skills from mannequins to clients from the community.

## GRADE 12 • 4 CREDITS

HS40SAHC ADVANCED HAIRSTYLING AND COLOURING 40S

HS40SAHCC ADVANCED HAIRCUTTING & CHEMICAL TEXTURE SERVICES 40S

HS40SSO SALON OPERATION 40S

HS40SCP CERTIFICATE PREPARATION 40S

The 3rd year of Hairstyling is devoted to fine-tuning skills. Students are exposed to advanced course work in men's and women's haircutting, hairstyling and hair colouring techniques. Additionally, students prepare for their provincial hairstyling exam.

If you are interested in the art and science of beauty, then a career in Hairstyling may be for you. During the three-year Hairstyling program, you will develop the necessary skills to enter a career that may branch into many different and challenging opportunities. **Students will apply for this program in their grade 9 year.**

### THIS PROGRAM INCLUDES

- BASIC SKINCARE
- CHEMICAL TEXTURE SERVICES
- HAIRCOLOURING AND LIGHTENING
- LONG HAIR UP STYLES
- MANICURING
- MEN AND WOMEN HAIR CUTTING
- RECEPTION DUTIES
- RETAILING EXPERIENCE
- STYLING HAIR

### CAREER OPPORTUNITIES

- EDUCATOR
- EDUCATOR FOR HAIR CARE PRODUCTS/TECHNIQUES
- FIELD TECHNICIAN (FILM WORK)
- HAIR COLOURIST
- LICENSED HAIRSTYLIST
- MANUFACTURE SALES REPRESENTATIVE
- PLATFORM ARTIST
- RETAILING COSMETICS
- SALES REPRESENTATIVE
- SALON OWNER
- SALON RECEPTIONIST

### APPRENTICESHIP PROGRAM OPTION

With the completion of 1400 hours of technical training, grade 12 students that have maintained a 70% average or better in both practical and theory course work are able to challenge their provincial practical exam and enroll in the Inter-provincial Apprenticeship Program.

Once employed as a Hairstylist Apprentice under the supervision of a Journey Person, the apprentice must complete 1600 hours. These hours are usually completed within a 1-year calendar period. At this time, apprentices may challenge the inter-provincial Red Seal theory exam. After successfully achieving 70% or better, the apprentice will receive an inter-provincial Red Seal hairstyling license that enables them to work as a licensed Journey Person Hairstylist in other provinces across Canada.

### STUDENTS WILL REQUIRE:

- Grade 10: Comb & Brush Kit - \$55.00
- Grade 11: Haircutting Scissors - \$65.00 - Barbering/highlighting tools - \$15.00
- Grade 12:

# INTERACTIVE DIGITAL MEDIA - KEC



If you are a gamer, a storyteller, a coder, an animation addict - Interactive Digital Media is the cutting edge of communication and entertainment. Digital Media includes games, websites, virtual reality/augmented reality, app development, video, animation and more. Interactive Digital Media is how we learn about, communicate and interact with a connected global society. This program includes aspects of language arts, mathematics, physics, art, music, engineering, computer science and psychology. Students develop technical skills, but also learn the art of engaging an audience - the process of making something beautiful, meaningful, and fun. In this program, we will make games, animations, websites, apps, VR and AR experiences. We will build skills in graphics and code and begin a pathway to 21st century careers.

## THIS PROGRAM INCLUDES

- 2D & 3D GAME GRAPHICS
- AFTER EFFECTS
- ANIMATION FOR GAMES AND FILM
- ART
- CHARACTER DESIGN
- CINEMA 4D
- CODING FOR MOBILE GAMES, THE WEB, VIDEO GAMES & VR/AR EXPERIENCES
- DATABASES
- DREAMWEAVER
- FIELD TRIPS
- GAME DESIGN
- IDEA DEVELOPMENT
- ILLUSTRATOR
- INDUSTRY CONNECTIONS
- JAVASCRIPT
- ONLINE FORMS
- PHOTOSHOP
- PROJECT PLANNING
- RESPONSIVE DESIGN
- STORYBOARDING
- TEAMWORK
- TITLING AND MOTION GRAPHICS
- UNITY GAME ENGINE
- VIDEO EDITING & PRODUCTION
- WEB GRAPHICS

## CAREER OPPORTUNITIES

- 2D ARTIST
- 3D MODELLER
- ADVERTISING AGENCIES
- ANIMATOR
- APP DEVELOPER
- ARCHITECTURE
- CONCEPT ARTIST
- EXHIBIT DESIGNER
- FREELANCE ARTIST
- GAME DESIGNER
- GOVERNMENT DEPARTMENTS
- INDUSTRIAL DESIGNER
- INTERFACE DESIGNER/ DEVELOPER
- MOTION GRAPHICS ARTIST
- ONLINE NEWS MEDIA
- PRODUCER
- PROGRAMMER
- PUBLIC RELATIONS & COMMUNITY
- GAME STUDIOS
- TEXTURE ARTIST
- VFX ARTIST/ PROGRAMMER
- VIDEO EDITOR
- VR/AR DEVELOPER
- WEBSITE DESIGNER/ DEVELOPER

## GRADE 11 • 4 CREDITS

DM20SIDM INTRODUCTION TO INTERACTIVE DIGITAL MEDIA 20S

DM30SIDMD INTERACTIVE DIGITAL MEDIA DESIGN 30S

DM30SIDMAC INTERACTIVE DIGITAL MEDIA ASSET CREATION 30S

DM30SCIDM CODING FOR INTERACTIVE DIGITAL MEDIA DESIGN 30S

Interactive Digital Media Design is about turning ideas into reality. IDM Design introduces project management, art and interactive design theory and utilizes a "learn by doing", collaborative approach.

Asset Creation for IDM focuses primarily on the artistic processes for creating 2D and 3D art assets. Students will design and create 2D and 3D characters and environmental art and learn the technical requirements for producing assets for a variety of projects.

In Coding for IDM, students gain theoretical knowledge, and practice in the development of code for interactive media projects. Students will explore topics such as Player controls, scoring, creating game play, user interfaces, and coding for websites.

## GRADE 12 • 4 CREDITS

DM40SFDM FUTURES IN INTERACTIVE DIGITAL MEDIA 40S

DM40SAAC ADVANCED INTERACTIVE DIGITAL MEDIA ASSET CREATION 40S

DM40SAC ADVANCED CODING FOR INTERACTIVE DIGITAL MEDIA 40S

DM40SPM PROJECT MANAGEMENT FOR INTERACTIVE DIGITAL MEDIA 40S

Futures in IDM will develop an online portfolio and make connections with industry to prepare pathways to employment in the IDM industry.

Advanced IDM Asset Creation is focused on developing individual creativity in many forms, from 2D graphics to 3D models, animation, videos music and sound.

Advanced Coding for IDM will experience the development of coding on many platforms and create solutions for a variety of interactive projects.

Project management for IDM focuses on the collaborative design process and workflow "pipelines" that organize complex projects from idea generation to a finished project.

# PHOTOGRAPHY - KEC

## GRADE 11 • 4 CREDITS

PH20SPE INTRODUCTION TO PHOTOGRAPHY 20S

PH30SPE PHOTOGRAPHIC EQUIPMENT 30S

PH30SPL PHOTOGRAPHIC LIGHTING 30S

PH30SDD DIGITAL DARKROOM 30S

Students will focus on the safe and appropriate use of professional photographic equipment, such as the functions of DSLR cameras, different types of lenses, and tripods. They will also learn all aspects of lighting, including lighting theory, techniques, and styles as well as basic digital editing techniques, including layout, resolution, tonal and colour correction, crop ratios, and output. At the end they will be able to use critical thinking skills to select and utilize the most appropriate equipment to complete photographic assignments. Introduction to Photography is highly recommended before taking any grade 11 photography courses.

## GRADE 12 • 4 CREDITS

PH40SAPe ADVANCED PHOTOGRAPHIC EQUIPMENT 40S

PH40SAPL ADVANCED PHOTOGRAPHIC LIGHTING 40S

PH40SADD ADVANCED DIGITAL DARKROOM 40S

PH40SAPH APPLIED PHOTOGRAPHY 40S

Students will focus on the advanced use of professional photographic lighting and advanced digital editing techniques. Students will use critical thinking skills to manipulate various forms of lighting to complete photographic assignments as well as select the most appropriate software and tools to professionally edit images to achieve desired results. The study of portraiture, commercial, architectural, drone photography as well as digital workflow is a major part of the program.



The art and science of creating a lasting image. Photographic skills are developed through a variety of projects. When participating in the Photography program, you will build on your photography skills and learn by using state-of-the-art photography equipment. Students are responsible for completing their projects from start to finish, including everything from the set-up to the final print. Digital imaging is a major part of the photography program. Students learn various photographic techniques with digital cameras and image manipulation using advanced editing software programs Adobe Photoshop and Lightroom. Such tasks will include re-sizing, color correction, image manipulation, editing using Camera RAW, as well as preparing images for printing and social media applications. Photography students play a major role in producing images for all aspects of our school and will gain experience working with real clients.

Photography is a skill that can be applied to enhance the possibility of future employment. Upon graduation you will be equipped with the knowledge, skills, and attitudes required to find entry-level employment in the industry. You will leave with an impressive portfolio containing readily available work samples to show prospective employers as well as learning a lifelong technical skilled trade.

## THIS PROGRAM INCLUDES

- ADVANCED EDITING
- B & W PRINTING
- CAMERA TECHNIQUES
- COMPOSITION
- DIGITAL IMAGING
- DIGITAL VIDEO AND NON-LINEAR EDITING
- DRONE AIRCRAFT TECHNOLOGY
- FILM PROCESSING
- LIGHTING
- PICTURE RETOUCHING
- PORTFOLIO
- PORTRAITURE
- SCANNING
- YEARBOOK PHOTOGRAPHY

## CAREER OPPORTUNITIES

- AERIAL PHOTOGRAPHY
- COMMERCIAL ADVERTISING STUDIOS
- COMMUNICATIONS
- CUSTOM PHOTO LABS
- FASHION
- FINE ARTS
- FREELANCE PHOTOGRAPHER
- JOURNALISM
- MEDICAL PHOTOGRAPHY
- PORTRAIT STUDIOS
- PROCESSING LABS
- PUBLIC RELATIONS
- RETAIL SALES
- SCIENTIFIC AND RESEARCH INSTITUTES

# REFRIGERATION & AIR CONDITIONING - KEC



Are you looking for a rewarding and challenging career choice with lots of earning potential? Do you enjoy working with your hands? Then the Refrigeration and Air Conditioning Program is for you. You will learn how to install, repair, and service various types of heating, cooling and ventilation equipment used in our homes. This industry is focused towards providing us with a clean and comfortable indoor environment regardless of the outdoor weather conditions. Upon successful completion of the course, graduates have the option of directly entering the work force or pursuing their studies at a post-secondary institution.

## COMPLEMENTARY COURSES

To fully benefit from the Refrigeration and Air Conditioning program, you may wish to consider taking: Electrical Exploratory and/or Carpentry Exploratory.

## THIS PROGRAM INCLUDES

- CONTROL CIRCUITRY
- COPPER TUBING
- CURRENT ELECTRONIC AND DIGITAL TEST EQUIPMENT RELATED TO THE INDUSTRY
- EVACUATION EQUIPMENT
- GAS PIPING
- HVAC EQUIPMENT
- LAYOUT AND BLUEPRINT READING
- REFRIGERANT RECOVERY
- SERVICE AND REPAIR
- SHEET METAL
- SHOP SAFETY
- TROUBLE SHOOTING SKILLS
- WHMIS
- WORK EXPERIENCE

## CAREER OPPORTUNITIES

- BUILDING OPERATION AND MAINTENANCE
- CONTRACTING SECTORS
- ENGINEERING
- MANUFACTURING SECTORS
- MARKETING SECTORS
- POWER ENGINEERING
- TECHNOLOGY AND TECHNICIAN OPTIONS
- UTILITIES
- WHOLESALE

## STUDENTS NEED TO SUPPLY

- CSA approved boots or shoes. These are required for grades 11 and 12.

## GRADE 11 • 4 CREDITS

RA20SR INTRODUCTION TO REFRIGERATION AND AIR CONDITIONING 20S

RA30SSF SYSTEMS FUNDAMENTALS 30S

RA30SPF PIPING FUNDAMENTALS 30S

RA30SEF ELECTRICAL FUNDAMENTALS 30S

Learning will begin in the classroom where you will develop problem-solving skills, working independently and in small groups through various activities related to the trade. Students will be given an understanding of how different mechanical systems work in conjunction with each other to provide us with a constant clean and comfortable indoor environment regardless of outdoor weather conditions.

## GRADE 12 • 4 CREDITS

RA40SEC ELECTRICAL CONTROLS 40S

RA40SRAC REFRIGERATION & AIR-COOLING SYSTEMS 40S

R40SHVA HEATING VENTILATION AIR CONDITIONING SYSTEM 40S

RA40SARA APPLIED REFRIGERATION AIR CONDITIONING 40S

Your last year of study will be based on practical applications through building working models of HVAC systems. When good initiative is shown, you could be placed into a variety of different job placements to gain valuable work experience. As more demands are placed on energy consumption and indoor air quality, Refrigeration and Air Conditioning has become one of the fastest growing areas of employment in our modern society.