

SENIOR HIGH Gr. 10-12 REGISTRATION HANDBOOK



Father Patrick Mercredi High School 2013-2014

**455 SILIN FOREST ROAD
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SENIOR HIGH CAREER PATHWAYS Our programs are designed to encourage students to explore their unique interests and support their personal career goals.	Course Description <i>NOTE: Options will only run if there are adequate numbers.</i>	CTS Courses Associated with Program	Maximum # of Students in Program
Business & Information Technologies			
Aboriginal Entrepreneurship 1 & 2 (yearlong) Prerequisite: None **Students will be recommended for this program by the FMNI Counselor and teacher. Regular attendance is essential for recommendation. 12 credits	Aboriginal Entrepreneurship focuses on ways in which entrepreneurs recognize opportunities, generate ideas, and organize resources to plan successful ventures that enable them to achieve their goals. During this course, students will create business plans for their own ventures. Through hands-on experiences, they will have opportunities to develop the values, characteristics, and skills often associated with successful entrepreneurs. In the <u>introductory level</u> of the course, students will participate in hands-on activities designed to teach them the principles of developing and operating a business and the final activity is a Business Plan Presentation. The <u>advanced level</u> of the course focuses on e-commerce. Students will develop a logo for their business, create a business card, a brochure and build a website. The final activity is participation in a Trade Show.	ENT1010: Challenge & Opportunity ENT1020: Planning a Venture ENT2010: Analyzing Ventures ENT2020: Financing Ventures or ENT2030: Marketing the Venture ENT2040: Implementing the Venture ENT1910: ENT Project A MAM1040: E-commerce 1 MAM2110: E-commerce 2 MAM3100: E-commerce 3 ENT3010: Managing the Venture ENT3020: Expanding the Venture ENT2910: ENT Project B	15
Networking Academy-IT Essentials 1 Gr. 10-12 Prerequisite: None 5 credits	This course covers the fundamentals of PC computer technology, networking, and security. The curriculum offers the following features: -Students develop working knowledge of digital technology -Hands-on labs and Virtual Laptop and Desktop learning tools help students develop critical thinking and complex problem-solving skills for workstation technology and operations.	NET1010: DIGITAL TECHNOLOGY 1 NET2010: DIGITAL TECHNOLOGY 2 NET2020: WORKSTATION TECHNOLOGY & OPERATIONS NET2080: LAPTOPS & PERIPHERALS NET1910: NET PROJECT A	24

<p>Networking Academy-IT Essentials 2 Gr. 10-12</p> <p>Prerequisite: IT Essentials 1</p> <p>5 credits</p>	<p>The course emphasizes the practical application of skills and procedures needed for laptops, peripherals, and telecommunications</p> <p>Interactive assessments provide immediate feedback to support the evaluation of knowledge and acquired skills in Network Media, Devices and Security</p> <p>The student may take level 2 of this course for high school credit only or may choose to write the external certification at our local testing centre at the student's cost (Approximately \$250 US).</p> <p>CompTIA A+ certification validates the latest skills needed by today's computer support professionals. It is an international, vendor-neutral certification recognized by major hardware and software vendors, distributors and resellers. CompTIA A+ confirms a technician's ability to perform tasks such as installation, configuration, diagnosing, preventive maintenance and basic networking.</p>	<p>NET2110: TELECOMMUNICATIONS 1 NET2910: NET PROJECT B NET3010: DIGITAL TECHNOLOGY 3 NET3080: INTERNET PROCESSES NET3100: NETWORK MEDIA & DEVICES, SECURITY</p>	<p>24</p>
Health, Recreation & Human Services			
<p>Cosmetology and Esthetics Introductory Level Gr. 10-12</p> <p>Prerequisite: None</p> <p>5-7 credits</p>	<p>The Cosmetology Studies curriculum focuses on personal and professional grooming, body care and enhancement practices, and provides students with opportunities to explore and prepare for cosmetology related career options.</p>	<p>COS1010: Personal Images COS1020: COS2010 Hair Graphics 1 & 2</p> <p>EST1020: Skin Care Practices / EST1070: Manicuring 1 HSS1050: Introduction to Mentorship</p> <p>COS2010: Long Hair Design 2</p> <p>EST1025: Skincare Practices-Client Services EST2030: Facials / EST2050: Make-up EST2090: Nail Art EST1140: Theatrical Make-up 1</p> <p>COS2000: Salon Design COS2210: Client Services and Sales 1</p> <p>EST2070: Manicuring 2 EST2140: Theatrical Make-up 2</p>	<p>18</p>

<p>Cosmetology and Esthetics Advanced Level Gr. 10-12</p> <p>Prerequisite: Intermediate & Advanced Levels-As required</p> <p>5-7 credits</p>	<p>The Cosmetology Studies curriculum focuses on personal and professional grooming, body care and enhancement practices, and provides students with opportunities to explore and prepare for cosmetology related career options.</p>	<p>HSA3400 - Hair and Scalp Care 1 HSA3430: Hair Styling 1 HSA3340: Hair Styling 2 HSA3520: Chemical Texturizing 1</p> <p>HSA3570: Hair Colouring 1 HSA3580: Haircolouring 2: Client Services</p> <p>HSA3410: Hair and Scalp Care 2 HSA3445: Hair Styling 3: Client Services HSA3450: Hair Cutting 1 HSA3455: Haircutting 2: Client Services HSA3585: Haircolouring 3: Client Services HSA3590: Haircolouring 4: Decolourization HSA3595: Haircolouring 5: Decolourization Client HSA3630: Historical Cosmetology</p> <p>HSA3420: Hair and Scalp Care 3 HSA3460: Haircutting 3: Advanced Techniques HSA3465: Haircutting 4: Advanced Techniques Client Services HSA3470: Haircutting 5: Creative Services HSA3475: Haircutting 6: Creative Client Services HSA3485: Haircutting 7: Current Trends Client Services HSA3495: Haircutting 8: Male Client Services HSA3600: Hair Colouring 6: Colour Correction</p>	<p>18</p>
<p>Foods and Nutrition-Introductory Level Gr. 10-12</p> <p>Prerequisite: None</p> <p>5-7 credits</p>	<p>Students will have the opportunity to create and eat a wide variety of dishes and sweet treats. Students will investigate and develop important knowledge, skills and attitudes relative to the culinary arts both for personal and industry related environments. Students at this level will complete cooking and baking basics, create a variety of snacks and appetizers and learn how to make amazing well round meals. Students will show off all their cooking skills and try to win the Iron Chef cooking experience at the semester end project.</p>	<p>FOD 1010 - Food Basics FOD 1020 - Contemporary Baking FOD 1030 - Snacks & Appetizers FOD 1040 - Meal Planning 1 FOD 1050 - Fast & Convenience Foods FOD 1060 - Canadian Heritage Foods FOD 1910 Project A FOD 2010 - Food & Nutrition Basics FOD 2020 - Nutrition & the Athlete FOD 2030 - Food Decisions & Health FOD 2040 - Cake & Pastry FOD 2050 - Yeast Breads & Rolls FOD 2060 - Milk Products & Eggs FOD 2070 - Stocks, Soups & Sauces FOD 2090 - Creative Cold Foods FOD 2100 - Basic Meat Cookery FOD 2110 - Fish & Poultry FOD 2120 - Meal Planning 2 FOD 2130 - Vegetarian Cuisine FOD 2140 - Rush Hour Cuisine FOD 2150 - Food Safety & Sanitation FOD 2180 Fruits and Vegetables FOD 2190 Grains, Legumes, Nuts and Seeds</p>	<p>18</p>

<p>Foods and Nutrition-Advanced Level Gr. 10-12</p> <p>Prerequisite: Intermediate & Advanced Levels-As required</p> <p>5-7 credits</p>	<p>Having built a skill base with Introductory Foods and Nutrition students will work on skills and experiences required for entry-level employment or for further post-secondary education. Students will earn 5-6 credits while learning how to make delectable cakes and pastries, breads, well rounded meals, delicious ethnic dishes and show off their culinary skills during the in class Iron Chef competition.</p>	<p>FOD 2010 - Food & Nutrition Basics FOD 2020 - Nutrition & the Athlete FOD 2030 - Food Decisions & Health FOD 2040 - Cake & Pastry FOD 2050 - Yeast Breads & Rolls FOD 2060 - Milk Products & Eggs FOD 2070 - Stocks, Soups & Sauces FOD 2090 - Creative Cold Foods FOD 2100 - Basic Meat Cookery FOD 2110 - Fish & Poultry FOD 2120 - Meal Planning 2 FOD 2130 - Vegetarian Cuisine FOD 2140 - Rush Hour Cuisine FOD 2150 - Food Safety & Sanitation FOD 2180 Fruits and Vegetables FOD 2190 Grains, Legumes, Nuts and Seeds FOD 3020 - Nutrition & Digestion FOD 3030 - Creative Baking FOD 3040 - Advanced Yeast Products FOD 3050 - Advanced Soups & Sauces FOD 3060 - Food Presentation FOD 3080 - Advanced Meat Cookery FOD 3100 - Entertaining with Food FOD 3140 - International Cuisine 2</p>	<p>18</p>
<p>Health Sciences-Beginning Level Gr. 10-12</p> <p>Prerequisites: (60% or higher in Math & Science is highly recommended)</p> <p>5-7 credits</p>	<p>This course prepares students for careers in the health care field.</p> <p>Students will acquire the basic skills and knowledge to work in multiple areas of health care, both within the hospital and in the community.</p> <p>For those students preparing for a career in the health sciences, the study of anatomy and physiology provides the foundation needed to support clinical experiences.</p> <p>This course will also provide a career foundation for students interested in continuing their education after completing high school. A strong interest and ability in Math and Science is recommended for success in this course.</p>	<p>HCS1050: MUSCULOSKELETAL SYSTEM/MEDICAL MATHEMATICS 1 HSS1010: HEALTH SERVICES FOUNDATIONS HCS1100: INFECTION & IMMUNITY 1 CCS1030: CARING FOR BODY SYSTEMS 1 CCS2010: HEALTH CARE 1 HCS1910: HCS PROJECT A HCS2020: FIRST AID/CPR WITH AED (Provided by St. John's Ambulance)</p>	<p>24</p>

<p>Health Sciences-Advanced Level Gr. 10-12</p> <p>Prerequisites: FIRST AID/CPR WITH AED</p> <p>(60% or higher in Math & Science is highly recommended)</p> <p>5-8 credits</p>	<p>This course prepares students for careers in the health care field.</p> <p>Students will acquire advanced skills and knowledge within a variety of challenging areas.</p> <p>For those students preparing for a career in the health sciences, First Responder 1 & 2 provides the foundation needed for a career in the EMT/EMR areas.</p> <p>This course will also provide a career foundation for students interested in continuing their education after completing high school. A strong interest and ability in Math and Science is recommended for success in this course.</p>	<p>HCS1080: CARDIOVASCULAR SYSTEM/MEDICAL MATHEMATICS 2 HCS1110: INFECTION & IMMUNITY 2 CCS3010: HEALTH CARE 2 CCS3020: HEALTH CARE 3 MAM1030: COMMUNICATION STRATEGIES 1 HCS2910: HCS PROJECT B HCS3020: FIRST RESPONDER 1 HCS3030: FIRST RESPONDER 2</p>	<p>24</p>
Communication Technologies			
<p>Communication Technologies Level 1</p> <p>Prerequisites: None</p> <p>(5-8 credits)</p>	<p>This course introduces students to communications technology from a media perspective. Students will work in the areas of photography, animation, videography and media design.</p>	<p>COM 1005 Visual Composition ** COM 1015 Media** COM 1035 Graphic Tools ** COM 1025 Typography COM 1105 Audio/Video COM 1145 Animation I COM 1205 Photography- Introduction COM 1215 Photography- Exposure COM 1275 Photography-Digital Processing I COM 1910 COM Project A</p>	<p>20</p>
<p>Communication Technologies Level 2</p> <p>Prerequisites: Based on completion of supporting courses from Level 1</p> <p>(5-8 credits)</p>	<p>This course introduces students to communications technology from a media perspective. Students will work in the areas of photography, animation, videography and media design.</p> <p>Based on completion of prerequisite/supporting courses from Level 1, students may select from the courses they are most interested in.</p>	<p>COM 2015: Media Impact COM 2025: Electronic Layout and Publishing 1 COM 2035: Raster Graphics 1 COM 2045: Vector Graphics 1 COM 2105: AV Preproduction 1 COM 2115: AV Production 1 COM 2125: AV Postproduction 1 COM 2145: Animation 2 COM 2205: Photography- Composition COM 2215: Photography-Communication COM 2225: Photography-Dark Room Techniques COM 2235: Photography- Lenses COM 2285: Com Tech Client Services 1 COM 2910: COM Project B COM 2920: COM Project C</p>	<p>20</p>

<p>Communication Technologies Level 3</p> <p>Prerequisites: Based on completion of supporting courses from Level 2</p> <p>(5-8 credits)</p>	<p>This course introduces students to communications technology from a media perspective. Students will work in the areas of photography, animation, videography and media design.</p> <p>Based on completion of prerequisite courses from level 1 and level 2, students may select the courses they are most interested in:</p>	<p>COM 3025 Electronic Layout and Publishing 2 COM 3035 Raster Graphics 2 COM 3045 Vector Graphics 2 COM 3105 AV Preproduction 2 COM 3115 AV Production 2 COM 3125 AV Postproduction 2 COM 3145 Animation 3 COM 3205 Photography- Lighting COM 3215 Photography-Photojournalism COM 3225 Photography-Color COM 3235 Photography-B/W Digital Techniques COM 3245 Photography-Outdoor COM 3275 Photography-Digital Processing 2 COM 3285 Com Tech Client Services 2 COM 3910 COM project D COM 3920 COM Project E</p>	<p>20</p>
<p>High School Robotics Gr. 10-12</p> <p>Prerequisites: (60% or higher in Math & Science is highly recommended)</p> <p>5-7 credits</p>	<p>Students will be learning the fundamentals of robotics including:</p> <ul style="list-style-type: none"> • Introduction to robotics systems • Introduction to electronics • Programming and Interfacing • Design and Fabrication • Designing a Robotics System • <p>Working in teams and using their attained knowledge and skill, students will be designing and creating a VEX or FRC robot in order to compete at the provincial level.</p>		<p>24</p>
Natural Resources			
<p>Energy & Mining Gr. 10-12</p> <p>Prerequisite: None</p> <p>6 credits</p>	<p>Take this course if you wish to pursue a career in the Natural Resources area. This course focuses on: the nature and origin of Alberta's hydrocarbon and mineral resources exploration & recovery, production & refining and reclamation of nonrenewable hydrocarbons, techniques in developing consumer products within a hydrocarbon industry, and exploration techniques within the context of Alberta's oil sands, heavy oil or non-conventional methane. Students with a high school diploma and who meet the program requirements will get Preferred Consideration status from SAIT for these programs:</p> <ul style="list-style-type: none"> • Petroleum Engineering Technology Diploma • Chemical Engineering Technology Diploma • Energy Asset Management Diploma • Petroleum Land Administration Certificate 	<p>PRS1010 – Overview of Alberta Geology PRS1020 – Non-renewable Resources PRS1060 – Consumer Products and services PRS2030 – Non-Conventional Hydrocarbon Exploration PRS2060 – Refining Hydrocarbons PRS1810 – PRS Project A</p>	<p>24</p>

<p>KAE Natural Resources 10-4 Gr. 10-12 Prerequisite: None</p> <p>5-7 credits</p>	<p>This course focuses on: the nature and origin of Alberta's oil sands. Students will orient themselves towards entry-level post secondary opportunities and employment within an oil career environment.</p> <ul style="list-style-type: none"> • Students will demonstrate basic safe workplace practices and procedures. • Students will demonstrate the functional mapping skills needed for resource location and navigation. • Students will gain a practical understanding of the oil industry in Alberta. • Students will develop a basic understanding of the processing of oil. • Students will investigate the environmental effects of oil exploration, drilling, extraction, transportation and processing. • Students will investigate possible entry-level positions within the oil industry. 	<p>KAE1591 HCS3000 HCS3010</p>	<p>24</p>
<p>Trades, Manufacturing & Transportation</p>			
<p>Mechanics Gr. 10-12 Prerequisite: Introductory Level-None</p> <p>Intermediate & Advanced Levels-As required</p> <p>5-7 credits</p>	<p>In the Mechanics strand, students have the opportunity to increase their knowledge and skills related to the maintenance of vehicles through hands-on experiences. Whether a student plans to prepare for a work place role in the industry or wants to simply be an informed owner of a vehicle, the Mechanics strand can be very useful.</p>	<p>Introductory MEC1010:Modes and Mechanisms - MEC1020:Vehicle Service/Care MEC1040:Engine Fundamentals - MEC1090:Electrical Fundamentals MEC1110:Pneumatics/Hydraulics - MEC1130:Mechanical Systems MEC1150:Ride/ Control Systems - MEC1160:Structures/Materials MEC1170:Metal Forming/ Finishing - MEC1190:Surface Preparation</p> <p>Intermediate MEC2010:Vehicle Detailing - MEC2030:Lubrication/ Cooling MEC2040:Fuel and Exhaust Systems - MEC2060:Ignition Systems MEC2070:Emission Controls - MEC2090:Electrical Components MEC2100:Braking Systems - MEC2120:Hydraulic Accessories MEC2130:Drive Trains - MEC2140:Transmissions/ Transaxles MEC2150:Suspension Systems - MEC2160:Steering Systems MEC2170:Metal Repair and Finishing - MEC2180:Trim Replacement MEC2190: Surface Preparation Two - MEC2200:Refinishing One MEC2210: Paint Touch-up and Finishing - MEC2220:Interior Repairs</p> <p>Advanced MEC3010:Buying/ Selling Vehicles - MEC3020:Vehicle Value Appraisal MEC3030:Engine Diagnosis - MEC3040:Engine Tune-up MEC3050:Engine Replacement - MEC3060:Cylinder Head Recognition MEC3070:Block Reconditioning - MEC3080:Alternative Energy Systems MEC3090: Computer Systems - MEC3140:Drive Train Repair MEC3160: Body Repair Estimation - MEC3170:Body Damage Analysis MEC3210:Plastic and Fiberglass - MEC3220:Glass Replacement</p>	<p>18</p>

<p>Construction Gr. 10-12 Prerequisite: Introductory Level-None</p> <p>Intermediate & Advanced Levels-As required</p> <p>5-7 credits</p>	<p>Students selecting modules from this strand have the opportunity to investigate and develop important knowledge, skills and attitudes relative to the design, construction and maintenance of buildings and other products. Successful completion of modules in this strand is intended to provide students with the skills and experience required for entry-level employment or for further post-secondary education.</p>	<p>CON1010: Const. Tools and Materials CON1120: Product Management CON1130: Solid Stock Construction CON1140: Turning Operations CON1160: Manufactured Materials CON1910: CON Project A CON2035: Floor Framing CON2045: Wall Framing CON2050: Roof Structures 1 CON2130: Furniture Making 1 CON2150: Finishing and Refinishing CON2160: Cabinet Making 1 CON2910: CON Project B CON2920: CON Project C CON3050: Roof Structures 2 CON3060: Doors and Trim CON3130: Furniture Making 3 CON3140: Furniture Making 4 CON3150: Furniture Repair CON3910: CON Project D CON3920: CON Project E</p>	<p>18</p>
<p>Engineering-Beginning Level Gr. 10-12 Prerequisite: 60% or higher in Math & Science or recommendation by Principal</p> <p>(A strong, independent and mature work ethic remains paramount for success)</p> <p>5-7 credits</p>	<p>A state-of-the-art lab helps students investigate various aspects of the engineering field.</p> <p>Students will use hands-on learning equipment to conduct meaningful engineering investigations that emphasize mathematics and science.</p> <p>Instruction covers the fundamentals of engineering as well as a focus in ROBOTICS.</p> <p>Students will work in teams to research, design and create a solution to an open-ended engineering challenge. They will complete a major design project and showcase it to a team of real engineers.</p> <p>In addition, this course will cultivate student's knowledge of engineering so as to determine whether engineering and technology are the career fields they desire.</p>	<p>ENT1010: Challenge and Opportunity ELT1140: Robotics Application ELT1010: Electro-assembly 1 DES1010: Sketch, Draw & Model FAB2150: CNC Turning FAB2020: Print Reading FAB2030: Oxyfuel Welding FAB1130: Principles of Machining FAB2010: Structural Engineering MEC1040: Engine Fundamentals MEC1130: Mechanical Systems MEC1110: Pneumatics & Hydraulics ENT1910: ELT Project A</p>	<p>24</p>

<p>Engineering-Advanced Level Gr. 10-12 Prerequisite: Introduction to Engineering</p> <p>(60% or higher in pure Math, Physics, Chemistry or Science 30)</p> <p>(A strong, independent and mature work ethic remains paramount for success)</p> <p>5-7 credits</p>	<p>Students will use continue to use hands-on learning equipment to conduct meaningful engineering investigations that emphasize a more advanced understanding of mathematics and science.</p> <p>Students are then able to choose a pathway of their choice and complete the learning objectives associated with it. Instruction covers the fundamentals of engineering as well as a focus in Advanced ROBOTICS.</p> <p>Students will continue to work in teams to research, design and create a solution to an open-ended engineering challenge presented to a team of real engineers.</p> <p>Upon successful completion of this course, students who meet the requirements outlined in our articulation agreement with Keyano College and NAIT, will be eligible for admission into a Bachelor of Science in Engineering Partial Degree or various Engineering Diploma Programs at NAIT.</p> <p>(Note: Academic averages vary and admission is competitive across the several programs in Engineering. It is strongly recommended that students meet or exceed posted competitive entrance standards)</p>	<p>ENT1020: Elements of a Venture Plan ELT2180: Process Control CON2070: Electrical Systems FAB2130: Precision Turning 1 DES2055: CAD 2 DES3055: CAD 3 ELT2150: Electronic Controls FAB3150: CNC Milling MEC2130: Drive Line FAB2010: Structural Engineering ENT2910: ENT Project B</p>	<p>24</p>
<p>Fabrication Gr. 10-12 Prerequisite: Introductory Level-None</p> <p>Intermediate & Advanced Levels-As required</p> <p>5-7 credits</p>	<p>Students selecting modules from the Fabrication Studies strand have the opportunity to investigate and develop important knowledge, skills and attitudes related to the properties of materials and the design and fabrication of useful products. Successful completion of advanced level modules gives students the skills and experience required for entry level employment or for post-secondary education.</p>	<p>Fab1010 - Fabrication Tools and Materials Fab1040 - Oxyacetylene Welding Fab1050 - Basic Electric Welding Fab1048 - Semi-Automated/Automated Welding Fab2030 - Oxyfuel Welding Fab2040 - Thermal Cutting Fab2050 - Arc Welding 1 Fab2060 - Arc Welding 2 Fab2070 - Gas Metal Arc Welding1 Fab 2048 - Flux Core Arc Welding 1 Fab3030 - Gas Tungsten Arc Welding Fab3040 - Specialized Welding Fab3050 - Arc Welding 3 Fab3060 - Arc Welding 4 Fab3070 - Pipe and Tubular Welding Fab3170 - Gas Metal Arc Welding 2</p>	<p>18</p>

<p>Industrial Technologies-Beginner Level Gr. 10-12 Prerequisite: None</p> <p>5-7 credits</p>	<p>Our state-of-the-art lab offers hands-on learning where students gain knowledge and skills.</p> <p>At this level, the learning systems can operate independently, or be combined together in different configurations to simulate more-complex processes needed for a wide variety of technology or trade careers such as Electrical, Millwright, Instrumentation, and Power Engineering.</p> <p>This course involves career preparation, presentations from industry and a mentoring opportunity with instructors at Keyano College in the above areas.</p> <p>This pathway involves advanced learning and problem-solving with special emphasis in:</p> <ul style="list-style-type: none"> • Maintenance, Safety, and Technical Mathematics • AC/DC Level 1 • Pneumatics 1 and Hydraulics 1 • Mechanical Fabrication 1 • Measurement Tools 1 • Thermal Technology 1 <p>Once five of the above levels are mastered with an average of 70% or over, then students may learn one or more of the following systems:</p> <ul style="list-style-type: none"> • Electrical Fabrication 1 • Mechanisms 1 • Electrical Control 1 • Industrial Electronics 1 <p>Completion of this course provides you with the opportunity to get the academic and practical hand-on training that, before now, could only be gained by being employed as an apprentice.</p>	<p>HCS3000: Workplace Safety Systems ELT1010: Electro-assembly 1 ELT1030: Conversion & Distribution ENS2220: Energy Conservation Principles MEC1130: Mechanical Systems MEC1110: Pneumatics & Hydraulics MEC1015: Mechanics Tools & Materials ELT2030: Branch Circuit Wiring FAB1130: Principles of Machining ELT1080: Control Systems 1 ELT2050: Electronic Power Supply 2</p>	<p>24</p>
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<p>Industrial Technologies-Advanced Level Gr. 10-12 Prerequisite: Intermediate & Advanced Levels-As required</p> <p>5-7 credits</p>	<p>The industrial technologies lab offers hands-on learning where students gain knowledge and skills.</p> <p>At this level, the learning systems can operate independently, or be combined together in different configurations to simulate more-complex processes needed for a wide variety of technology or trade careers such as Electrical, Millwright, Instrumentation, and Power Engineering.</p> <p>This course involves career preparation, presentations from industry and a mentoring opportunity with instructors at Keyano College in the above areas.</p> <p>This pathway involves advanced learning and problem-solving with special emphasis in:</p> <ul style="list-style-type: none"> • Print Reading, Safety, and Trigonometry • AC/DC 2 • Intermediate Pneumatics • Mechanisms 1/2 • Measurement Tools 2 • Electronic Sensors 1 • Electrical Learning 2 <p>Once 5 of the above levels are mastered with an average of 70% or over, then students may learn one or more of the following systems:</p> <ul style="list-style-type: none"> • Electro Fluid Power • Industrial Electronics • Programmable Controller • Industrial Electronics 1 <p>Upon successful completion of this course, students will have a competitive advantage when seeking an apprenticeship or when applying for admission into post-secondary institutions.</p>	<p>HCS3010: Workplace Safety Practices FAB2020: Printing Reading CON2070: Electrical Systems MEC2130: Drive Line ELT3140: Motors FAB2010: Structural Engineering MEC1040: Engine Fundamentals ELT2140: Robotics 2 NET2010: Digital Technology 2 ELT2130: Magnetic Control Devices ELT3160: Control Applications ELT1050: Electronic Power Supply 1 ELT2080: Control Systems 2</p>	<p>24</p>
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<p>Power Engineering-4th Class through NAIT Gr. 10-12 with Careers the Next Generation</p> <p>Prerequisites:</p> <ul style="list-style-type: none"> • Full-time high school student • Have an average or superior academic standing in reading, math and science • Be on track to graduate from high school • Mechanical and electrical aptitude • Good vision, hearing, manual dexterity • Good communication and organizational skills • The ability to work well with others in a team environment • Participate in a successful interview by an industry sponsor • Excellent school citizen <p>In addition students must have excellent school attendance of at least 95%.</p> <p>10 credits per year</p>	<p>Power engineers are responsible for the safe operation and maintenance of industrial equipment such as boilers, steam and gas turbines, generators, gas and diesel internal combustion engines, pumps, condensers, compressors, pressure vessels and related controls.</p> <p>The 4th Class Power Engineering learner pathway provides a meaningful career development opportunity for high school students.</p> <p>Students receive credits toward a high school diploma and at the same time have the opportunity to meet requirements for a 4th Class Power Engineering certificate.</p> <p>A student spends all or most of the first and second semester in grade 10, 11 and 12 completing a full course load (i.e., normal high school course requirements in core subject areas and theory components of power engineering as part of the complementary high school program).</p> <p>Successful achievement in both core subject areas and theory components of the power engineering program enables the student to spend up to 320 supervised internship hours each summer obtaining post-secondary lab training and working as a full-time paid intern in a local heating or power plant.</p> <p>Participating industry will annually provide to CAREERS: The Next Generation the internship opportunities available for students who wish to enroll in the program.</p> <p>CAREERS will then assist local schools and school systems in identifying committed industry partners within their communities who can offer summer internship opportunities to their students. Student participation in the 4th Class Power Engineering pathway and mentorship program will facilitate but does not guarantee future employment with local industry.</p>	<p>Year 1</p> <p>HCS3000: Workplace Safety Systems HCS3010: Workplace Safety Practices ENS1040: Living with the Environment ENS2040: Environmental Health and Safety FAB1010: Fabrication Tools and Materials FAB2170: Pipe Fitting DES2060: Evolution of Design DES1060: Technical Design and Drafting 1 FAB1910: FAB Project A CTR1010: Job Preparation</p> <p>Year 2</p> <p>CTR2010: Job Maintenance MEC1040: Engine Fundamentals MEC1110: Pneumatics and Hydraulics MEC2030: Lubrication and Cooling MEC1090: Electrical Fundamentals ELT1030: Conversion and Distribution ELT1010: Electro-assembly 1 ELT1080: Control Systems 1 DES1910: DES Project A MEC2950: MEC Intermediate Practicum</p> <p>Year 3</p> <p>CT3010: Preparing for Change ELT2080: Control Systems 2 ELT2910: ELT Project B ELT1910: ELT Project A MEC3110: Climate Control MEC1910: MEC Project A MEC3910: MEC Project D MEC3950: MEC Advanced Practicum HCS3950: HCS Advanced Practicum ENS1910: ENS Project A</p>	<p>12</p>
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<p>Registered Apprenticeship Program/Health Services and Career Preparation</p> <p>Prerequisites:</p> <ul style="list-style-type: none"> • Full-time high school student • Have an average or superior academic standing in reading, math and science • Be on track to graduate from high school • Mechanical and electrical aptitude • Good vision, hearing, manual dexterity • Good communication and organizational skills • The ability to work well with others in a team environment • Participate in a successful interview by an industry sponsor • Excellent school citizen <p>In addition students must have excellent school attendance of at least 95%.</p> <p>5-7 credits</p>	<p>By selection process with the Off-Campus Coordinator (Lynda Cachia)</p>	<p>HCS3000: Workplace Safety Systems HCS3010: Workplace Safety Practices HCS2020: FIRST AID/CPR WITH AED CTR1010: Job Preparation CTR2310: Career Directions - Expansion CTR3310: Career Directions - Transitions</p>	<p>No Maximum</p>
Social Sciences			
<p>Aboriginal Studies Gr. 10-12</p>	<p>Students study the effect of the forces of history—contact and colonization—upon the lives and perspectives of the Aboriginal people. In addition, current issues affecting Aboriginal people are analyzed from the Aboriginal perspective. Students will demonstrate the ability to:</p> <ul style="list-style-type: none"> -participate in the practices and use of the products of their Aboriginal culture -understand the perspectives and underlying knowledge of their Aboriginal culture -willingly reflect on their relationships with themselves, one another and the natural world. 	<p>Aboriginal Studies 10-20-30</p>	<p>30</p>

Fine Arts			
Art Gr. 10 Prerequisite: None 5 credits	In Art 10, students will develop basic drawing, sculpting, printmaking and painting techniques; an ability to express personal feelings and thoughts through a variety of mediums; an understanding of the elements and principles of design; and will receive training in analyzing and critically responding to their own artistic expression and art of the past. Art history will be studied as it relates to curriculum and assignments.	Art 10	30
Art 20 Gr. 11 Prerequisite: Art 10 5 credits	This course is an extension of Art 10 with an emphasis on individual expression. Students will work toward mastery of drawing, sculpting, and painting techniques and will learn to apply knowledge of the elements and principles of design to their compositions. Students will continue to analyze and critically respond to their own artistic expression and art of the past. Art history will be studied as it relates to curriculum and assignments.	Art 20	30
Art 30 Gr. 12 Prerequisite: Art 20 5 credits	This course calls for each student to think of him/herself as an artist in the process of developing individual style and expression in all areas of fine art including drawing, painting, sculpting, or mixed media. Application of the elements and principles of design to compositions will be required. Students will continue to analyze and critically respond to their own artistic expression. Class time will be devoted to development of personal portfolio: what is a portfolio; what goes into a portfolio; completing specific tasks to include in portfolios; submitting portfolios. Art history will be studied independent of curriculum and assignments.	Art 30	30
Second Languages			
French Second Language 10-20-30 (3 yr. program) Prerequisite: FSL10/FSL20 as required 5-credits	The program is designed to teach students how to understand what they hear and read in French and to communicate their ideas orally and in written form, using an approach that is based on real life experiences and situations.	FSL 10-20-30	30

Music Options			
<p>Jazz Band 10-20-30</p> <p>Prerequisite: General Music 10/20 as required</p> <p>(after school)</p> <p>5-credits</p>	<p>This course is for students who have at least 1 or more full years of concert band experience already. Students will continue to progress on learning the instrument they chose in band but there may be opportunity to learn additional instruments such as the Baritone Sax, String Bass and Drum set. Students who have prior skills in Electric guitar and Piano are also welcome to come join the jazz band. Concerts will be performed at Christmas, Music Festival and June. For concert purposes this group may be include grade 7-9 students.</p>	<p>FNA1425, FNA2425, FNA3425</p>	<p>30</p>
<p>Choral Music Gr. 10-12</p> <p>Prerequisite: None</p> <p>(after school)</p> <p>5 credits</p>	<p>Choral Music is an open choral program for all students in Grades 10 through 12. Auditions and previous musical experience are not required. The choir will meet after school three times a week. They perform publicly three to five times a year. If you want to learn to sing, and enjoy learning in a positive and fun atmosphere, this is the place.</p>	<p>Choral Music 10-20-30</p>	<p>30</p>
<p>Instrumental Music (Band) 10-20-30</p> <p>Prerequisite: This course is designed for students who have at least 1+ years of concert band experience.</p> <p>5 credits</p>	<p>This course is designed for students who have achieved a level of proficiency in instrumental music or who have participated in the Middle School Band Program.</p> <p>Emphasis will be placed on tone, blend, balance, technique, interpretation, theory and history. Working together as a team is stressed.</p> <p>Concerts festivals and tours are among the opportunities for students.</p> <p>Please note this is a combined course. Band is combined with Religion so that the student receives both of these subjects all year, every second day.</p>	<p>Instrumental Music 10-20-30</p>	<p>30</p>

Dual Campus Option			
<p>Dance Academy Gr. 10-12</p> <p>Prerequisite: Previous Dance Experience</p> <p>COST: TBA</p> <p>Location: 8:00 a.m. Meet in the Dance Studio at Holy Trinity High School</p> <p>Shuttle provided to Father Mercredi after class</p>	<p>Dance Academy is intended for students who desire the opportunity to advance and enhance their dance skills.</p> <p>Dancers will be exposed to a variety of dance techniques and public performance is a requirement.</p> <p>High School Dance Academy classes will be run throughout the year and will run after school.</p>	<p>FNA1425, FNA2425, FNA3425</p>	<p>30</p>
Academy Options			
<p>Academy-Golf</p> <p>Prerequisite: None</p> <p>5-8 credits</p> <p>COST: \$500 plus course fees + Clothing</p> <p>Golf Academy is after school and you must provide OWN transportation</p>	<p>This sport academy is designed to promote the development of academic, athletic and life skills. Students in this academy will experience a unique opportunity where they will not receive excellent academic instruction but will also receive skill training. This program is designed to enrich the golf instruction and skill development of players during the regular school day. Students will have the opportunity to be trained by coaches and have access to specialized equipment for fitness training and video skill analysis.</p> <p>An application process will be required with a coach's recommendation also a tuition fee of \$300 plus course fees will be required. Students are required to provide their OWN transportation as this is an after school program.</p>	<p>Level One Phy. Ed 10 (3) HSS 1010 – Health Services Foundations REC 1040 – Foundations for Training 1 REC 1050 – Sport Psychology 1 REC 2010 – Nutrition for Recreation Activities & Sport</p> <p>Level Two Phy. Ed 20 (3) REC 2040 – Foundations for Training 2 REC 2050 – Sport Psychology 2</p> <p>Level Three Phy. Ed 30 (3) REC 3050 – Sport Psychology 3 REC 3140 – Sport and Society</p>	<p>No Maximum</p>
<p>Academy-Hockey</p> <p>Prerequisite: None</p> <p>15-18 credits</p> <p>COST: \$500 per semester (Total \$1000) + Clothing</p>	<p>This sport academy is designed to promote the development of academic, athletic and life skills. Students in this academy will experience a unique opportunity where they will not receive excellent academic instruction but will also receive skill training. Program administrators and instructors realize that students have a commitment to their own hockey team. This program is designed to enrich the hockey instruction and skill development of players during the regular school day. The unique setup of the program will not interfere with the commitment a student has to his or her own team.</p> <p>Students will have the opportunity to be trained by</p>	<p>Level One Phy. Ed 10 (3) HCS 2020 – First Aid/CPR with AED HSS 1010 – Health Services Foundations Religion 15 (3) CTR 1010 – Job Preparation HCS 3000 – Workplace Safety Systems HCS 1050 – Musculoskeletal System HCS 3010 – Workplace Safety Practices REC 1020 – Injury Management 1 REC 1040 – Foundations for Training 1 REC 1050 – Sport Psychology 1 REC 2010 – Nutrition for Recreation Activities & Sport</p> <p>Level Two</p>	<p>50</p>

	<p>coaches and have access to specialized equipment for fitness training and video skill analysis.</p> <p>An application process will be required with a coach's recommendation also a tuition fee of \$1000 per player will be required to assist with program and transportation costs.</p>	<p>Phy. Ed 20 (5) Religion 25 (3) CALM 20 (3) REC 2020 – Injury Management 2 REC 2040 – Foundations for Training 2 REC 2050 – Sport Psychology 2 REC 2120 – Coaching 1</p> <p>Level Three Phy. Ed 30 (5) Religion 35 (5) CALM 20 (3) REC 3010 – Human Movement REC 3020 – Injury Management 3 REC 3050 – Sport Psychology 3 REC 3120 – Coaching 2 REC 3130 – Officiating REC 3140 – Sport and Society</p>	
<p>Academy-Baseball</p> <p>Prerequisite: None</p> <p>13-18 credits</p> <p>COST: \$500 per semester (Total \$1000) + Clothing</p>	<p>This sport academy is designed to promote the development of academic, athletic and life skills. Students in this academy will experience a unique opportunity where they will not only receive excellent academic instruction but will also receive skill training. Program administrators and instructors realize that students have a commitment to their own baseball team. This program is designed to enrich the baseball instruction and skill development of players during the regular school day. The unique setup of the program will not interfere with the commitment a student has to his or her own team.</p> <p>Students will have the opportunity to be trained by coaches and have access to specialized equipment for fitness training and video skill analysis.</p> <p>An application process will be required with a coach's recommendation also a tuition fee of \$1000 per player will be required to assist with program and transportation costs.</p>	<p>Level One Phy. Ed 10 (3) HCS 2020 – First Aid/CPR with AED HSS 1010 – Health Services Foundations Religion 15 (3) CTR 1010 – Job Preparation HCS 3000 – Workplace Safety Systems HCS 1050 – Musculoskeletal System HCS 3010 – Workplace Safety Practices REC 1020 – Injury Management 1 REC 1040 – Foundations for Training 1 REC 1050 – Sport Psychology 1 REC 2010 – Nutrition for Recreation Activities & Sport</p> <p>Level Two Phy. Ed 20 (5) Religion 25 (3) CALM 20 (3) REC 2020 – Injury Management 2 REC 2040 – Foundations for Training 2 REC 2050 – Sport Psychology 2 REC 2120 – Coaching 1</p> <p>Level Three Phy. Ed 30 (5) Religion 35 (5) CALM 20 (3) REC 3010 – Human Movement REC 3020 – Injury Management 3 REC 3050 – Sport Psychology 3 REC 3120 – Coaching 2 REC 3130 – Officiating REC 3140 – Sport and Society</p>	<p>No Maximum</p>

<p>Academy-Soccer</p> <p>Prerequisite: None</p> <p>15-18 credits</p> <p>COST: \$500 + Clothing</p>	<p>This sport academy is designed to promote the development of academic, athletic and life skills. Students in this academy will experience a unique opportunity where they will not only receive excellent academic instruction but will also receive skill training. Program administrators and instructors realize that students have a commitment to their own soccer team. This program is designed to enrich the soccer instruction and skill development of players during the regular school day. The unique setup of the program will not interfere with the commitment a student has to his or her own team.</p> <p>Students will have the opportunity to be trained by coaches and have access to specialized equipment for fitness training and video skill analysis.</p> <p>An application process will be required with a coach's recommendation also a tuition fee of \$500 per player will be required to assist with program and transportation costs.</p>	<p>Level One Phy. Ed 10 (5) CCS 1080 – Community Volunteerism 1 REC 1020 – Injury Management 1 REC 1040 – Foundations for Training 1 REC 1050 – Sport Psychology 1 HSS 1080 – Leadership Fundamentals CCS 1910 – CCS Project A REC 1910 – REC Project A</p> <p>Level Two Phy. Ed 20 (5) CCS 2080 – Community Volunteerism 2 REC 2010 – Nutrition for Recreation Activities & Sport REC 2040 – Foundations for Training 2 REC 2120 – Coaching 1 REC 2050 – Sport Psychology 2 REC 2910 – REC Project B HSS 2080 – Leadership Fundamentals 2</p> <p>Level Three Phy. Ed 30 (5) CCS 3080 – Community Enhancement CCS 3910 – CCS Project D REC 3050 – Sport Psychology 3 REC 3130 – Officiating REC3910 – REC Project D HSS 3080 – Leadership Fundamentals 3</p>	<p>No Maximum</p>
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<p>Academy-Cheerleading</p> <p>Prerequisite: None</p> <p>15-18 credits</p> <p>COST: \$500 per semester (Total \$1000) + Clothing</p>	<p>This sport academy is designed to promote the development of academic, athletic and life skills. Students in this academy will experience a unique opportunity where they will not only receive excellent academic instruction but will also receive skill training. Program administrators and instructors realize that students have a commitment to their cheerleading squad.</p> <p>This program is designed to enrich the cheerleading instruction and skill development of students during the regular school day.</p> <p>Students will have the opportunity to be trained by coaches with a background in this area. An application process will be required with a coach's recommendation.</p> <p>A tuition fee of \$1000 per student will be required to assist with program and transportation costs. There will also be fundraising expectation with this academy.</p>	<p>Level One Phy. Ed 10 (3) HCS 2020 – First Aid/CPR with AED HSS 1010 – Health Services Foundations Religion 15 (3) CTR 1010 – Job Preparation HCS 3000 – Workplace Safety Systems HCS 1050 – Musculoskeletal System HCS 3010 – Workplace Safety Practices REC 1020 – Injury Management 1 REC 1040 – Foundations for Training 1 REC 1050 – Sport Psychology 1 REC 2010 – Nutrition for Recreation Activities & Sport</p> <p>Level Two Phy. Ed 20 (5) Religion 25 (3) CALM 20 (3) REC 2020 – Injury Management 2 REC 2040 – Foundations for Training 2 REC 2050 – Sport Psychology 2 REC 2120 – Coaching 1</p> <p>Level Three Phy. Ed 30 (5) Religion 35 (5) CALM 20 (3) REC 3010 – Human Movement REC 3020 – Injury Management 3 REC 3050 – Sport Psychology 3 REC 3120 – Coaching 2 REC 3130 – Officiating REC 3140 – Sport and Society</p>	<p>18</p>
<p>Swim Academy Gr 10-12</p> <p>Prerequisite: None</p> <p>15-18 credits</p> <p>COST: \$500 per semester (Total \$1000) + Clothing</p>	<p>This sport academy is designed to promote the development of academic, athletic, and life skills. It can enrich the opportunity for competitive swimmers to train and excel at their level during the regular school day and free up after school time to study, participate in other sports, and volunteer.</p> <p>This will be a combination of building strong swim technique with a great cross training program for any sport along with developing swim ability for life-long health. There may be a possibility of combining with a Lifeguard Training Program.</p> <p>Students will be trained by a Level 3 (Comp dev) NCCP certified coach and have access to specialized equipment for training along with Video Analysis.</p> <p>The swimmer must be registered through "Young Aquatic Club" and Swim Alberta for Insurance reasons.</p> <p>A tuition fee of \$1000 per student (\$500/semester) will be required to assist with program and transportation costs.</p>	<p>Level One Phys. Ed 10 (5) HCS 2020 – First Aid/CPR with AED HCS 3000 – Workplace Safety Systems REC 1020 – Injury Management 1 REC 1040 – Foundations for Training 1 REC 1050 – Sport Psychology 1 REC 2010 – Nutrition for Recreation Activities & Sport</p> <p>Level Two Phys. Ed 20 (5) REC 2020 – Injury Management 2 REC 2040 – Foundations for Training 2 REC 2050 – Sport Psychology 2 REC 2120 – Coaching 1</p> <p>Level Three Phys. Ed 30 (5) REC 3010 – Human Movement REC 3020 – Injury Management 3 REC 3050 – Sport Psychology 3 REC 3120 – Coaching 2 REC 3130 – Officiating REC 3140 – Sport and Society</p>	

