



# **Knowledge and Employability – Career and Technology Studies (CTS)**

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Available online at http://education.alberta.ca/teachers/program/know/resources.aspx.

The primary audience for this resource is:

Administrators	✓
Counsellors	✓
Parents	
Students	
Teachers	✓

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Workplace Readiness/Workplace Practicum-Career Transitions/Health Care Services

#### **PURPOSE**

This document identifies potential linkages among knowledge and employability (K&E) occupational courses and career and technology studies (CTS) courses. These linkages need to be clarified and communicated to teachers, counsellors, students, parents/guardians and school administrators. This document is designed to assist those responsible for implementing and coordinating CTS and K&E courses. The information it contains will:

- clarify how the two programs are similar and how they differ
- facilitate decision making related to (1) student placement and (2) course delivery.
- 1. Student Placement: Should students be placed in a K&E occupational course or in a general secondary program that emphasizes CTS? What are the most appropriate transition points for those students enrolled in K&E courses who are able to meet the competencies defined in selected occupational areas/courses in the CTS curriculum?

#### **K&E Courses**

- K&E courses are designed for students who:
  - have demonstrated and/or expressed a desire to enter the workplace after completing a Certificate of High School Achievement rather than achieving an Alberta High School Diploma
  - have expressed goals that include succeeding in school to become better prepared for the workplace
  - achieve success through experiential learning activities that:
    - o focus on reading, writing, mathematical literacy and employability skills in occupational contexts
    - o provide practical applications and connections to the home, community and workplace.

#### **Placement Criteria**

- As Alberta moves toward a more inclusive educational system, more and more students with varying learning needs will be exploring the potential of different programs and courses.
   Although individual school authorities may have their own enrollment criteria, any student should have access to the school programs or courses that best meet his or her learning needs.
- The student is a minimum age of 12 years 6 months upon enrollment.
- Consultation with the student, the student's parents/guardians, teachers, counsellors and other staff:
  - to discuss the philosophy, goals and nature of the courses
  - to discuss attainable transitions to secondary, post-secondary and workplace opportunities
  - to create a written plan that clearly states the student's goals AND maps and tracks courses needed to achieve those goals.
- Annual written consent required of the student and, if the student is under the age of 16 years, parents/guardians.

2. **Course Delivery**: If students taking CTS courses and K&E occupational courses are included in the same class, how can teachers effectively deliver them concurrently?

Knowledge and employability includes three sequences of 5-credit occupational courses. Students progress through the courses in a sequence and may combine courses across sequences to increase the depth of their knowledge.

The 10-level course is a prerequisite for any of the 20-level courses. The 20-level course in each sequence is a prerequisite for the 30-level course in that sequence.

The occupational courses may be offered in a variety of learning environments that range from a classroom in a school to a business/industry work site. The courses offer a balance between school-based and work-based learning that provides options for students to enter the workplace or to pursue post-secondary education or training.

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#### **BACKGROUND**

The Integrated Occupational Program (IOP) was implemented in Alberta junior and senior high schools in 1991. IOP was replaced with K&E courses in September of 2006. K&E occupational courses are designed for students who need unique learning support systems.

CTS is an optional program offered at both junior and senior high schools across the province. CTS is a complementary program from which schools can design programs by selecting 1-credit courses from 28 occupational areas.

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#### PROGRAM COMPARISON

CTS and K&E courses should be compared primarily within the context of the K&E occupational courses. The following chart identifies which K&E occupational courses connect with 16 of the 28 CTS occupational areas. Note that this comparison is based on the learning outcomes established in the K&E programs of study.

#### **K&E Alignment with CTS**

NOC Career Cluster	CTS Career Cluster	CTS Occupational Area	Related K&E Occupational Courses
NOC 1: Business, Finance and Administration Occupations	Business, Administration, Finance & Information	<ul> <li>Computing Science (CSE)</li> <li>Enterprise &amp; Innovation (ENT)</li> <li>Financial Management (FIN)</li> <li>Information Processing (INF)</li> </ul>	Business Services
NOC 2: Natural and Applied Sciences and Related Occupations	Natural Resources (NAT)	<ul> <li>Management &amp; Marketing (MAM)</li> <li>Networking (NET)</li> <li>Agriculture (AGR)</li> <li>Environmental Stewardship (ENS)</li> <li>Forestry (FOR)</li> <li>Primary Resources (PRS)</li> </ul>	Art/Design and Communication
NOC 3: Health Occupations; NOC 4: Occupations in Education, Law and Social, Community and Government Services	Health, Recreation & Human Services (HRH)	Wildlife (WLD)     Community Care Services (CCS)     Cosmetology (COS)     Esthetics (EST)     Foods (FOD)     Health Care Services (HCS)     Human & Social Services (HSS)     Legal Studies (LGS)     Recreation Leadership (REC)	Human Care     Foods     Cosmetology
NOC 5: Occupations in Art, Culture, Recreation and Sport	Media, Design & Communication Arts (MDC)	Tourism (TOU)     Communication Technology (COM)     Design Studies (DES)     Fashion Studies (FAS)	Art/Design and Communication     Fabrics
NOC 6: Sales and Service Occupations	Business, Administration, Finance & Information Technology (BIT)	Computing Science (CSE)     Enterprise & Innovation (ENT)     Financial Management (FIN)     Information Processing (INF)     Management & Marketing (MAM)     Networking (NET)	<ul> <li>Business Services</li> <li>Cosmetology</li> <li>Foods</li> <li>Fabrics</li> </ul>
NOC 7: Trades, Transport and Equipment Operators and Related Occupations	Trades, Manufacturing & Transportation (TMT)	Construction (CON)     Electro-Technologies (ELT)     Fabrication (FAB)     Logistics (LOG)     Mechanics (MEC)	<ul> <li>Business Services</li> <li>Auto Mechanics</li> <li>Construction: Metal Fabrication</li> <li>Construction: Building</li> </ul>
NOC 8: Natural Resources, Agriculture and Related Production Occupations	Natural Resources (NAT)	<ul> <li>Agriculture (AGR)</li> <li>Environmental Stewardship (ENS)</li> <li>Forestry (FOR)</li> <li>Primary Resources (PRS)</li> <li>Wildlife (WLD)</li> </ul>	Horticulture     Natural Resources
NOC 9: Occupations in Manufacturing and Utilities	Trades, Manufacturing & Transportation (TMT)	<ul> <li>Construction (CON)</li> <li>Electro-Technologies (ELT)</li> <li>Fabrication (FAB)</li> <li>Logistics (LOG)</li> <li>Mechanics (MEC)</li> </ul>	<ul> <li>Construction: Building</li> <li>Fabrics</li> <li>Construction: Metal Fabrication</li> <li>Natural Resources (forestry)</li> <li>Art/Design and Communication</li> <li>Auto Mechanics</li> </ul>
		Career Transitions (CTR)     (relevant to all clusters)     HCS3000: Workplace Safety     Systems	Workplace Readiness

Some of the outcomes in the CTS Enterprise & Innovation (ENT) and Career Transitions (CTR) occupational areas are integrated within the related K&E courses.

The CTS occupational areas of Cosmetology (COS), Electro-Technologies (ELT), Environmental Stewardship (ENS), Financial Management (FIN), Health Care Services (HCS), Human & Social Services (HSS) and Wildlife (WLD) are not related to any K&E occupational course.

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#### **Program Similarities**

Both the K&E occupational courses and the CTS program are designed to:

- involve students in hands-on learning experiences
- assist students in the development of occupational competencies within a career-related context that will assist them in their transition into the workplace

Curriculum Focus	K&E	стѕ
Life Skills	✓	✓
Career Awareness/Exploration	✓	✓
Workplace Transitions (including apprenticeships)	✓	✓
Post-secondary Transitions (including related university, college and technical programs)	minimal	✓

provide opportunities for students to explore a variety of career pathways.

Knowledge and Employability	Career and Technology Studies
Employability Competencies  work skills organizational skills workplace performance positive workplace attitudes managing transitions personal management	Basic Competencies
working with others	<ul> <li>be responsible</li> <li>be adaptable</li> <li>learn continuously</li> <li>work safely</li> <li>work with others</li> <li>participate in projects and tasks</li> </ul>

#### **Program Differences**

The following charts outline some of the ways in which the K&E and CTS programs differ.

#### **Student Placement**

	Knowledge and Employability	Career and Technology Studies
Grade Levels*	specific curriculum designed for grades 8–12	designed around levels, not grades— introductory, intermediate, advanced
Learning Experiences	practical and experiential learning experiences	practical, experiential and abstract learning experiences
Expectations for Student Performance	<ul> <li>Students will be expected to demonstrate generic skills within an occupational context with limited emphasis on theory.</li> <li>Grading merges student ability and effort.</li> </ul>	<ul> <li>Students must demonstrate a set of competencies to a specified standard, based on workplace and post-secondary expectations.</li> <li>Grading only occurs after the minimum competencies have been met.</li> </ul>

For a detailed profile of a student enrolled in K&E courses, refer to the <u>Knowledge and Employability Courses Handbook, Grades 8–12</u>.

\* Until September 2014, when the new career and technology foundations curriculum for grades 5 to 9 is scheduled for implementation, schools offering career and technology studies (CTS) as one of their provincially authorized optional courses can continue to use Introductory level courses from the CTS senior high school program of studies.

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#### **Course Delivery**

	Knowledge and Employability	Career and Technology Studies
On-campus Learning Experiences	Most programs will be delivered on-campus, depending on school facilities and enrollments.	Most programs will be delivered on-campus, depending on school facilities and enrollments.
Off-campus Learning Experiences	<ul> <li>Community partnerships are an integral component in the delivery of occupational courses (may include off-campus learning, job shadowing and guest speakers).</li> <li>Courses may be delivered through an off-campus placement (e.g., Workplace Readiness 10-4; Workplace Practicum 20-4 and Workplace Practicum 30-4) and a 30-level off-campus course is required for the Certificate of High School Achievement.</li> </ul>	Off-campus learning can be used to deliver competencies outlined in the courses.

#### **Funding**

	Knowledge and Employability	Career and Technology Studies
Senior High School	K&E senior high school occupational courses are 5 credits and are funded at the Tier 1 Credit Enrollment Unit (CEU) rate.	CTS credits earned at the senior high school level are funded at the Tier 1, 2 or 3 CEU rate depending on the occupational area.

For more information, see the Funding Manual for School Authorities.

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#### CONSIDERATIONS FOR STUDENT TRANSITIONS

The following considerations will help identify which students enrolled in K&E courses are most likely to achieve success in making the transition from K&E occupational courses to CTS courses and what strategies will support that transition.

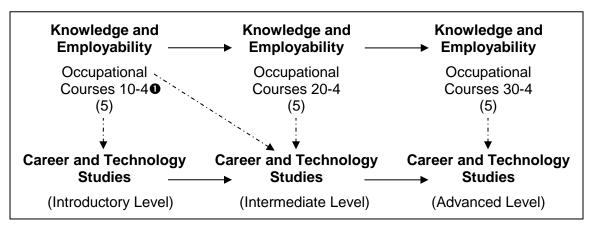
#### **Indicators of Success**

Many students make the transition from K&E to CTS after they have completed their Grade 11 or Grade 12 K&E courses and are working toward earning an Alberta High School Diploma. A key indicator of success is students' performance in the K&E academic courses. Students who demonstrate high levels of success in K&E language arts, mathematics, science and social studies are likely to:

- meet the increased requirements of the CTS program in reading, writing, making calculations and taking measurements
- understand and apply the theory that is fundamental to technical processes.

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### Transfer Points (Recommended) and Course Sequences Knowledge and Employability Occupational Courses to Career and Technology Studies Courses



• Transfer from a 10-4 K&E occupational course directly to an intermediate level CTS course may be considered where there is content relevancy and prerequisite requirements are met.

#### Integrating K&E and CTS

Some students enrolled in K&E courses may be able to achieve success in selected CTS courses; programming can be planned accordingly.

Program Planning Options	Courses	Credential Received
Students enrolled in K&E courses take a combined K&E/CTS program.	<ul><li>K&amp;E courses academic courses</li><li>CTS courses</li></ul>	Certificate of High School Achievement
Students enrolled in K&E courses may move from K&E (either before or after earning a Certificate of High School Achievement) to a general high school program that emphasizes CTS.	<ul> <li>Academic requirements for an Alberta High School Diploma</li> <li>CTS courses</li> </ul>	Alberta High School Diploma

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#### **Learning Environment**

Teachers can help students make a successful transition to CTS by recognizing that the student enrolled in K&E courses may need help in adjusting to a different learning environment. In general, the K&E courses learning environment may be characterized by:

- smaller class sizes, allowing teachers to provide students with individual assistance in building self-esteem and developing specific competencies
- hands-on learning, with minimal reference to occupation-related theory
- the recognition of students' ability to demonstrate practical skills necessary for success in the specified occupational area
- the awarding of grades based on generic skills development, rather than for the equivalent career-specific competencies in CTS courses.

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#### CONSIDERATIONS FOR CONCURRENT PROGRAM DELIVERY

Some schools schedule students enrolled in K&E and CTS courses in the same time block and facility. In such circumstances, the following considerations may assist students enrolled in K&E courses in achieving success and assist teachers in managing any challenges these students face.

- Use a combination of CTS and K&E curriculum and learning resources to deliver the required outcomes.
- Clarify each program's expectations for student performance. Students enrolled in K&E
  courses are assessed primarily on their ability to demonstrate generic skills in careerspecific contexts. Students enrolled in CTS courses are assessed on their ability to
  demonstrate a set of career-specific competencies to a specified standard.
- Assist students enrolled in K&E courses in developing academic competencies in the areas
  of language arts and mathematics.
- Recognize that students enrolled in K&E courses may require more practice.

### KNOWLEDGE AND EMPLOYABILITY – CAREER AND TECHNOLOGY STUDIES CONNECTIONS CHARTS

The following charts identify the CTS occupational areas/courses in which students enrolled in K&E courses will most likely be successful in transferring the skills they have developed through the occupational courses at the 10-4, 20-4 and 30-4 levels. *They do not indicate equivalency*. Students enrolled in K&E courses wishing to receive credit in CTS courses must meet all outcomes set for each CTS course.

Assessment of the prior learning of students enrolled in K&E courses results in better identification of these students' K&E entry-level knowledge, skills and attitudes as they relate to the CTS general outcomes. The levels of competency of students enrolled in K&E courses can be assessed using the challenge provision outlined in the *Guide to Education: ECS to Grade 12*.

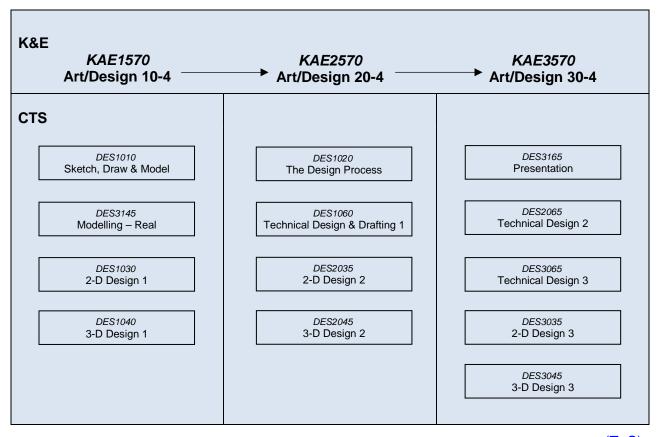
The following charts can also help teachers who run concurrent K&E/CTS programs to plan appropriately to meet the needs of students in each program.

The CTS courses specified in these charts:

- include concepts introduced within the related K&E occupational courses
- emphasize considerable hands-on learning with limited emphasis on theory
- support workplace entry.

**Note:** Students who wish to make the transition to CTS courses should be informed of program differences in expectations and learning environments.

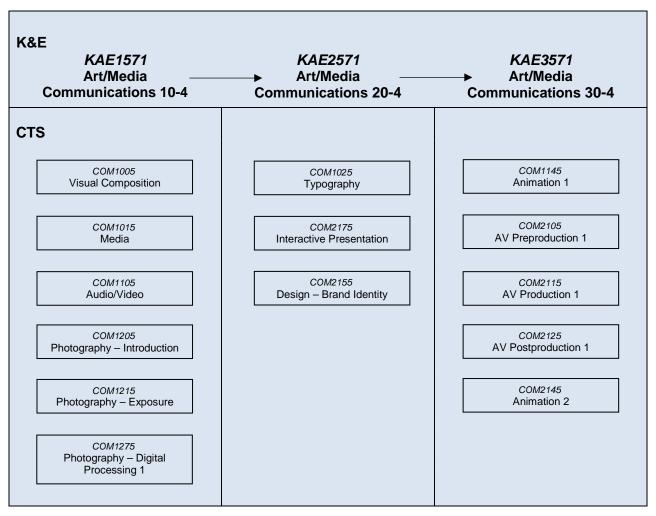
#### **K&E Art/Design and CTS Design Studies**



DES = Design Studies (CTS) (ToC)

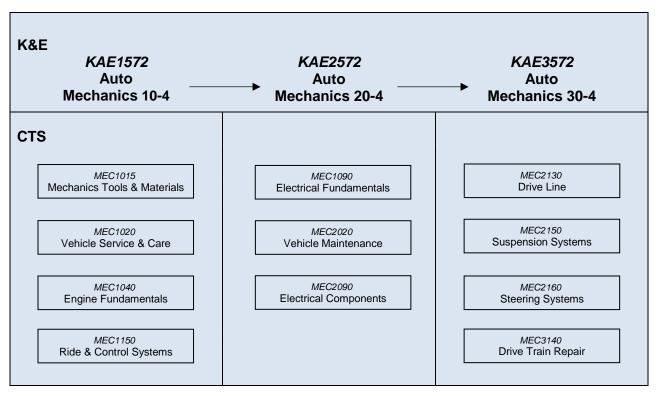
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#### **K&E Art/Media Communications and CTS Communication Technologies**



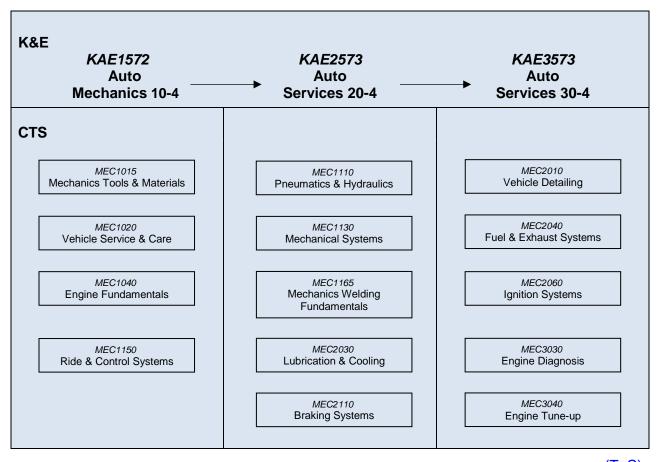
COM = Communication Technologies (CTS)

#### **K&E Auto Mechanics and CTS Mechanics**

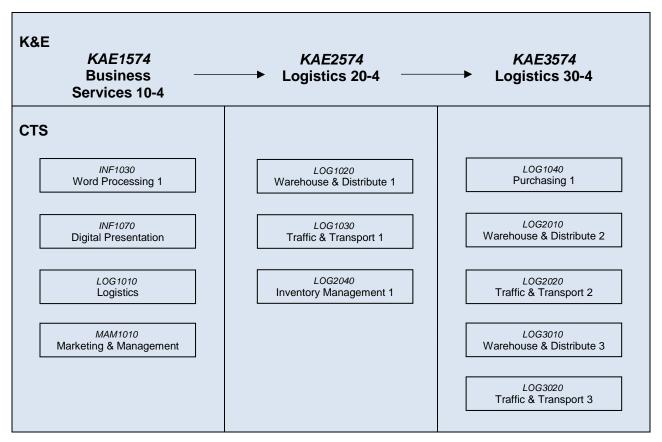


MEC = Mechanics (CTS) (ToC)

#### **K&E Auto Mechanics/Auto Services and CTS Mechanics**

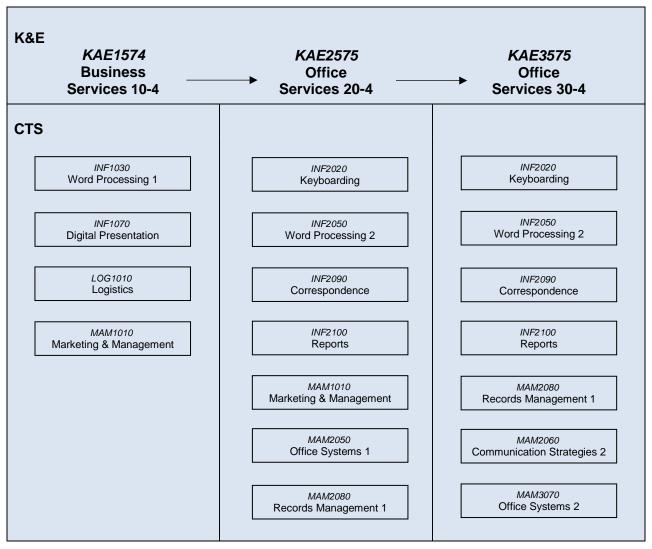


#### K&E Business Services/Logistics and CTS Logistics/Information Processing



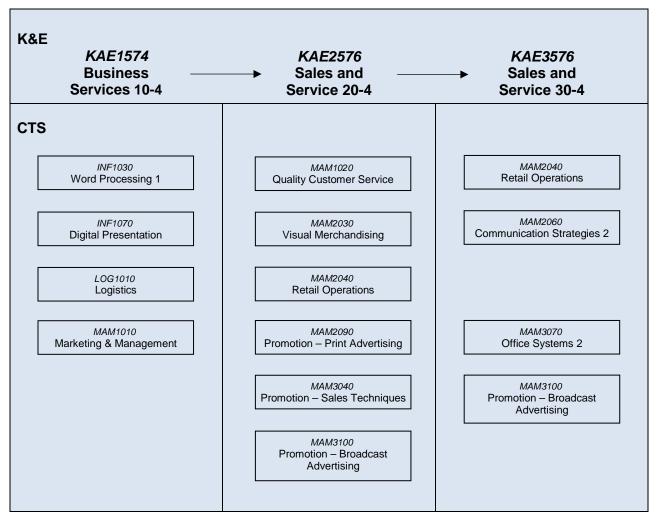
INF = Information Processing (CTS) LOG = Logistics (CTS) MAM = Management & Marketing (CTS)

### K&E Business Services/Office Services and CTS Information Processing/Management & Marketing/Logistics



INF = Information Processing (CTS) LOG = Logistics (CTS) MAM = Management & Marketing (CTS)

### K&E Business Services/Sales and Service and CTS Information Processing/Management & Marketing



INF = Information Processing (CTS) LOG = Logistics (CTS) MAM = Management & Marketing (CTS)

#### **K&E Construction: Building/Woodworking and Cabinetry and CTS Construction**

K&E  KAE1577  Construction:  Building 10-4	KAE2577 —▶ Woodworking and ——— Cabinetry 20-4	<i>KAE3577</i> ——▶ Woodworking and Cabinetry 30-4
тѕ		
CON1010 Construction Tools & Materials	CON1120 Product Management	CON1120 Product Management
CON1070 Building Construction	CON1130 Solid Stock Construction	CON3120 Tool Maintenance
	CON1140 Turning Operations	CON3130 Furniture – Leg & Rail
	CON1160 Manufactured Materials	CON3140 Furniture – Surface Enhancement
	CON2150 Finishing & Refinishing	CON3150 Furniture Repair
	CON2200 Product Development  CON3120 Tool Maintenance	CON3160 Cabinetmaking – Cabinets/Countertops
	CON2130 Furniture – Box Construction	CON3170 Cabinetmaking – Layout & Installation
	CON2140 Furniture – Frame & Panel	CON3190 Production Planning  CON3200
	CON2160 Cabinetmaking – Web & Face Frame	Production Management
	CON2170 Cabinetmaking – Door & Drawer	

CON = Construction (CTS)

#### **K&E Construction: Building/Wood Frame Construction and CTS Construction**

KAE1577 Construction: Building 10-4	KAE2578 → Wood Frame —— Construction 20-4	KAE3578 → Wood Frame Construction 30-4
CTS		
CON1010 Construction Tools & Materials	CON1120 Product Management	CON1120 Product Management
CON1070 Building Construction	CON2010 Site Preparation	CON2100 Agri-structures
	CON2020 Concrete Forming	CON3030 Wall & Ceiling Finishing
	CON2030 Alternative Foundations	CON3060 Doors & Trim
	CON2035 Framing Systems – Floor	CON3070 Floorcovering
	CON2045 Framing Systems – Wall	CON3080 Energy-efficient Housing
	CON2050 Roof Structures 1	CON3110 Site Management
	CON2060 Doors, Windows & Siding	CON3120 Tool Maintenance
	CON2100 Agri-structures	CON3190 Production Planning
	CON3050 Roof Structures 2	CON3200 Production Management
	CON3110 Site Management	
	CON3120 Tool Maintenance	
	CON3210 Framing Systems – Advanced	

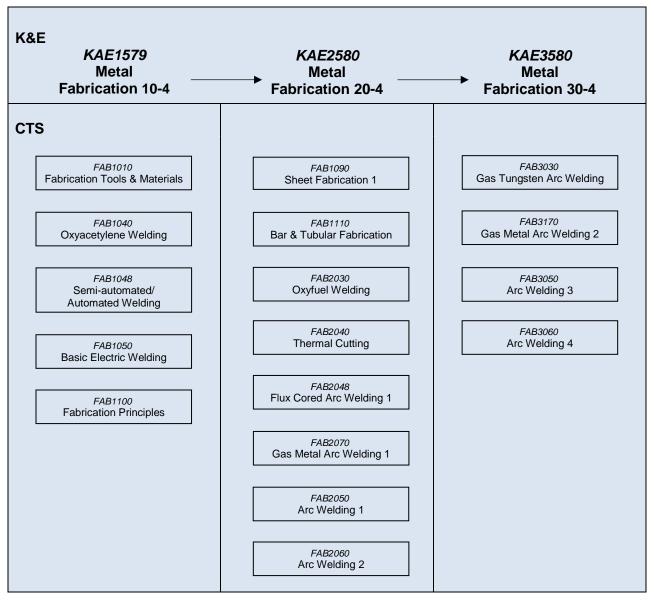
CON = Construction (CTS)

#### **K&E Construction: Metal Fabrication/Construction Systems and CTS Construction**

K&E  KAE1579  Metal  Fabrication 10-4	KAE2579  → Construction Systems 20-4	KAE3579  → Construction Systems 30-4
стѕ		
There are no CTS courses in the Construction occupational area that align with KAE1579	CON1070 Building Construction	CON1070 Building Construction
Construction: Metal Fabrication 10-4; however, Construction Tools & Materials (CON1010) is the prerequisite course for	CON1120 Product Management	CON1120 Product Management
the Construction occupational area.	CON1180 Mould Making & Casting	CON1180  Mould Making & Casting
	CON2010 Site Preparation	CON2070 Electrical Systems
	CON2020 Concrete Forming	CON2080 Plumbing Systems
	CON2070 Electrical Systems	CON2090 Climate Control Systems
	CON2080 Plumbing Systems	CON2120 Multiple Materials
	CON2090 Climate Control Systems	CON3010 Concrete – Structures & Finishes
	CON2120 Multiple Materials	CON3020 Masonry Work – Structures & Finishes
	CON3010 Concrete – Structures & Finishes	CON3110 Site Management
	CON3020 Masonry Work – Structures & Finishes	CON3120 Tool Maintenance
	CON3110 Site Management	CON3190 Production Planning
		CON3200 Production Management

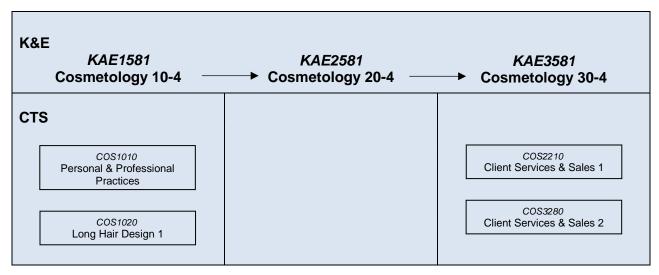
CON = Construction (CTS)

#### **K&E Construction: Metal Fabrication and CTS Fabrication**



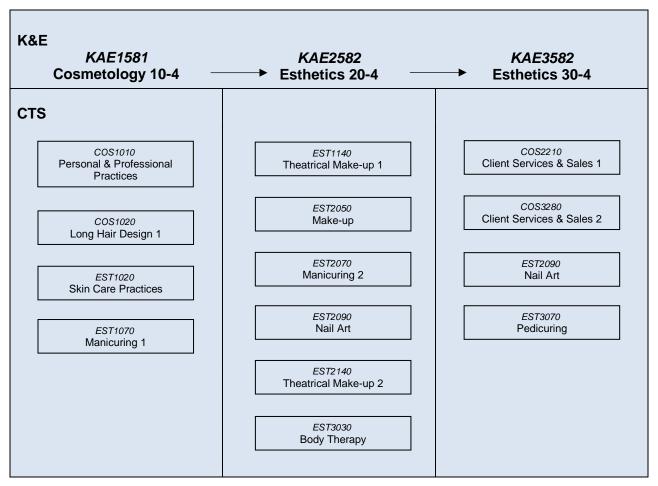
FAB = Fabrication (CTS) (ToC)

#### **K&E Cosmetology and CTS Cosmetology**



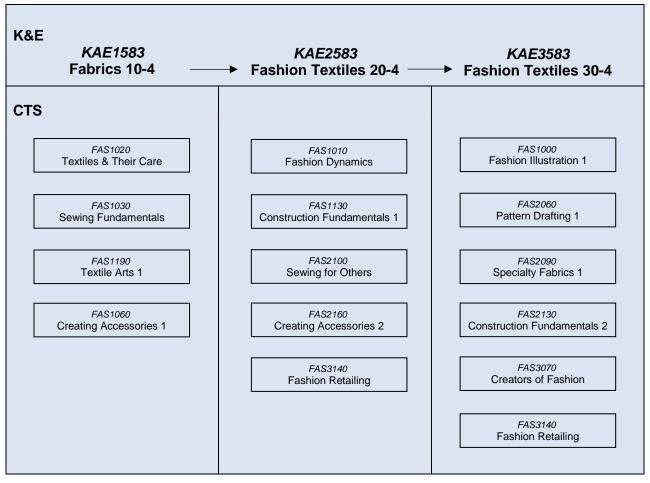
COS = Cosmetology (CTS)

#### K&E Cosmetology/Esthetics and CTS Cosmetology/Esthetics



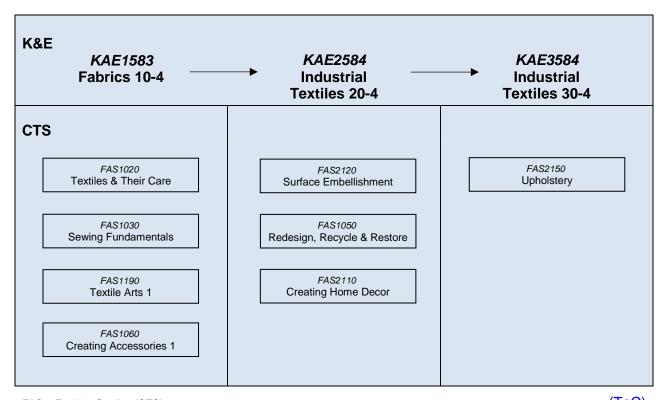
COS = Cosmetology (CTS) EST = Esthetics (CTS)

#### **K&E Fabrics/Fashion Textiles and CTS Fashion Studies**



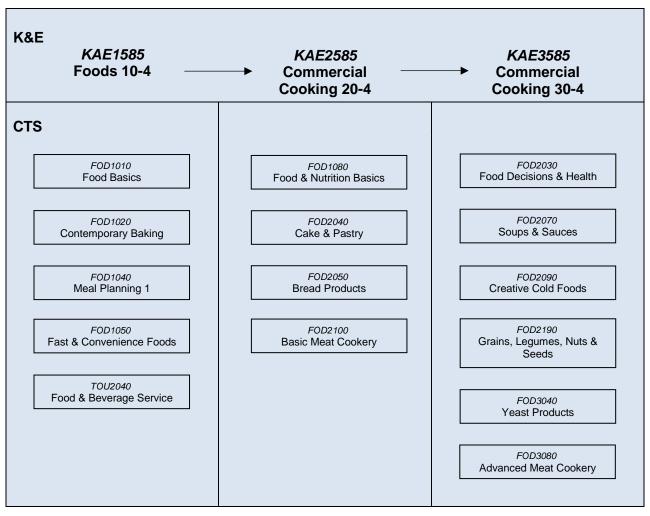
FAS = Fashion Studies (CTS) (ToC)

#### K&E Fabrics/Industrial Textiles and CTS Fashion Studies



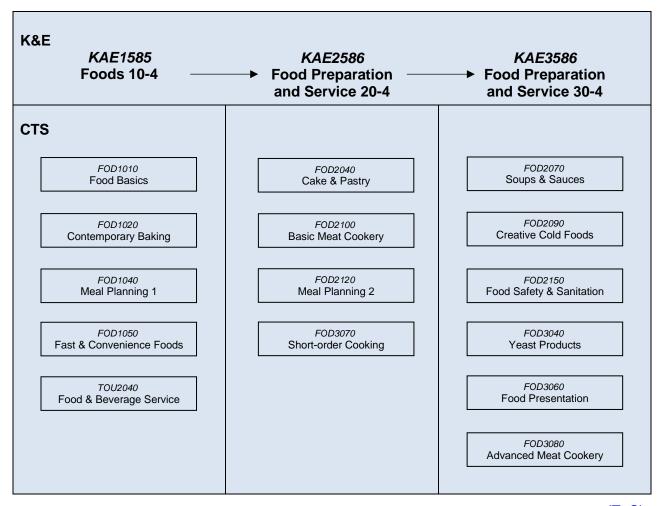
FAS = Fashion Studies (CTS)

#### **K&E Foods/Commercial Cooking and CTS Foods/Tourism**



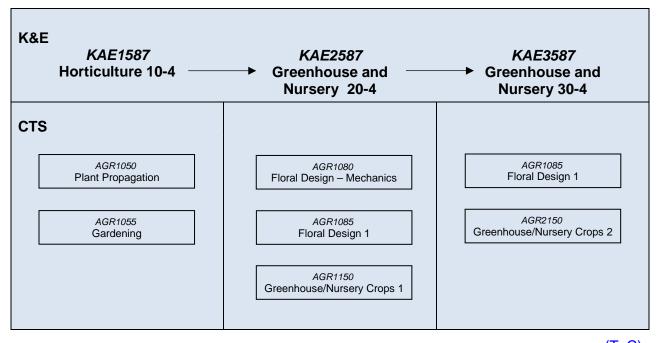
FOD = Foods (CTS) TOU = Tourism (CTS)

#### **K&E Foods/Food Preparation and Service and CTS Foods/Tourism**



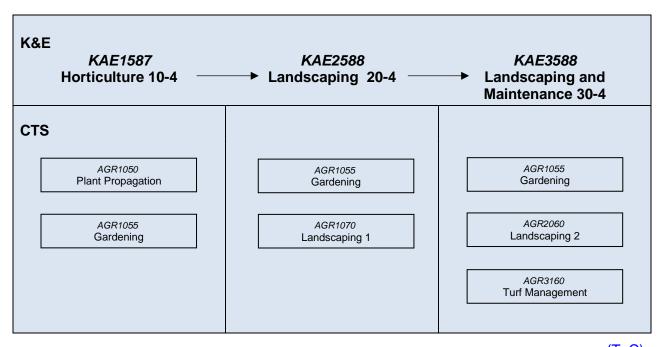
FOD = Foods (CTS) TOU = Tourism (CTS)

#### **K&E Horticulture/Greenhouse and Nursery and CTS Agriculture**



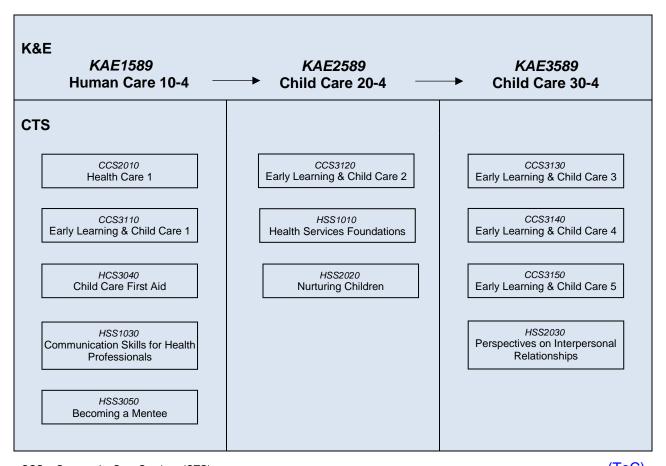
AGR = Agriculture (CTS)

#### **K&E Horticulture/Landscaping and Maintenance and CTS Agriculture**



AGR = Agriculture (CTS) (ToC)

### K&E Human Care/Child Care and CTS Community Care Services/Health Care Services/Human & Social Services

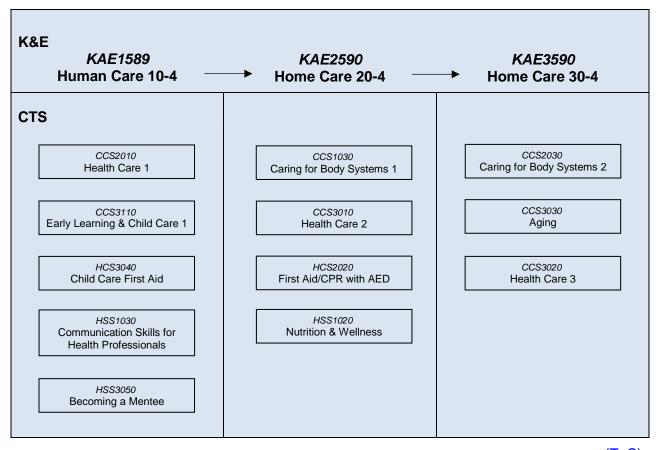


CCS = Community Care Services (CTS)

HCS = Health Care Services (CTS)

HSS = Human & Social Services (CTS)

### K&E Human Care/Home Care and CTS Community Care Services/Health Care Services/Human & Social Services

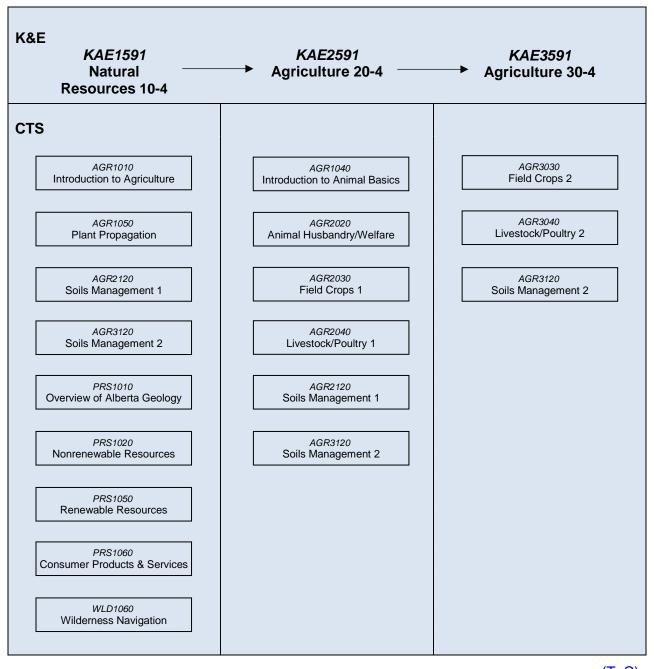


CCS = Community Care Services (CTS)

HCS = Health Care Services (CTS)

HSS = Human & Social Services (CTS)

#### K&E Natural Resources/Agriculture and CTS Agriculture/Primary Resources/Wildlife

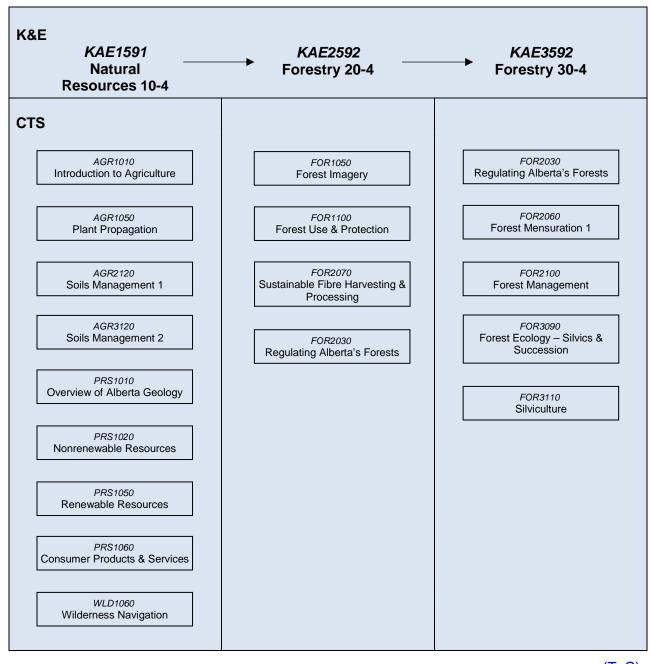


AGR = Agriculture (CTS)

PRS = Primary Resources (CTS)

WLD = Wildlife (CTS)

#### K&E Natural Resources/Forestry and CTS Agriculture/Forestry/ Primary Resources/Wildlife



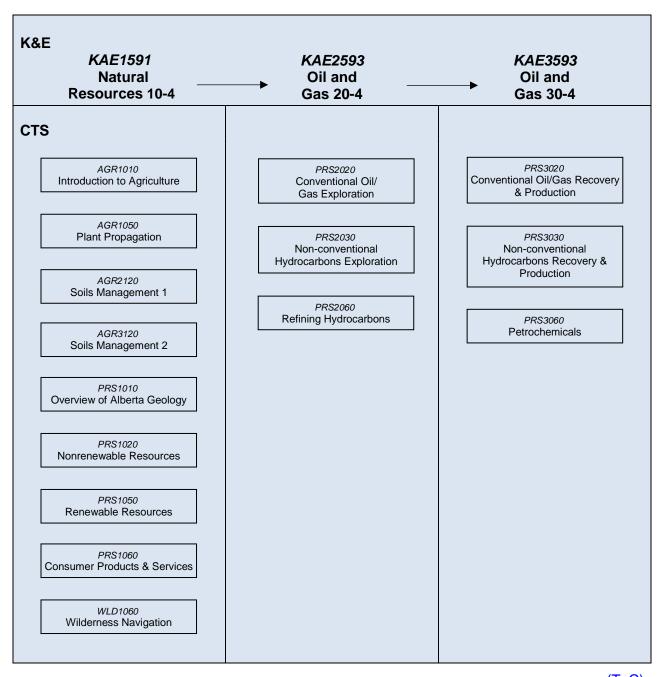
AGR = Agriculture (CTS)

FOR = Forestry (CTS

PRS = Primary Resources (CTS)

WLD = Wildlife (CTS)

#### K&E Natural Resources/Oil and Gas and CTS Agriculture/Primary Resources/Wildlife

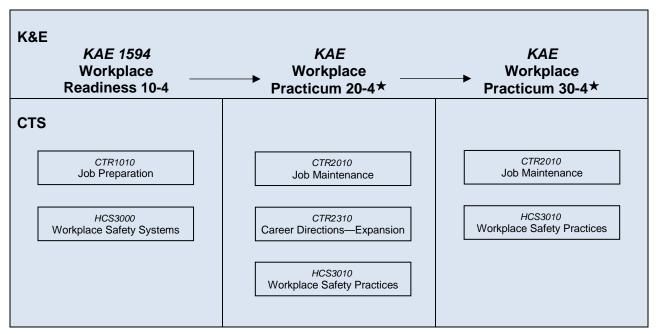


AGR = Agriculture (CTS)

PRS = Primary Resources (CTS)

WLD = Wildlife (CTS)

#### K&E Workplace Readiness/Workplace Practicum and CTS Career Transitions/ Health Care Services



CTR = Career Transitions (CTS) HCS = Health Care Services (CTS) (ToC)

★ KAE2594 Workplace Practicum 20-4A KAE2595 Workplace Practicum 20-4B KAE2596 Workplace Practicum 20-4C KAE2597 Workplace Practicum 20-4D KAE3594 Workplace Practicum 30-4A KAE3595 Workplace Practicum 30-4B KAE3596 Workplace Practicum 30-4C KAE3597 Workplace Practicum 30-4D

# Appendix A: Knowledge and Employability Occupational Course Prerequisites

Course Code	Knowledge and Employability Courses	Prerequisites	IOP Courses Withdrawn
KAE1570	Art/Design 10-4		IOP1407 Crafts and Arts 16 IOP2407 Crafts and Arts 26 IOP3407 Crafts and Arts 36
KAE2570	Art/Design 20-4	KAE1570 IOP1407	
KAE3570	Art/Design 30-4	KAE2570 IOP2407	
KAE1571	Art/Media Communications 10-4		IOP1408 Technical Arts 16 IOP2408 Technical Arts 26 IOP3408 Technical Arts 36
KAE2571	Art/Media Communications 20-4	KAE1571 IOP1408	
KAE3571	Art/Media Communications 30-4	KAE2571 IOP2408	
KAE1572	Auto Mechanics 10-4		IOP1747 Automotive Services 16 IOP2747 Automotive Services 26 IOP3747 Automotive Services 36
KAE2572	Auto Mechanics 20-4	KAE1572 IOP1747	
KAE3572	Auto Mechanics 30-4	KAE2572 IOP2747	
KAE2573	Auto Services 20-4	KAE1572 IOP1748	IOP1748 Service Station Services 16 IOP2748 Service Station Services 26 IOP3748 Service Station Services 36
KAE3573	Auto Services 30-4	KAE2573 IOP2748	
KAE1574	Business Services 10-4		IOP1749 Warehouse Services 16 IOP2749 Warehouse Services 26 IOP3749 Warehouse Services 36
KAE2574	Logistics 20-4	KAE1574 IOP1749	
KAE3574	Logistics 30-4	KAE2574 IOP2749	
KAE2575	Office Services 20-4	KAE1574 IOP1547	IOP1547 Office Services 16 IOP2547 Office Services 26 IOP3547 Office Services 36
KAE3575	Office Services 30-4	KAE2575 IOP2547	
KAE2576	Sales and Service 20-4	KAE1574 IOP1546	IOP1546 Business Services 16 IOP2546 Business Services 26 IOP3546 Business Services 36
KAE3576	Sales and Service 30-4	KAE2576 IOP2546	

# **Appendix A: Knowledge and Employability Occupational Course Prerequisites** (continued)

Course Code	Knowledge and Employability Courses	Prerequisites	IOP Courses Withdrawn
KAE1577	Construction: Building 10-4		IOP1847 Building Services 16 IOP2847 Building Services 26 IOP3847 Building Services 36
KAE2578	Wood Frame Construction 20-4	KAE1577 IOP1847	
KAE3578	Wood Frame Construction 30-4	KAE2578 IOP2847	
KAE2577	Woodworking and Cabinetry 20-4	KAE1577 IOP1847	
KAE3577	Woodworking and Cabinetry 30-4	KAE2577 IOP2847	
KAE1579	Construction: Metal Fabrication 10-4		IOP1851 Construction Services 16 IOP2851 Construction Services 26 IOP3851 Construction Services 36
KAE2579	Construction Systems 20-4	KAE1579 KAE1577 IOP 1847 IOP1851	
KAE3579	Construction Systems 30-4	KAE2579 IOP 2851	
KAE2580	Metal Fabrication 20-4	KAE1579 IOP 1851 IOP1802	IOP1802 Agricultural Mechanics 16 IOP2802 Agricultural Mechanics 26 IOP3802 Agricultural Mechanics 36
KAE3580	Metal Fabrication 30-4	KAE2580 IOP 2851 IOP2802	
KAE1581	Cosmetology 10-4		IOP1831 Hair Care 16 IOP2831 Hair Care 26 IOP3831 Hair Care 36
KAE2581	Cosmetology 20-4	KAE1581 IOP1831	
KAE3581	Cosmetology 30-4	KAE2581 IOP2831	
KAE2582	Esthetics 20-4	KAE1581 IOP1603	IOP1603 Esthetology 16 IOP2603 Esthetology 26 IOP3603 Esthetology 36
KAE3582	Esthetics 30-4	KAE2582 IOP2603	
KAE1583	Fabrics 10-4		IOP1877 Fashion and Fabric Services 16 IOP2877 Fashion and Fabric Services 26 IOP3877 Fashion and Fabric Services 36
KAE2583	Fashion Textiles 20-4	KAE1583 IOP1877	
KAE3583	Fashion Textiles 30-4	KAE2583 IOP2877	
KAE2584	Industrial Textiles 20-4	KAE1583	
KAE3584	Industrial Textiles 30-4	KAE2584	

# **Appendix A: Knowledge and Employability Occupational Course Prerequisites** (continued)

Course Code	Knowledge and Employability Courses	Prerequisites	IOP Courses Withdrawn
KAE1585	Foods 10-4		IOP1632 Commercial Food Preparation 16 IOP2632 Commercial Food Preparation 26 IOP3632 Commercial Food Preparation 36
KAE2585	Commercial Cooking 20-4	KAE1585 IOP1632	
KAE3585	Commercial Cooking 30-4	KAE2585 IOP2632	
KAE2586	Food Preparation and Service 20-4	KAE1585 IOP1633	IOP1633 Food Services 16 IOP2633 Food Services 26 IOP3633 Food Services 36
KAE3586	Food Preparation and Service 30-4	KAE2586 IOP2633	
KAE1587	Horticulture 10-4		IOP1915 Horticultural Services 16 IOP2915 Horticultural Services 26 IOP3915 Horticultural Services 36
KAE2587	Greenhouse and Nursery 20-4	KAE1587 IOP1915	
KAE3587	Greenhouse and Nursery 30-4	KAE2587 IOP2915	
KAE2588	Landscaping 20-4	KAE1587 IOP1915	
KAE3588	Landscaping and Maintenance 30-4	KAE2588 IOP2915	
KAE1589	Human Care 10-4		IOP1602 Child and Health Care 16 IOP2602 Child and Health Care 26 IOP3602 Child and Health Care 36
KAE2589	Child Care 20-4	KAE1589 IOP1602	
KAE3589	Child Care 30-4	KAE2589 IOP2602	
KAE2590	Home Care 20-4	KAE1589 IOP1602	
KAE3590	Home Care 30-4	KAE2590 IOP2602	
KAE1591	Natural Resources 10-4		IOP1801 Agricultural Production 16 IOP2801 Agricultural Production 26 IOP3801 Agricultural Production 36
KAE2591	Agriculture 20-4	KAE1591 IOP1801	
KAE3591	Agriculture 30-4	KAE2591 IOP2801	
KAE2592	Forestry 20-4	KAE1591 IOP 1941	IOP1941 Natural Resource Services 16 IOP2941 Natural Resource Services 26 IOP3941 Natural Resource Services 36
KAE3592	Forestry 30-4	KAE2592 IOP 2941	
KAE2593	Oil and Gas 20-4	KAE1591 IOP1941	
KAE3593	Oil and Gas 30-4	KAE2593 IOP2941	

# **Appendix A: Knowledge and Employability Occupational Course Prerequisites** (continued)

Course Code	Knowledge and Employability Courses	Prerequisites	IOP Courses Withdrawn
KAE1594	Workplace Readiness 10-4		
KAE2594	Workplace Practicum 20-4A	KAE1594	
KAE2595	Workplace Practicum 20-4B	KAE1594	
KAE2596	Workplace Practicum 20-4C	KAE1594	
KAE2597	Workplace Practicum 20-4D	KAE2594	
KAE3594	Workplace Practicum 30-4A	KAE2594	
KAE3595	Workplace Practicum 30-4B	KAE2594	
KAE3596	Workplace Practicum 30-4C	KAE2594	
KAE3597	Workplace Practicum 30-4D	KAE2594	

**Note:** Students may take more than one Practicum course at the 20 and 30 levels, depending on the number of prerequisite occupational courses they have completed.