



CONESTOGA

Connect Life and Learning

Conestoga College Institute of Technology and Advanced Learning College
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Final Status Report
ONCAT Project 2015-18
Pathways between Ontario Woodworking Postsecondary
Programs and Cabinetmaking Trade Curriculum
March 15, 2016

Project Overview:

Phase One – Program Mapping:

The partner institution project members visited Conestoga on December 2, 2015 to tour the woodworking facilities, discuss project expectations, and confirm timelines and individual responsibilities for gap analyses and bridge development between programs.

The partner institutions provided to Conestoga relevant program design matrices, learning outcomes, and all course outlines for applicable programs. Additionally, program maps demonstrating how the program learning outcomes are met through the individual program curriculum were supplied.

Conestoga completed a preliminary comparison of the applicable programs to determine possible pathways. In sharing their findings with the partner institutions, Conestoga made the following recommendations:

- 1) Use the MTCU framework
- 2) k of Vocational Outcomes (MTCU Descriptions 44300; 54300; 64300) to support comparison of program outcomes and curriculum mapping, given the differences in outcome statements
- 3) Use the Apprenticeship Curriculum Standard Cabinetmaker (438A) at Standard outcome and sub-outcome level for curriculum mapping to assess coverage of Apprenticeship curriculum provided by the 1, 2 and 3 year programs.
- 4) Discuss differences in admission requirements if relevant to the pathways

Phase Two – Gap Analysis:

Conestoga completed a comprehensive gap analysis for the pathways, as determined in phase one of the

project. The following is a curriculum gap analysis resulted from the comparative study of the Woodworking programs at 4 participating colleges based on two reference learning outcomes frameworks. The current (2015) version of each participating program was compared at program outcome level and course level with the other programs through the reference frameworks and where applicable, academic pathways were developed.

The following programs participated in this mapping exercise:

1. Humber College: Cabinet Making Certificate and Industrial Woodworking Technician Diploma
2. St. Clair College: Woodworking Technician Diploma
3. Georgian College: Cabinetmaking Techniques Certificate
4. Conestoga College: Woodworking Technician Diploma and Woodworking Technology Advanced Diploma

Method:

Complete information, including program design, admission requirements, program outcomes and course outlines, was collected for phase 1 of the project. The first stage of the gap analysis consisted of a comparison of program admission criteria across the participating programs. [Appendix D](#) provides the details of this comparison.

In stage two of the gap analysis, participating programs were compared at the program vocational learning outcomes level and at course level. Learning outcomes from each program were compared within two available frameworks.

- The first framework used in this analysis consists of the Ministry of Training, Colleges and Universities (MTCU) program descriptions number 44300, 54300, and 64300. These descriptions provide the validated program vocational learning outcomes. The matrices in [Appendix A](#) reflect the way each of the programs at the participating colleges meet the MTCU validated program outcomes through local program outcome and courses.
- The second framework used in this analysis consists of the Cabinetmaking Apprenticeship Standard 438A issued in May 2010 by the Ontario College of Trades (OCOT). Each program was mapped against the apprenticeship standard outcomes and sub-outcomes, at local program outcome and course level.

The gap analysis aimed to identify which MTCU vocational outcomes and Apprenticeship outcomes or sub-outcomes (if any) are not achieved through the pedagogic activities in each program. Where a local program outcome was not identified to map to the framework, the team listed the courses in the program that satisfy the identified outcome. Gaps and their remediation were assessed and documented. The results of this analysis are described below and the supporting mapping documentation is presented [Appendix E](#).

Findings:

1. Admission requirements:

There is strong alignment between the admissions requirements in the programs involved in the resulting pathways. Although Georgian is the only institution that does not require a Grade 12 Mathematics course, a 45 hour course in Mathematics in the first semester ensures students are brought to the required level for transfer into semester 2 of other Woodworking programs. This difference was not identified as a gap and no remedies were required. Please see [Appendix D](#) for further detail.

2. Program Comparison through the MTCU framework:

Overall the majority of the program outcomes in the MTCU descriptions 44300, 54300 and 64300 respectively are met by the corresponding programs. The evolution of the program curriculum and the alignment with the newer Apprenticeship standard has created, in some cases small gaps in the way the MTCU description outcomes are being met by individual programs. The details of this analysis can be found in [Table 1](#), [Table 2](#), [Table 3](#) and [Table 4](#) in [Appendix E](#). Here is a summary of this analysis:

- All programs meet all the outcomes of the MTCU description 44300. There are no gaps between the program outcomes at the Certificate level.
- The following exceptions were noted in the Diploma outcomes comparison using the 54300 MTCU description framework:
 - Outcome 15. Understand the product development process and the role of the product engineer – the role of the production engineer is not explicitly covered in St. Clair's and Humber's Diploma programs
 - Outcome 17. Evaluate, estimate repair costs and restore antique furniture – antique furniture is not a subject covered in the St. Clair and Conestoga Diploma programs


Remediation: the terms and concepts in these outcomes were deemed outdated and the group will propose the removal or upgrading of these outcomes at the next MTCU review (scheduled for 2018-2019). These outcomes were not considered essential in the development of pathways
- As expected, a certain number of the program outcomes in the Advanced Diploma MTCU description 64300 program were not covered in the Certificate or Diploma programs, only in the Advanced Diploma program:
 - Outcome 4.d. Carry out time studies and develop standard data applying the principles of work measurement.
 - Outcome 4.e. Apply the principles of methods analysis, work station efficiency, and productive work flow for typical manufacturing processes.
 - Outcome 4.f. Understand and assist in layout and materials handling analysis, equipment selection, and plant support system planning.
 - Outcome 4.g. Perform operations planning and scheduling as well as inventory and materials requirement analysis.
 - Outcome 6.b. Understand the concepts of computer-integrated manufacturing and apply the principles of computer control in the woodworking manufacturing environment.
 - Outcome 6.c. Transfer the data generated by software programs through to CNC machinery for part manufacturing.
 - Outcome 7.a. Develop a quality assurance program for wood manufacturing operation applying the principles of statistical process control.
 - Outcome 12. Apply the fundamentals of effective supervision and personnel management.
 - Outcome 13. Understand the responsibility and methods of maintaining a safe working environment.

Remediation: these gaps are covered in the courses in Year 3 of the Advanced Diploma program. The course comparison analysis supports this dimension by providing additional details in cases where the coverage is partial.


3. Program Comparison through the Apprenticeship standard framework

The vast majority of the apprenticeship standard outcomes and sub-outcomes are covered in the two and three year programs at the participating colleges. A detailed analysis was conducted, where each Apprenticeship outcome was aligned – where applicable – with a program outcome; consecutively, each component sub-outcome was mapped to courses in the program that support them. The detail analysis for each program is presented below. Due to the large volume of information contained in these tables, e.g. all the outcomes and sub outcomes of the Apprenticeship standard and the courses that support them for each of the programs, the information is embedded as Excel spreadsheets as opposed to Word tables.


- The following exceptions were noted:
 - i. St. Clair College – Woodworking Technician Diploma
 - 1. S1471.1 Stationary Machines: 1.4; 1.5; 1.6

2. S1475.3 Cost Estimating: 3.3
 3. S1477.2 Woodworking Shop Productivity and Efficiency: 2.2; 2.3; 2.4; 2.5
 4. S1478.1 Cabinet Design: 1.3; 1.4
 5. S1478.2 Materials Selection: 2.3
 6. S1478.4 Cabinet/Furniture Construction: 4.4
 7. S1478.5 Quality Assurance: 5.1; 5.2; 5.4; 5.5
 8. S1478.6 Packing and Shipping: 6.1; 6.2; 6.3; 6.4; 6.5
 9. S1480.1 Site Safety and Environment: 1.2
 10. S1480.3 Windows, Doors and Stairs: 3.4
- ii. Humber College Industrial Woodworking Technician Diploma
 1. S1478.5 Quality Assurance: 5.2; 5.6
 2. S1478.6 Packing and Shipping: 6.1; 6.2; 6.3; 6.4; 6.5 - will cover in next iteration
 3. S1480.1 Site Safety and Environment: 1.2 - will cover in next iteration;
 - iii. Georgian College Cabinetmaking Techniques Certificate
 1. S1461.2 General Safety Standards: 2.3; 2.8
 2. S1468.2 Cutting Tool Performance: 2.2
 3. S1478.5 Quality Assurance: 5.4
 4. S1478.6 Packing and Shipping: 6.1; 6.2; 6.5
 - iv. Conestoga College Woodworking Technician and Technology – all sub-outcomes are covered
- The analysis indicated that certain sub outcomes are not explicitly covered at course outcome level, although the overall student learning ensures the outcome is being met. A detailed presentation of the analysis for each institution is available in the following, embedded spreadsheets:
- 


Conestoga
Woodworking Tech



Humber
Woodworking Tech



Georgian
Cabinetmaking Tech



StClair
Woodworking Tech
- Where applicable the course review process will strive to incorporate more explicitly the apprenticeship sub-outcomes currently marked as “not covered”.
 - Overall, it is evident that the two and three year programs facilitate the accomplishment of student learning outcomes from all three levels of the Apprenticeship curriculum standard; in the case of Georgian College, the Apprenticeship Standard Levels I and II sub-outcomes are covered well.
 - As a result the group would like to explore the creation of a pathway that would allow graduates of the diploma or advanced diploma programs to be exempt from the in-school portion of all three levels of the Cabinetmaking apprenticeship, and graduates from Georgian’s Certificate program to be exempt from Level I and Level II. This process requires further exploration with the appropriate branch at MTCU and Ontario College of Trades.

Recommendations:

The pathways established through these process fall into two main categories: mid-stream pathways, mostly from Semester 1 of one program to Semester 2 of another program, of equal or higher credential level; and pathways for graduates of a 1 year program into the 2 and 3 year programs. Each pathway was analyzed at outcome, course design and practical project level, and in some cases instead of a bridging course, the receiving institution indicated that the interview with the program coordinator will provide information about the student level of outcome accomplishment. As such, no bridging is required for the programs in this situation, however the transferring student might be asked to sit for an evaluative computer test or complete a project.

A second recommendation that resulted from this project is that a better alignment of the vocational outcomes can be accomplished through an update process similar to the MTCU Standard Review or Development process. The three MTCU descriptions: 44300, 54300, and 64300 are scheduled for review and consolidation into standards in 2018. Until then, the group agreed that outcomes review as a result of internal program reviews activities will be communicated to the partners in pathways and will ensure pathway integrity. The outcomes were not reviewed at this time, but maintained as they are stated for 2016-2017 in MTCU documentation and at each institution as it was felt this work was outside of the current project scope.

A third recommendation stems from the established extensive coverage these programs provide for the Cabinetmaking Apprenticeship curriculum. As a result, the partner institutions would like to propose the creation of a pathway that will enable graduates of the one year Cabinetmaking Techniques Certificate (Georgian) to be exempt from the first two levels of in-school training and the graduates of the 2 and 3 year Woodworking Diplomas (Conestoga, Humber, St.Clair) to be exempt from all three levels of in-school training of the Apprenticeship program. These two pathways are not presented in the documentation attached to this report, only the evidence that supports them. Their creation would need to involve approval from Ontario College of Trades and ensure it meets the conditions set forth by this organization. The partner institutions would be interested in completing a project focused on this particular set of pathways.

The partner institutions recognize the importance of creating accessible pathways of education for students, while maintaining program integrity and providing for student success. Phase Three of the project included the development of program pathways, including bridging courses, addressing the gaps in knowledge, skills or abilities identified through the gap analysis completed in Stage Two ([Appendix A](#)).

Once the pathways were developed, the minimum GPA and other relevant eligibility standards for students seeking admission via these established pathways were determined, during a second meeting held on March 11, 2016 at Conestoga College. Also identified were the courses for which transfer credit will be granted to students entering via each established pathway, as well as the remaining courses to be completed. See [Appendix A](#) for details regarding bridging curriculum and [Appendix B](#) for complete pathway details.

Phase Three: Articulation Agreements and Final Report

Conestoga and the other 3 institutions have partnered to complete all analysis and conclusions that support the objectives of project 2015-18: Pathways between Ontario Woodworking Postsecondary Programs and Cabinetmaking Trade Curriculum, including: a curriculum and gap analysis of the pathways, a corresponding explanation of bridge curriculum and scheduling ([Appendix A](#)), required pathway documentation ([Appendix B](#)), and a detailed financial statement ([Appendix C](#)).

Complete pathway details at ontransfer.ca upon final approval of the Memorandum of Understanding and Articulation Agreements within each institution. At that time, the Credit Transfer and Registrar's Offices of the partner institutions will be appropriately informed of the new pathway details, per [Appendix B](#). The pathways will be implemented in 2017. The receiving institution specified in a given pathway will be responsible for the upload and maintenance of pathway information at ontransfer.ca.

Executive Summary:

Conestoga College ITAL (Conestoga), Georgian College, Humber College and St. Clair College (herein referred to

as the 'partner institutions') have worked in partnership to establish educational pathways between woodworking and cabinetmaking programs, including:

- Certificate to diploma and Advanced Diploma pathways
- Diploma to Diploma and Advanced Diploma pathways, and
- Mid-stream pathways for both categories above.

In total, 13 pathways were established, as follows:

- Pathway 1: Humber Cabinet Making and Humber Industrial Woodworking Technician to Conestoga Woodworking Technician and Conestoga Woodworking Technology (mid-stream)
- Pathway 2: Humber Industrial Woodworking Technician to Conestoga Woodworking Technology
- Pathway 3: Conestoga Woodworking Technician to Humber Woodworking Technician (mid-program)
- Pathway 4: Georgian Cabinetmaking Techniques to Conestoga Woodworking Technician and Conestoga Woodworking Technology
- Pathway 5: Georgian Cabinetmaking Techniques to Humber Industrial Woodworking Technician
- Pathway 6: Georgian Cabinetmaking Techniques to St.Clair Woodworking Technician
- Pathway 7: St. Clair Woodworking Technician to Georgian Cabinetmaking Techniques (mid-stream)
- Pathway 8: Humber Cabinet Maker to Georgian Cabinetmaking Techniques (mid-stream)
- Pathway 9: Humber Cabinet Maker and Humber Industrial Woodworking Technician to St.Clair Woodworking Technician (mid-stream)
- Pathway 10: St. Clair Woodworking Technician to Humber Cabinet Maker and Humber Industrial Woodworking Technician (mid-stream)
- Pathway 11: St.Clair Woodworking Technician to Conestoga Woodworking Technician (mid-stream)
- Pathway 12: St.Clair Woodworking Technician to Conestoga Woodworking Technology (mid-stream)
- Pathway 13: Conestoga Woodworking Technician to St. Clair Woodworking Technician (mid-program)

Best Practices:

Over the various phases of project 2015-18, the partner institutions identified the following best practices:

- When multiple institutions are involved, a common framework of vocational outcomes makes program comparison possible.
- For programs with a strong application and hands-on component, mapping curriculum between two institutions establishing a pathway is accomplished through a review of course outlines as well as practical projects at various stages in the program.

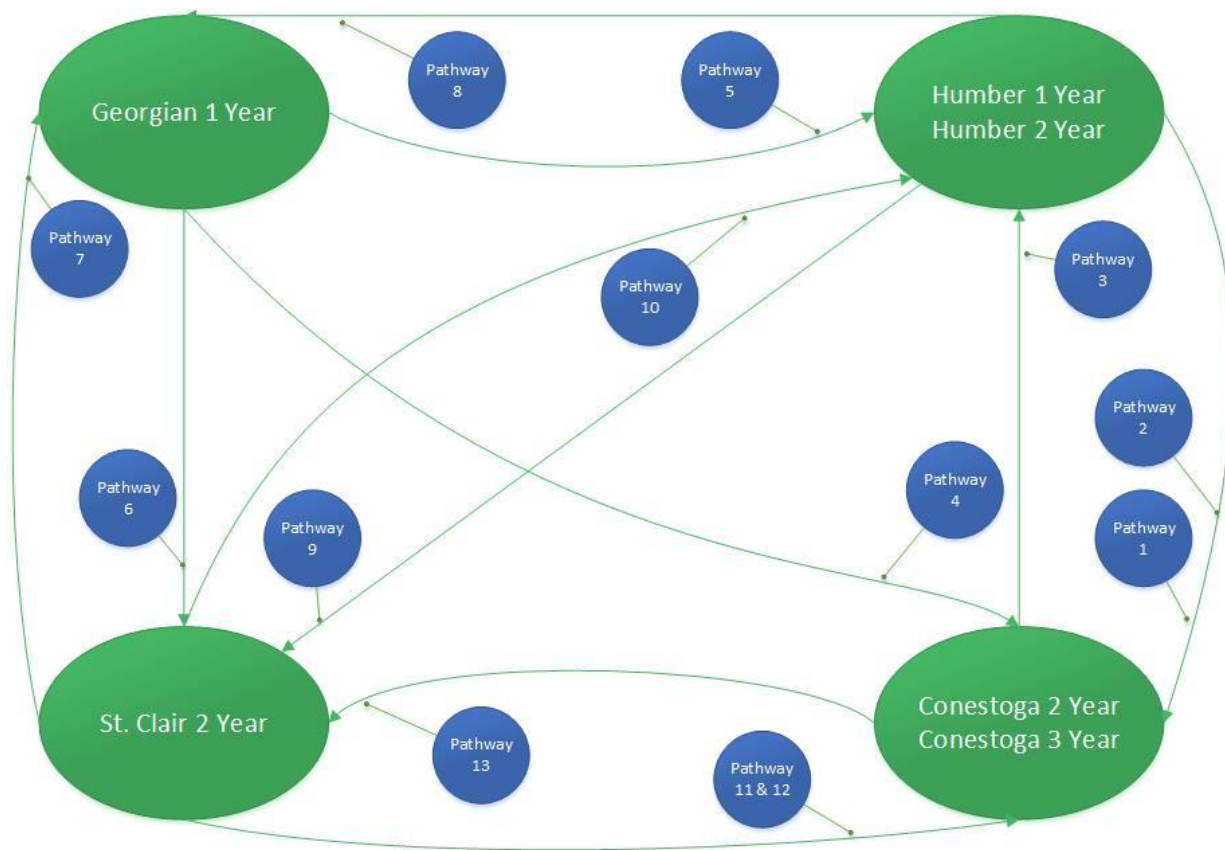
The partner institutions also learned that planned time allocation for detailed mapping activities and review of final documentation as well as additional curriculum support can make the process more effective.

Conclusions:

This project established 13 pathways for students in the Woodworking and Cabinetmaking programs at the participating 4 colleges:

1. From Georgian Cabinetmaking Techniques to :
 - a. Conestoga Woodworking Technician and Conestoga Woodworking Technology – pathway 4
 - b. St.Clair Woodworking Technician – pathway 6
 - c. Humber Cabinet Maker and Humber Industrial Woodworking – pathway 5
2. From Humber Cabinet Maker to:
 - a. Conestoga Woodworking Technician and Conestoga Woodworking Technology – pathway 1
 - b. Georgian Cabinetmaking Techniques – pathway 8
 - c. St.Clair Woodworking Technician – pathway 9
3. From Humber Industrial Woodworking Technician to:

- a. Conestoga 2 year and Conestoga 3 Year – pathway 2
- b. St.Clair Woodworking Technician – pathway 9
- 4. From St.Clair Woodworking Technician to:
 - a. Conestoga Woodworking Technician and Conestoga Woodworking Technology – pathways 11 and 12
 - b. Georgian Cabinetmaking Techniques – pathway 7
 - c. Humber Cabinet Maker and Humber Industrial Woodworking Technician – pathway 10
- 5. From Conestoga Woodworking Technician to:
 - a. St.Clair Woodworking Technician – pathway 13
 - b. Humber Industrial Woodworking Technician – pathway 3



The pathways, as depicted above, have been established with consideration of the academic and practical abilities of students at the sending institutions. These pathways provide opportunity for student mobility across the province and for academic continuity should they intend on furthering their study. The project provided supporting evidence for establishing future pathways between the post-secondary programs at the participating colleges and the Cabinetmaking Apprenticeship.

Appendix A: GAP ANALYSIS:

[Pathway 1](#): Humber Cabinet Making and Humber Industrial Woodworking Technician to Conestoga Woodworking Technician and Conestoga Woodworking Technology (mid-stream)



Pathway 1 Humber
2 Year Student to Cc

The gap analysis for this pathway is based on the outcome comparison ([Table 1](#) and [Table 4](#)) and course to course comparison using course outlines and project descriptions. No Gaps in learning outcomes other than the ones mentioned above were identified for this pathway. No bridging courses are necessary for this pathway.

[Pathway 2](#): Humber Industrial Woodworking Technician to Conestoga Woodworking Technology



Pathway 2 Humber
2 Year Student to Cc

The gap analysis for this pathway is based on the outcome comparison ([Table 1](#) and [Table 4](#)) and course to course comparison using course outlines and project descriptions. No Gaps in learning outcomes other than the ones mentioned above were identified for this pathway. The transferring student will be required to complete the following courses that address gaps identified through the course to course comparison. There will be 3 bridging courses available during one semester as listed below:

Course Title	Course Code
Advanced Computer Applications	COMP2010
Computerized Product Development II	DSGN2130
Finishing III Theory	WOOD2070

[Pathway 3](#): Conestoga Woodworking Technician to Humber Woodworking Technician (mid-stream)



Pathway 3
Conestoga 2 Year St

The gap analysis for this pathway is based on the outcome comparison ([Table 1](#) and [Table 4](#)) and course to course comparison using course outlines and project descriptions. No Gaps in learning outcomes other than the ones mentioned above were identified for this pathway. No bridging courses are necessary for this pathway. As a result of the interview with the Program Coordinator, the transferring student might be required to complete a project that includes self-study and execution of bending and laminating.

Pathway 4: Georgian Cabinetmaking Techniques to Conestoga Woodworking Technician and Conestoga Woodworking Technology



Pathway 4
Georgian Student tc

The gap analysis for this pathway is based on the outcome comparison ([Table 2](#) and [Table 4](#)) and course to course comparison using course outlines and project descriptions. The identified gaps in learning outcomes include Outcomes 14, 15, 16, 17, 23 and 26 from MTCU 54300 and 2b., 2c, 3c, 4b – g, 5b, 6a – 7b., 9, 10, 11, 12. The comparison of course content and the position of the courses in the receiving institution program design ensures that these gaps will be addressed in the courses the student is completing at Conestoga. Therefore, no bridging courses are necessary for this pathway. As a result of the interview with the Program Coordinator, the transferring student might be required to sit for an evaluative computer aptitude test relating to Computer Drafting to ensure student success in the subsequent courses in the program.

Pathway 5: Georgian Cabinetmaking Techniques to Humber Industrial Woodworking Technician



Pathway 5
Georgian Student tc

The gap analysis for this pathway is based on the outcome comparison ([Table 1](#) and [Table 2](#)) and course to course comparison using course outlines and project descriptions. The identified gaps in learning outcomes include Outcomes 14, 15, 16, 17, 23 and 26 from MTCU 54300. The comparison of course content and the position of the courses in the receiving institution program design ensures that these gaps will be addressed in the courses the student is completing at Humber. Therefore, no bridging courses are necessary for this pathway. As a result of the interview with the Program Coordinator, the transferring student might be required to complete a project that includes self-study and execution of bending and laminating.

Pathway 6: Georgian Cabinetmaking Techniques to St.Clair Woodworking Technician



Pathway 6
Georgian Student tc

The gap analysis for this pathway is based on the outcome comparison ([Table 2](#) and [Table 3](#)) and course to course comparison using course outlines and project descriptions. The identified gaps in learning outcomes include Outcomes 14, 16, 23 and 26 from MTCU 54300. The comparison of course content and the position of the courses in the receiving institution program design ensures that most of these gaps will be addressed in the courses the student is completing at St.Clair. There will be 2 bridging courses available during one semester, as listed below:

Course Title	Course Code
Renovation Carpentry	BDT219
Outdoor Structures	CRP211

Pathway 7: St. Clair Woodworking Technician to Georgian Cabinetmaking Techniques (mid-stream)



Pathway 7 StClair
Student to Georgiar

The gap analysis for this pathway is based on the outcome comparison ([Table 2](#) and [Table 3](#)) and course to course comparison using course outlines and project descriptions. There are no outcome gaps identified for this pathway. Based on the comparison of course content, there will be 1 bridging course available during one semester as listed below:

Course Title	Course Code
Finishing Processes	CABT1012

Pathway 8: Humber Cabinet Maker to Georgian Cabinetmaking Techniques (mid-stream)



Pathway 8 Humber
Student to Georgiar

The gap analysis for this pathway is based on the outcome comparison ([Table 2](#) and [Table 1](#)) and course to course comparison using course outlines and project descriptions. There are no outcome gaps identified for this pathway. Based on the comparison of course content, there will be 1 bridging course available during one semester as listed below:

Course Title	Course Code
Finishing Processes	CABT1012

Pathway 9: Humber Cabinet Maker and Humber Industrial Woodworking Technician to St.Clair Woodworking Technician (mid-stream)



Pathway 9 Humber
1&2 year Student to

The gap analysis for this pathway is based on the outcome comparison ([Table 1](#) and [Table 3](#)) and course to course comparison using course outlines and project descriptions. There are no outcome gaps identified for this pathway. Based on the comparison of course content, no bridging is required for this pathway.

Pathway 10: St. Clair Woodworking Technician to Humber Cabinet Maker and Humber Industrial Woodworking Technician (mid-stream)



Pathway 10 St.Clair
Student to Humber

The gap analysis for this pathway is based on the outcome comparison ([Table 1](#) and [Table 3](#)) and course to course comparison using course outlines and project descriptions. There are no outcome gaps identified for this pathway. Based on the comparison of course content, no bridging is required for this pathway. However, for students coming into this pathway from the Cabinet Making Certificate, arrangements have to be made to facilitate completion of the required number of General Education Electives in the Humber Industrial Woodworking Technician Diploma Program.

Pathway 11: St.Clair Woodworking Technician to Conestoga Woodworking Technician (mid-stream)



Pathway 11 StClair
Student to Conestoga

The gap analysis for this pathway is based on the outcome comparison ([Table 4](#) and [Table 3](#)) and course to course comparison using course outlines and project descriptions. The following outcome gaps were identified for this pathway: 12, 15 and 17 from MTCU 54300. These outcome gaps will be addressed in the subsequent courses in semesters 2, 3 and 4. Students must complete COMM1085 College Reading and Writing Skills before graduation. This course is offered in multiple sections in every semester.

Course Title	Course Code
College Reading and Writing Skills	COMM1085

Pathway 12: St.Clair Woodworking Technician to Conestoga Woodworking Technology (mid-stream)



Pathway 12 StClair
Student to Conestoga

The gap analysis for this pathway is based on the outcome comparison ([Table 4](#) and [Table 3](#)) and course to course comparison using course outlines and project descriptions. The following outcome gaps were identified for this pathway: 3c, 4d – 4.g, 6b, 6c, 7a, 11-14 from MTCU 64300. These outcome gaps will be addressed based on the student's point of entry as described below:

To enter at Semester 2 level, no bridging is required for this pathway. However, students must complete COMM1085 College Reading and Writing Skills before graduation. This course is offered in multiple sections in every semester.

Course Title	Course Code
College Reading and Writing Skills	COMM1085

To enter at Semester 4 (Year 2 level) students must complete COMM1085 College Reading and Writing Skills before graduation. This course is offered in multiple sections in every semester. Additionally, there will be 4 bridging courses available during one semester as listed below:

Course Title	Course Code
CNC (Woodworking)	MACH1020
Finishing II - Practical	WOOD1070
Machining II - Practical	WOOD1080
Finishing 2 – Theory	WOOD1170

[Pathway 13](#): Conestoga Woodworking Technician to St. Clair Woodworking Technician (mid-program)



Pathway 13
Conestoga 2 year Stu

The gap analysis for this pathway is based on the outcome comparison ([Table 4](#) and [Table 3](#)) and course to course comparison using course outlines and project descriptions. No gaps were identified in the program outcomes.

To enter at Semester 2 level, no bridging is required for this pathway.

To enter at Semester 4 (Year 2 level) students must complete the following 2 bridging courses, which will be available during one semester. Outlines for each of these courses follow.

Course Title	Course Code
Renovation Carpentry	BDT219
Outdoor Structures	CRP211

Appendix B: Pathway Documentation

Pathway 1: Humber Cabinet Making and Humber Industrial Woodworking Technician to Conestoga Woodworking Technician and Conestoga Woodworking Technology (mid-stream)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Humber Cabinet Making Certificate and Humber Industrial Woodworking Technician Diploma To: Conestoga Woodworking Technician Diploma Conestoga Woodworking Technology
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Certificate to Diploma and Advanced Diploma mid-stream Diploma to Diploma and Advanced Diploma mid-stream
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; St. Clair College; Humber College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Conestoga Woodworking Technician (#0054) 1701 design and forward Conestoga Woodworking Technology (#0804) 170 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.conestogac.on.ca/fulltime/0054.jsp Program Coordinator: Dennis Harlock, (519) 748-5220 ext.: 2272 Dharlock@conestogac.on.ca Admissions Officer: Darlene Lavigne, (519) 748-5220 ext.: 2331 dlavigne@conestogac.on.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students that have successfully completed the first semester of the Humber Cabinet Making Certificate program with a minimum of 60% average Students that have successfully completed the first semester of the Humber Industrial Woodworking Technician Diploma program with a minimum of 60% average May apply for advanced standing into the second semester of the Conestoga Woodworking Technician Diploma program and / or the Conestoga Woodworking Technology Advanced Diploma program <ul style="list-style-type: none"> Students that have successfully completed the first two semesters of

	<p>the Humber Industrial Woodworking Technician Diploma program with a minimum of 60% average</p> <p>May apply for advanced standing into the second year of the Conestoga Woodworking Technician program and the Conestoga Woodworking Technology Advanced Diploma program.</p> <ul style="list-style-type: none"> Students that have successfully completed the first two semesters of the Humber Industrial Woodworking Technician Diploma program with a minimum of 60% average may apply for advanced standing into the second year of the Conestoga Woodworking Technician Diploma program. <p>Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator.</p> <p>Based on the program outcome analysis and the evaluation of learning across the sending institution's program, no bridging courses are required for this pathway.</p>
Applicant must have graduated from the program at the sending institution:	No – only successful completion of the required number of academic semesters for the specific pathway
Minimum program GPA or % required to be eligible for this pathway:	60%
Minimum GPA or % required in specific courses	N/A
Total number of courses in the Conestoga program design, not including Co-op:	29 courses for the Conestoga Woodworking Technician Diploma program 55 courses for the Conestoga Woodworking Technology Advanced Diploma program
Co-op opportunities in the Conestoga program design:	<p>Total number of Co-op opportunities in the program: 0</p> <p>Number of Co-ops required for graduation from the full program: 0</p> <p>Number of Co-ops to be completed by advanced standing students: 0</p> <p>Note: Conestoga offers a Co-op version of the Woodworking Technology Advanced Diploma program. Transfer into the second semester of this program would enable the student to complete the co-op design without any bridge courses.</p>
Total number of program courses for which credit will be granted:	<ul style="list-style-type: none"> 7 out of 29 courses for the Semester 1 Certificate or Diploma to Semester 2 Diploma pathway 7 out of 55 for the Semester 1 Certificate or Diploma to Semester 2 Advanced Diploma pathway 15 of 29 courses for the Semester 2 Certificate or Diploma to Year 2 Semester 3 Diploma pathway
Transfer Credits Granted:	Transfer credit will be granted for a maximum of the first semester of the Conestoga Woodworking Technician Diploma or the first semester of the Conestoga Woodworking Technology Advanced Diploma

	<p>The following Year 2 courses will be considered for advanced standing:</p> <ul style="list-style-type: none"> • WOOD2037 Machining 3 Practical • ENTR1011 Entrepreneurship
Total number of program courses that must be completed at Conestoga in order to graduate:	<ul style="list-style-type: none"> • 22 out of 29 courses for the Semester 1 Certificate or Diploma to Semester 2 Diploma pathway • 48 out of 55 courses for the Semester 1 Certificate or Diploma to Semester 2 Advanced Diploma pathway • 14 of 29 courses for the Semester 2 Certificate or Diploma to Year 2 Semester 3 Diploma pathway
Program Completion Requirements:	<p>In order to graduate from the Conestoga Woodworking Technician Diploma program, advanced standing students must successfully complete</p> <ul style="list-style-type: none"> • Semesters 2 (Year 1), 3 and 4 (Year 2) for the Semester 1 Certificate or Diploma to Semester 2 Diploma pathway • Semesters 3 and 4 (Year 2) for the Semester 2 Certificate or Diploma to Semester 3 (Year 2) Diploma pathway <p>In order to graduate from the Conestoga Woodworking Technology Advanced Diploma program, advanced standing students must successfully complete:</p> <ul style="list-style-type: none"> • Semesters 2 (Year 1), and all the academic terms in Year 2 and 3 for the Semester 1 Certificate or Diploma to Semester 2 Advanced Diploma pathway <p>Note: this pathway allows students to complete the coop version of the program without any additional bridging</p>
Anticipated time to complete the credential if enrolled full-time:	<p>Number of years: 1.5 (3 academic semesters) for the Semester 1 Certificate or Diploma to Semester 2 Diploma pathway</p> <p>Number of academic semesters: 3 academic terms</p> <p>Number of years: 2.5 (5 academic semesters) for the Semester 1 Certificate or Diploma to Semester 2 Advanced Diploma pathway</p> <p>Number of academic semesters: 5 academic terms</p>
List of eligible institutions and their programs	<p>Humber College:</p> <ul style="list-style-type: none"> - Humber Cabinet Making (30991) - Humber Industrial Woodworking Technician (30891)

Pathway 2: Humber Industrial Woodworking Technician to Conestoga Woodworking Technology

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Humber Industrial Woodworking Technician Diploma To: Conestoga Woodworking Technology Advanced Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Diploma to Advanced Diploma
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; St. Clair College; Humber College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Conestoga Woodworking Technology (#0804) 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.conestogac.on.ca/fulltime/0804C.jsp Program Coordinator: Dennis Harlock, (519) 748-5220 ext.: 2272 Dharlock@conestogac.on.ca Admissions Officer: Darlene Lavigne, (519) 748-5220 ext.: 2331 dlavigne@conestogac.on.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Graduates of the Humber Industrial Woodworking Technician Diploma program with a minimum of 60% average may apply for advanced standing into the third year of the Conestoga Woodworking Technology program. <p>Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator.</p> <p>Based on the program outcome analysis and the evaluation of learning across the sending institution's program, the following bridging courses are required for</p> <ul style="list-style-type: none"> COMP2010 Advanced Computer Applications DSGN2130 Computerized Product Development II WOOD2070 Finishing III Theory
Applicant must have graduated from the program at the sending institution:	Yes
Minimum program GPA or % required to be eligible for this pathway:	60%

Minimum GPA or % required in specific courses	N/A
Total number of courses in the Conestoga program design, not including Co-op:	55
Co-op opportunities in the Conestoga program design:	<p>Total number of Co-op opportunities in the program: 0</p> <p>Number of Co-ops required for graduation from the full program: 0</p> <p>Number of Co-ops to be completed by advanced standing students: 0</p> <p>If the student from the sending institution pursues entry into the Co-op stream of the program, an additional pathway, not represented here, will need to be developed.</p>
Total number of program courses for which credit will be granted:	30 out of 55 courses for the Diploma to Advanced Diploma courses
Transfer Credits Granted:	<p>For the Diploma to Advanced Diploma pathway, transfer credit will be granted for a maximum of the first two years of the Conestoga Woodworking Technology program plus the following two courses from the third year:</p> <ul style="list-style-type: none"> • WTCE1003 Elective: General Education • ENTR1011 Entrepreneurship
Total number of program courses that must be completed at Conestoga in order to graduate:	25 out of 55 for the Diploma to Advanced Diploma pathway, including the bridging courses
Program Completion Requirements:	<p>In order to graduate from the Conestoga Woodworking Technology Advanced Diploma program, advanced standing students must successfully complete</p> <p>year 3 academic terms (2 in total) for the Diploma to Advanced Diploma pathway plus the bridging courses</p> <ul style="list-style-type: none"> • COMP2010 Advanced Computer Applications • DSGN2130 Computerized Product Development II • WOOD2070 Finishing III Theory
Anticipated time to complete the credential if enrolled full-time:	<p>For the Diploma to Advanced Diploma pathway</p> <p>Number of academic semesters: 2 academic terms</p> <p>Number of years: 1</p>
List of eligible institutions and their programs	<p>Humber College:</p> <ul style="list-style-type: none"> - Humber Industrial Woodworking Technician (30891)

Pathway 3: Conestoga Woodworking Technician to Humber Woodworking Technician (mid-program)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Conestoga Woodworking Technician Diploma To: Humber Industrial Woodworking Technician Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Diploma to Diploma mid-stream
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; St. Clair College; Humber College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Humber Industrial Woodworking Technician Diploma 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.humber.ca/program/industrial-woodworking-technician Program Coordinator: Drew Aaslepp, (416) 675-6622 ext. 78059 drew.aaslepp@humber.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students in the Conestoga Woodworking Technician program that have completed the first year of study with a minimum of 60% average may apply for advanced standing into the third semester of the Humber Industrial Woodworking Technician Diploma program. Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, the transferring student might be required to complete a project that includes self-study and execution of bending and laminating.
Applicant must have graduated from the program at the sending institution:	No
Minimum program GPA or % required to be eligible for this pathway:	60%
Minimum GPA or % required in specific courses	N/A

Total number of courses in the Humber program design, not including Co-op:	20
Co-op opportunities in the Humber program design:	<p>Total number of Co-op opportunities in the program: 0</p> <p>Number of Co-ops required for graduation from the full program: 0</p> <p>Number of Co-ops to be completed by advanced standing students: 0</p>
Total number of program courses for which credit will be granted:	13 out of 20 courses
Transfer Credits Granted:	For this Diploma to Diploma pathway, transfer credit will be granted for a maximum of the first and second year of the Conestoga Woodworking Technology program
Total number of program courses that must be completed at Humber in order to graduate:	7 out of 20 courses
Program Completion Requirements:	<p>In order to graduate from the Humber Industrial Woodworking Technician Diploma program, advanced standing students must successfully complete</p> <p>year 2 academic term (1 in total)</p>
Anticipated time to complete the credential if enrolled full-time:	<p>For this Diploma to Diploma pathway</p> <p>Number of academic semesters: 1 academic terms</p> <p>Number of years: 1</p>
List of eligible institutions and their programs	<p>Conestoga College:</p> <ul style="list-style-type: none"> - Woodworking Technician Diploma (0054)

Pathway 4: Georgian Cabinetmaking Techniques to Conestoga Woodworking Technician and Conestoga Woodworking Technology

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Georgian Cabinetmaking Certificate To: Conestoga Woodworking Technician Diploma and Conestoga Woodworking Technology Advanced Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Certificate to Diploma Certificate to Advanced Diploma
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; St. Clair College; Humber College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Conestoga Woodworking Technician (#0054) 1601 design and forward This pathway is not eligible for program designs predating 1601. Conestoga Woodworking Technology (0084) 1701 design and forward This pathway is not eligible for program designs predating 1701
Contact Procedure:	Program Website: http://www.conestogac.on.ca/fulltime/0804C.jsp Program Coordinator: Dennis Harlock, (519) 748-5220 ext.: 2272 Dharlock@conestogac.on.ca Admissions Officer: Darlene Lavigne, (519) 748-5220 ext.: 2331 dlavigne@conestogac.on.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students who have completed the first semester of the Georgian Cabinetmaking Techniques Certificate program with a minimum of 60% average may apply for advanced standing into the second semester of the Conestoga Woodworking Technician program or in the second year of the Conestoga Woodworking Technology program Graduates of the Georgian Cabinetmaking Techniques Certificate program with a minimum of 60% average may apply for advanced standing into the second year of the Conestoga Woodworking Technician program or in the second year of the Conestoga Woodworking Technology program <p>Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator.</p> <p>Based on the program outcome analysis and the evaluation of learning across the sending institution's program, no bridging courses are required. The interested student may sit for an evaluative computer aptitude test relating to Computer Drafting following the interview with the program coordinator.</p>

Applicant must have graduated from the program at the sending institution:	<p>No for the mid-stream transfer – only successful completion of semester 1 is required</p> <p>Yes for the Certificate to Diploma pathway</p> <p>Yes for the Certificate to Advanced Diploma pathway</p>
Minimum program GPA or % required to be eligible for this pathway:	60%
Minimum GPA or % required in specific courses	N/A
Total number of courses in the Conestoga program design, not including Co-op:	<p>29 courses for the Conestoga Woodworking Technician Diploma</p> <p>55 courses for the Conestoga Woodworking Technology Advanced Diploma</p>
Co-op opportunities in the Conestoga program design:	<p>Total number of Co-op opportunities in the program: 0</p> <p>Number of Co-ops required for graduation from the full program: 0</p> <p>Number of Co-ops to be completed by advanced standing students: 0</p>
Total number of program courses for which credit will be granted:	<p>7 out of 29 courses for the Certificate Semester 1 to Diploma Semester 2 Pathway</p> <p>7 out of 55 courses for the Certificate Semester 1 to Advanced Diploma Pathway</p> <p>15 out of 29 courses for the Certificate to Diploma Year 2 Pathway</p> <p>17 out of 55 courses for the Certificate to Advanced Diploma Year 2 Pathway</p>
Transfer Credits Granted:	<p>For the Certificate to Semester 2 Diploma and Advanced Diploma pathway, transfer credit will be granted for a maximum of the first semester of the Conestoga Woodworking Technician Diploma program and the Conestoga Woodworking Technology Advanced Diploma program</p> <p>For the Certificate to Year 2 Diploma and Advanced Diploma pathway, transfer credit will be granted for a maximum of the first year of the Conestoga Woodworking Technician Diploma program and the Conestoga Woodworking Technology Advanced Diploma program</p>
Total number of program courses that must be completed at Conestoga in order to graduate:	<p>22 out of 29 courses for the Certificate to Semester 2 Diploma Pathway</p> <p>48 out of 55 courses for the Certificate to Semester 2 Advanced Diploma Pathway</p> <p>14 out of 29 courses for the Certificate to Diploma pathway</p> <p>38 out of 55 courses for the Certificate to Advanced Diploma pathway</p>
Program Completion Requirements:	In order to graduate from the Conestoga Woodworking Technician program, advanced standing students must successfully complete Semesters 2, 3, and 4 (one half of year one and the entire year 2) or the entire 2 – semesters 3 and 4

	In order to graduate from the Conestoga Woodworking Technology program, advanced standing students must successfully complete semesters 2, 3, 4, 5, 6, 7, 8, 9 or year 2 and year 3 academic terms
Anticipated time to complete the credential if enrolled full-time:	<p>For the Certificate to Semester 2 Diploma pathway</p> <p>Number of academic semesters: 3 academic terms</p> <p>Number of years: 1.5</p> <p>For the Certificate to Advanced Diploma Semester 2 pathway</p> <p>Number of academic semesters: 8 academic terms</p> <p>Number of years: 2</p> <p>Note: This pathway allows transferring students to complete the Co-op option of the program.</p> <p>For the Certificate to Year 2 Diploma pathway</p> <p>Number of academic semesters: 2 academic terms</p> <p>Number of years: 1</p> <p>For the Certificate to Advanced Diploma Year 2 pathway</p> <p>Number of academic semesters: 4 academic terms</p> <p>Number of years: 2</p>
List of eligible institutions and their programs	<p>Georgian College:</p> <ul style="list-style-type: none"> - Cabinetmaking Techniques

Pathway 5: Georgian Cabinetmaking Techniques to Humber Industrial Woodworking Technician

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Georgian Cabinetmaking Certificate To: Humber Industrial Woodworking Technician Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Certificate to Diploma
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; St. Clair College; Humber College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Humber Industrial Woodworking Technician (30891) 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.humber.ca/program/industrial-woodworking-technician Program Coordinator: Drew Aaslepp, (416) 675-6622 ext. 78059 drew.aaslepp@humber.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Graduates of the Georgian Cabinetmaking Techniques Certificate program with a minimum of 60% average may apply for advanced standing into the third Semester of the Humber Industrial Woodworking Technician program <p>Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator.</p> <p>Based on the program outcome analysis and the evaluation of learning across the sending institution's program, no bridging courses are required for this pathway. The interested student might be asked to complete bending and laminating self-study and a project.</p>
Applicant must have graduated from the program at the sending institution:	Yes
Minimum program GPA or % required to be eligible for	60%

this pathway:	
Minimum GPA or % required in specific courses	N/A
Total number of courses in the Humber program design, not including Co-op:	20 courses for the Humber Industrial Woodworking Technician Diploma
Co-op opportunities in the Conestoga program design:	Total number of Co-op opportunities in the program: 0 Number of Co-ops required for graduation from the full program: 0 Number of Co-ops to be completed by advanced standing students: 0
Total number of program courses for which credit will be granted:	11 out of 20 courses for the Certificate to Diploma pathway
Transfer Credits Granted:	Transfer credit will be granted for a maximum of the first two semesters of the Humber Industrial Woodworking Technician Diploma program
Total number of program courses that must be completed at Humber in order to graduate:	9 out of 20 courses for the Certificate to Diploma pathway
Program Completion Requirements:	In order to graduate from the Humber Industrial Woodworking Technician program, advanced standing students must successfully complete Semester 3 academic term
Anticipated time to complete the credential if enrolled full-time:	For the Certificate to Diploma pathway Number of academic semesters: 1 academic term Number of years: 1
List of eligible institutions and their programs	Georgian College: - Cabinetmaking Techniques

Pathway 6: Georgian Cabinetmaking Techniques to St.Clair Woodworking Technician

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Georgian Cabinetmaking Certificate To: St.Clair Woodworking Technician Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Certificate to Diploma
List other postsecondary institution/s involved in the creation of the pathway:	St. Clair College; Humber College; Conestoga College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	St.Clair Woodworking Technician (30891) 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.stclaircollege.ca/programs/postsec/woodwork/ Program Coordinator: Roy Bottoset, 519-972-2727, ext. 4407 rbottoset@stclaircollege.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Graduates of the Georgian Cabinetmaking Techniques Certificate program with a minimum of 60% average may apply for advanced standing into the second year of the St.Clair Woodworking Technician program Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, the following bridging courses are required for this pathway: <ul style="list-style-type: none"> BDT 219 RENOVATION CARPENTRY CRP 211 OUTDOOR STRUCTURES
Applicant must have graduated from the program at the sending institution:	Yes
Minimum program GPA or % required to be eligible for	60%

this pathway:	
Minimum GPA or % required in specific courses	N/A
Total number of courses in the St.Clair program design, not including Co-op:	22 courses for the St.Clair Woodworking Technician Diploma
Co-op opportunities in the Conestoga program design:	Total number of Co-op opportunities in the program: 0 Number of Co-ops required for graduation from the full program: 0 Number of Co-ops to be completed by advanced standing students: 0
Total number of program courses for which credit will be granted:	10 out of 22 courses for the Certificate to Diploma pathway
Transfer Credits Granted:	Transfer credit will be granted for a maximum of the first year of the St.Clair Woodworking Technician Diploma program
Total number of program courses that must be completed at St.Clair in order to graduate:	12 out of 20 courses for the Certificate to Diploma pathway including the bridge course
Program Completion Requirements:	In order to graduate from the St.Clair Woodworking Technician program, advanced standing students must successfully complete the second year of study
Anticipated time to complete the credential if enrolled full-time:	For the Certificate to Diploma pathway Number of academic semesters: 2 academic terms Number of years: 1
List of eligible institutions and their programs	Georgian College: - Cabinetmaking Techniques

Pathway 7: St. Clair Woodworking Technician to Georgian Cabinetmaking Techniques (mid-stream)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: St. Clair Woodworking Technician Diploma To: Georgian Cabinetmaking Techniques Certificate
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Diploma to Certificate mid-stream
List other postsecondary institution/s involved in the creation of the pathway:	Humber College; Conestoga College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Georgian Cabinetmaking Techniques 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.georgiancollege.ca/academics/full-time-programs/cabinetmaking-techniques-cabt/overview-tab/ Program Coordinator: Kim Woodman (705) 728-1968 ext. 5231 Kim.Woodman@GeorgianCollege.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students in the St. Clair Woodworking Technician program that have completed the first semester of study with a minimum average of 60% average may apply for advanced standing into the second semester of the Conestoga Woodworking Technician program. Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, the following bridging course is required: CABT1012 Finishing Processes
Applicant must have graduated from the program at the sending institution:	No
Minimum program GPA or % required to be eligible for this pathway:	60%

Minimum GPA or % required in specific courses	N/A
Total number of courses in the Georgian program design, not including Co-op:	18
Co-op opportunities in the Conestoga program design:	Total number of Co-op opportunities in the program: 0 Number of Co-ops required for graduation from the full program: 0 Number of Co-ops to be completed by advanced standing students: 0
Total number of program courses for which credit will be granted:	5 out of the 18 courses
Transfer Credits Granted:	Transfer credit will be granted for a maximum of the first semester of the Georgian Cabinetmaking Techniques program
Total number of program courses that must be completed at Georgian in order to graduate:	13 out of 18 courses
Program Completion Requirements:	In order to graduate from the Georgian Cabinetmaking Techniques program, advanced standing students must successfully complete the remainder Year 1 academic terms (semesters 2 and 3) plus the bridge course
Anticipated time to complete the credential if enrolled full-time:	Number of academic semesters: 2 academic terms Number of years: 1
List of eligible institutions and their programs	St. Clair College: - Woodworking Technician Diploma (T805)

Pathway 8: Humber Cabinet Maker to Georgian Cabinetmaking Techniques (mid-stream)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Humber Cabinet Maker Certificate To: Georgian Cabinetmaking Techniques Certificate
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Certificate to Certificate mid-stream
List other postsecondary institution/s involved in the creation of the pathway:	St.Clair College; Conestoga College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Georgian Cabinetmaking Techniques 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.georgiancollege.ca/academics/full-time-programs/cabinetmaking-techniques-cabt/overview-tab/ Program Coordinator: Kim Woodman (705) 728-1968 ext. 5231 Kim.Woodman@GeorgianCollege.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students in the Humber Cabinet Maker Certificate program that have completed the first semester of study with a minimum average of 60% average may apply for advanced standing into the second semester of the Georgian Cabinetmaking Techniques program. Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, the following bridging course is required: CABT1012 Finishing Processes
Applicant must have graduated from the program at the sending institution:	No
Minimum program GPA or % required to be eligible for this pathway:	60%

Minimum GPA or % required in specific courses	N/A
Total number of courses in the Georgian program design, not including Co-op:	18
Co-op opportunities in the Conestoga program design:	Total number of Co-op opportunities in the program: 0 Number of Co-ops required for graduation from the full program: 0 Number of Co-ops to be completed by advanced standing students: 0
Total number of program courses for which credit will be granted:	5 out of the 18 courses
Transfer Credits Granted:	Transfer credit will be granted for a maximum of the first semester of the Georgian Cabinetmaking Techniques program
Total number of program courses that must be completed at Georgian in order to graduate:	13 out of 18 courses
Program Completion Requirements:	In order to graduate from the Georgian Cabinetmaking Techniques program, advanced standing students must successfully complete the remainder Year 1 academic terms (semesters 2 and 3) plus the bridge course
Anticipated time to complete the credential if enrolled full-time:	Number of academic semesters: 2 academic terms Number of years: 1
List of eligible institutions and their programs	Humber College: - Cabinet Maker Certificate

Pathway 9: Humber Cabinet Maker and Humber Industrial Woodworking Technician to St.Clair Woodworking Technician (mid-stream)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Humber Cabinet Maker Certificate and Humber Industrial Woodworking Technician Diploma To: St.Clair Woodworking Technician Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Certificate to Diploma – mid stream Diploma to Diploma – mid stream
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; Conestoga College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	St.Clair Woodworking Technician (30891) 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.stclaircollege.ca/programs/postsec/woodwork/ Program Coordinator: Roy Bottoset, 519-972-2727, ext. 4407 rbottoset@stclaircollege.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students in the Humber Cabinet Maker Certificate program that have completed the first semester of study with a minimum of 60% average may apply for advanced standing into the second semester of the St.Clair Woodworking Technician program Students in the Humber Industrial Woodworking Technician Diploma program that have completed the first semester of study with a minimum of 60% average may apply for advanced standing into the second semester of the St.Clair Woodworking Technician program Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, there are no bridging courses required.
Applicant must have graduated from the program at the sending	Yes

institution:	
Minimum program GPA or % required to be eligible for this pathway:	60%
Minimum GPA or % required in specific courses	N/A
Total number of courses in the St.Clair program design, not including Co-op:	22 courses for the St.Clair Woodworking Technician Diploma
Co-op opportunities in the Conestoga program design:	Total number of Co-op opportunities in the program: 0 Number of Co-ops required for graduation from the full program: 0 Number of Co-ops to be completed by advanced standing students: 0
Total number of program courses for which credit will be granted:	6 out of 22 courses for both Certificate to Diploma and Diploma to Diploma pathway
Transfer Credits Granted:	Transfer credit will be granted for a maximum of the first semester of the St.Clair Woodworking Technician Diploma program
Total number of program courses that must be completed at St.Clair in order to graduate:	16 out of 22 courses must be completed for both versions of the pathway
Program Completion Requirements:	In order to graduate from the St.Clair Woodworking Technician program, advanced standing students must successfully complete the remainder of the first year and the second year of study
Anticipated time to complete the credential if enrolled full-time:	For both Certificate to Diploma and Diploma to Diploma pathway Number of academic semesters: 3 academic terms Number of years: 1.5
List of eligible institutions and their programs	Humber College: <ul style="list-style-type: none"> - Cabinet Maker - Industrial Woodworking Technician

Pathway 10: St. Clair Woodworking Technician to Humber Cabinet Maker and Humber Industrial Woodworking Technician (mid-stream)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: St. Clair Woodworking Technician Diploma To: Humber Cabinet Maker Certificate and Humber Industrial Woodworking Technician Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Diploma to Certificate – mid-stream and Diploma to Diploma – mid-stream
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; Conestoga College;
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Humber Cabinet Maker Certificate Humber Industrial Woodworking Technician Diploma 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.humber.ca/program/industrial-woodworking-technician Program Coordinator: Drew Aaslepp, (416) 675-6622 ext. 78059 drew.aaslepp@humber.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students in the St. Clair Woodworking Technician program that have completed the first semester of study with a minimum of 60% average may apply for advanced standing into the second semester of the Humber Industrial Woodworking Technician Diploma program. Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, there are no bridging courses required for this pathway. However, for students coming into this pathway from the Cabinet Making Certificate, arrangements have to be made to facilitate completion of the required number of General Education Electives in the Humber Industrial Woodworking Technician Diploma Program.
Applicant must have graduated from the	No

program at the sending institution:	
Minimum program GPA or % required to be eligible for this pathway:	60%
Minimum GPA or % required in specific courses	N/A
Total number of courses in the Humber program design, not including Co-op:	13 for the Cabinet Making Certificate 20 for the Industrial Woodworking Technician Diploma
Co-op opportunities in the Humber program design:	Total number of Co-op opportunities in the program: 0 Number of Co-ops required for graduation from the full program: 0 Number of Co-ops to be completed by advanced standing students: 0
Total number of program courses for which credit will be granted:	5 out of 13 courses for the Cabinet Making Certificate 5 out of 20 courses for the Industrial Woodworking Technician Diploma
Transfer Credits Granted:	For the Diploma to Certificate pathway, transfer credit will be granted for a maximum of the first semester of the Humber Cabinet Making Certificate or Industrial Woodworking Technician Diploma program as applicable
Total number of program courses that must be completed at Humber in order to graduate:	8 out of 13 courses for the Cabinet Making Certificate 15 out of 20 courses for the Industrial Woodworking Technician Diploma
Program Completion Requirements:	In order to graduate from the Humber Cabinet Making Certificate program, advanced standing students must successfully complete Semester 2 and Semester 3 courses (2 in total) In order to graduate from the Humber Industrial Woodworking Technician Diploma program, advanced standing students must successfully complete Semester 2 and Semester 3 courses (2 in total)
Anticipated time to complete the credential if enrolled full-time:	For both versions of this pathway Number of academic semesters: 2 academic terms Number of years: 1
List of eligible institutions and their programs	St. Clair College: - Woodworking Technician Diploma (T805)

Pathway 11: St.Clair Woodworking Technician to Conestoga Woodworking Technician (mid-stream)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: St.Clair Woodworking Technician Diploma To: Conestoga Woodworking Technician Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Diploma to Diploma mid-stream
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; Humber College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Conestoga Woodworking Technician (#0054) 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.conestogac.on.ca/fulltime/0054.jsp Program Coordinator: Dennis Harlock, (519) 748-5220 ext.: 2272 Dharlock@conestogac.on.ca Admissions Officer: Darlene Lavigne, (519) 748-5220 ext.: 2331 dlavigne@conestogac.on.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students that have successfully completed the first semester of the St.Clair Woodworking Technician Diploma program with a minimum of 60% average May apply for advanced standing into the second semester of the Conestoga Woodworking Technician Diploma program Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, there are no bridging courses required for this pathway. However, students must complete <ul style="list-style-type: none"> COMM1085 College Reading and Writing Skills before graduation. This course is offered in multiple sections in every semester.
Applicant must have graduated from the program at the sending	No – only successful completion of the courses in the first semester

institution:	
Minimum program GPA or % required to be eligible for this pathway:	60%
Minimum GPA or % required in specific courses	N/A
Total number of courses in the Conestoga program design, not including Co-op:	29 courses for the Conestoga Woodworking Technician Diploma program
Co-op opportunities in the Conestoga program design:	<p>Total number of Co-op opportunities in the program: 0</p> <p>Number of Co-ops required for graduation from the full program: 0</p> <p>Number of Co-ops to be completed by advanced standing students: 0</p>
Total number of program courses for which credit will be granted:	<ul style="list-style-type: none"> 6 out of 29 courses for the Semester 1 Diploma to Semester 2 Diploma pathway
Transfer Credits Granted:	Transfer credit will be granted for a maximum of the first semester of the Conestoga Woodworking Technician Diploma
Total number of program courses that must be completed at Conestoga in order to graduate:	<ul style="list-style-type: none"> 23 out of 29 courses for the Semester 1 Diploma to Semester 2 Diploma pathway
Program Completion Requirements:	<p>In order to graduate from the Conestoga Woodworking Technician Diploma program, advanced standing students must successfully complete</p> <ul style="list-style-type: none"> Semesters 2 (Year 1), 3 and 4 (Year 2) for the Semester 1 Diploma to Semester 2 Diploma pathway
Anticipated time to complete the credential if enrolled full-time:	Number of years: 1.5 (3 academic semesters) for the Semester 1 Diploma to Semester 2 Diploma pathway
List of eligible institutions and their programs	<p>Humber College:</p> <ul style="list-style-type: none"> St.Clair Woodworking Technician Diploma Program

Pathway 12: St.Clair Woodworking Technician to Conestoga Woodworking Technology (mid-stream)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: St.Clair Woodworking Technician Diploma To: Conestoga Woodworking Technology Advanced Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Diploma to Advanced Diploma mid-stream
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; Humber College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	Conestoga Woodworking Technology Advanced Diploma (#0804) 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.conestogac.on.ca/fulltime/0054.jsp Program Coordinator: Dennis Harlock, (519) 748-5220 ext.: 2272 Dharlock@conestogac.on.ca Admissions Officer: Darlene Lavigne, (519) 748-5220 ext.: 2331 dlavigne@conestogac.on.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students that have successfully completed the first semester of the St.Clair Woodworking Technician Diploma program with a minimum of 60% average May apply for advanced standing into the second semester of the Conestoga Woodworking Technology Diploma program Note: This pathway allows the student to complete the Co-op design of the program Students that have successfully completed the first year of the St.Clair Woodworking Technician Diploma program with a minimum of 60% average May apply for advanced standing into the second year of the Conestoga Woodworking Technology Diploma program Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning

	<p>across the sending institution's program, the following courses are required for this pathway:</p> <p>To enter at Semester 4 (year 2 level)</p> <ul style="list-style-type: none"> • COMM1085 College Reading & Writing Skills • MACH1020 CNC (Woodworking) • WOOD1070 Finishing II - Practical • WOOD1080 Machining II - Practical • WOOD1170 Finishing 2 – Theory <p>Note: the pathway with the entry point in the second year of the Conestoga Woodworking Technology Advanced Diploma provides access only into the non-co-op design.</p>
Applicant must have graduated from the program at the sending institution:	No – only successful completion of the courses in the first semester or the first year respectively
Minimum program GPA or % required to be eligible for this pathway:	60%
Minimum GPA or % required in specific courses	N/A
Total number of courses in the Conestoga program design, not including Co-op:	55 courses for the Conestoga Woodworking Technology Advanced Diploma program
Co-op opportunities in the Conestoga program design:	<p>For the pathway with entry into Semester 2:</p> <p>Total number of Co-op opportunities in the program: 3</p> <p>Number of Co-ops required for graduation from the full program: 3</p> <p>Number of Co-ops to be completed by advanced standing students: 3</p> <p>For the pathway with entry into Year 2:</p> <p>Total number of Co-op opportunities in the program: 3</p> <p>Number of Co-ops required for graduation from the full program: 3</p> <p>Number of Co-ops to be completed by advanced standing students: 3</p>
Total number of program courses for which credit will be granted:	<ul style="list-style-type: none"> • 6 out of 55 courses for the Semester 1 Diploma to Semester 2 Advanced Diploma pathway • 10 out of 55 courses for the Year 1 Diploma to Year 2 Advanced Diploma pathway
Transfer Credits Granted:	<p>Transfer credit will be granted for a maximum of the first semester of the Conestoga Woodworking Technician Diploma for the Semester 1 Diploma to Semester 2 Advanced Diploma pathway</p> <p>Transfer credit will be granted for a maximum of the first year of the Conestoga Woodworking Technician Diploma for the Year 1 Diploma to Year 2 Advanced Diploma pathway</p>

Total number of program courses that must be completed at Conestoga in order to graduate:	<ul style="list-style-type: none"> • 49 out of 55 courses for the Semester 1 Diploma to Semester 2 Advanced Diploma pathway • 45 out of 55 courses for the Year 1 Diploma to Year 2 Advanced Diploma pathway
Program Completion Requirements:	<p>In order to graduate from the Conestoga Woodworking Technology Diploma program, advanced standing students must successfully complete</p> <ul style="list-style-type: none"> • Semesters 2 (Year 1), and all the Academic and Co-op Semesters for the Semester 1 Diploma to Semester 2 Advanced Diploma pathway • All academic Semesters from Year 2 and Year 3 for the Year 1 Diploma to Year 2 Advanced Diploma pathway plus the bridging courses
Anticipated time to complete the credential if enrolled full-time:	Number of years: 2.5 for the Semester 1 Diploma to Semester 2 Advanced Diploma pathway
List of eligible institutions and their programs	<p>St.Clair College:</p> <ul style="list-style-type: none"> - St.Clair Woodworking Technician Diploma Program

Pathway 13: Conestoga Woodworking Technician to St. Clair Woodworking Technician (mid-program)

PATHWAY DETAILS	
Title of Pathway: Use Official Program/Credential Titles	From: Conestoga Woodworking Technician Diploma To: St. Clair Woodworking Technician Diploma
Pathway Type: <i>Degree Completion, Certificate to Diploma, etc.</i>	Diploma to Diploma mid-stream
List other postsecondary institution/s involved in the creation of the pathway:	Georgian College; Humber College
Pathway Implementation:	September 2017
Program designs for which this pathway is eligible:	St. Clair Woodworking Technician 1701 design and forward This pathway is not eligible for program designs predating 1701.
Contact Procedure:	Program Website: http://www.stclaircollege.ca/programs/postsec/woodwork/ Program Coordinator: Roy Bottoset, 519-972-2727, ext. 4407 rbottoset@stclaircollege.ca
Eligibility for the Pathway:	<ul style="list-style-type: none"> Students in the Conestoga Woodworking Technician program that have completed the first semester of study with a minimum of 60% average may apply for advanced standing into the second semester of the St. Clair Woodworking Technician program Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, no additional bridging courses are required for this pathway: Students in the Conestoga Woodworking Technician program that have completed the first year of study with a minimum of 60% average may apply for advanced standing into the second year of the St. Clair Woodworking Technician program Applicants must submit a transcript to the admissions officer and attend an interview with the Program Coordinator. Based on the program outcome analysis and the evaluation of learning across the sending institution's program, the following bridging courses are required for this pathway: <ul style="list-style-type: none"> BDT 219 RENOVATION CARPENTRY CRP 211 OUTDOOR STRUCTURES
Applicant must have	NO

graduated from the program at the sending institution:	
Minimum program GPA or % required to be eligible for this pathway:	60%
Minimum GPA or % required in specific courses	N/A
Total number of courses in the St. Clair program design, not including Co-op:	22 courses for the St. Clair Woodworking Technician Diploma
Co-op opportunities in the St. Clair program design:	Total number of Co-op opportunities in the program: 0 Number of Co-ops required for graduation from the full program: 0 Number of Co-ops to be completed by advanced standing students: 0
Total number of program courses for which credit will be granted:	6 out of 22 courses for the Diploma to Diploma pathway with entry point in the Second Semester 10 out of 22 courses for the Diploma to Diploma pathway with entry point in the Third Semester
Transfer Credits Granted:	Transfer credit will be granted for a maximum of the first semester of the St. Clair Woodworking Technician Diploma program if the entry point is Semester 2 Transfer credit will be granted for a maximum of the first year of the St. Clair Woodworking Technician Diploma program if the entry point is Year 2
Total number of program courses that must be completed at St. Clair in order to graduate:	16 out of 22 courses for the Diploma to Diploma pathway with the Semester 2 entry point 12 out of 22 courses for the Diploma to Diploma pathway with the Year 2 entry point
Program Completion Requirements:	In order to graduate from the St. Clair Woodworking Technician program, advanced standing students must successfully complete If they enter in Semester 2, the Year 1 Semester 2 and Year 2 academic terms plus the additional bridging courses: <ul style="list-style-type: none"> • BDT 219 RENOVATION CARPENTRY • CRP 211 OUTDOOR STRUCTURES If they enter in Year 2, year 2 academic terms and the additional bridging courses: <ul style="list-style-type: none"> • BDT 219 RENOVATION CARPENTRY

	<ul style="list-style-type: none"> • CRP 211 OUTDOOR STRUCTURES
Anticipated time to complete the credential if enrolled full-time:	<p>For this Diploma to Diploma pathway with the entry point is Semester 2: Number of academic semesters: 3 academic terms Number of years: 1.5</p> <p>For this Diploma to Diploma pathway with the entry point is Year 2: Number of academic semesters: 2 academic terms Number of years: 1</p>
List of eligible institutions and their programs	<p>Conestoga College:</p> <ul style="list-style-type: none"> - Woodworking Technician Program

Appendix C: Financial Statement

Final Budget

Project budget details can be found in Schedule B of the ONCAT Project 2015-18: Pathways between Ontario Woodworking Postsecondary Programs and Cabinetmaking Trade Curriculum Agreement. A detailed Financial Statement was provided separately to ONCAT.

Appendix D

Cabinetmaking Techniques - Ontario College Certificate Georgian	Cabinetmaking Ontario College Certificate Humber	Woodworking Technician Ontario College Diploma - Conestoga	Woodworking Technician- Ontario College Diploma - St. Clair	Industrial Woodworking Technician - Ontario College Diploma Humber	Woodworking Technology Ontario College Advanced Diploma Conestoga
<p>OSSD or equivalent with - Grade 12 English (C or U) Math in the program - allows for inter-college transfer</p>	<p>Ontario Secondary School Diploma (OSSD) or equivalent including these required courses: – Grade 12 English (ENG4C or ENG4U or equivalent) – Grade 12 Mathematics (MAP4C, MCT4C, MDM4U, MCB4U, MGA4U, MCV4U or MHF4U or equivalent) – Two Grade 11 or Grade 12 C, M or U courses in addition to those listed above Or Mature student status Or College or university transfer status All applicants whose first language is not English must meet Humber’s English Language Proficiency Policy</p> <p>Admission selection is based on the academic criteria indicated. Meeting minimum eligibility requirements does not guarantee admission.</p>	<p>Ontario Secondary School Diploma (OSSD), or equivalent, Grade 12 compulsory English, C or U, or equivalent, OR Conestoga College Preparatory Communications (COMM1270) Grade 12 Mathematics, C or U, or equivalent, OR Conestoga College Preparatory Mathematics for Trades (MATH1420) or 19 years of age or older with mature student status (See Mature Student definition for details.)</p> <p>An academic strength is calculated by averaging the submitted marks of required subjects. If more than one mark is received for a required subject, the highest mark will be used in the calculation.</p> <p>Ten (10) additional marks are added to each Advanced level, OAC, U, U/C, and post-secondary course used in the calculation of academic strength.</p> <p>Program Requirements Applicants are assumed to have basic computer literacy.</p>	<p>OSSD with the majority of courses at the College (C), University (U), University/College (M) or Open (O) level qualify for admission to this program. Mature students - See Admission Procedures for details.</p>	<p>Ontario Secondary School Diploma (OSSD) or equivalent including these required courses: – Grade 12 English (ENG4C or ENG4U or equivalent) – Grade 12 Mathematics (MAP4C, MCT4C, MDM4U, MCB4U, MGA4U, MCV4U or MHF4U or equivalent) – Two Grade 11 or Grade 12 C, M or U courses in addition to those listed above or • Mature student status Or College or university transfer status All applicants whose first language is not English must meet Humber’s English Language Proficiency Policy.</p> <p>Admission selection is based on the academic criteria indicated. Meeting minimum eligibility requirements does not guarantee admission.</p>	<p>Ontario Secondary School Diploma (OSSD), or equivalent, or 19 years of age or older with mature student status (See Mature Student definition for details.) Grade 12 compulsory English, C or U, or equivalent, OR Conestoga College Preparatory Communications (COMM1270) Grade 12 Mathematics, C or U, or equivalent, OR Conestoga College Preparatory Mathematics for Trades (MATH1420)</p> <p>An academic strength is calculated by averaging the submitted marks of required subjects. If more than one mark is received for a required subject, the highest mark will be used in the calculation.</p> <p>Ten (10) additional marks are added to each Advanced level, OAC, U, U/C, and post-secondary course used in the calculation of academic strength.</p>

Appendix E

Table 1: MTCU Vocational Outcomes Comparison Humber College



Humber MTCU
Comparison Map.xls

44300 (Certificate)	Humber Cabinetmaking Program Outcomes	Courses
1. Apply the fundamentals of mathematics to the solution of routine problems in their discipline.	2.5. Demonstrate dimensioning skills in both Imperial and Metric scales.	IWWT 105: Cabinet Construction 1 IWWT 100: General Drafting and Blueprint Reading IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3
2. Perform all Industrial Woodworking activities safely and demonstrate the ability to react to emergency situations properly.	1.1. Identify and apply the safety rules related to the application and operation of the various hand tools, portable power tools and stationary machines covered in IWWT 102 Power Tools 1 and IWWT 150 Power Tools	IWWT 102: Power Tools 1 IWWT 150: Power Tools 2
	3.2. Identify and describe safety issues specific to the woodworking lab.	IWWT 101: Shop Practices and Material Handling IWWT 102: Power Tools 1 IWWT 150: Power Tools 2
	3.3. Identify and describe Humber College safety policies.	IWWT 101: Shop Practices and Material Handling IWWT 102: Power Tools 1 IWWT 150: Power Tools 2
	3.4. Identify and describe Humber College safety policies for the lab.	IWWT 101: Shop Practices and Material Handling IWWT 102: Power Tools 1 IWWT 150: Power Tools 2

44300 (Certificate)	Humber Cabinetmaking Program Outcomes	Courses
3. Store, test and select the various grades of wood and related building materials.	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 101: Shop Practices and Material Handling IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
4. Select, maintain and operate hand tools, portable power tools and stationary powered machinery.	1.1. Identify and apply the safety rules related to the application and operation of the various hand tools, portable power tools and stationary machines covered in IWWT 102 Power Tools 1 and IWWT 150 Power Tools	IWWT 102: Power Tools 1 IWWT 150: Power Tools 2
5. Determine joinery requirements for various types of construction through the assessment of material characteristics and end use suitability.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 103: Fundamentals of Design and Joinery IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	2.1. Identify and demonstrate correct use of manual drafting equipment.	IWWT 100: General Drafting and Blueprint Reading
6. Perform sanding operations to the determined industrial standards.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 102: Power Tools 1 IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3 IWWT 152: Finishing 1 IWWT 205: Finishing 2
7. Select and apply adhesives common to the trade, utilizing related clamping and applying tools and equipment.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 101: Shop Practices and Material Handling IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2

44300 (Certificate)	Humber Cabinetmaking Program Outcomes	Courses
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 153: Bending and Laminating Methods IWWT 208: Cabinet Construction 3
	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 151: Cabinet Construction 2
8. Perform finishing operations utilizing materials and processes common to the wood products industry.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 151: Cabinet Construction 2 IWWT 152: Finishing 1
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3 IWWT 205: Finishing 2
9. Select and apply hardware and fasteners used in the manufacturing of furniture, cabinets, and millwork.	4.1 Describe and or construct the following types of case construction at a basic level: • Traditional (face frame) construction; • 32 millimetre construction systems; • Kitchen cabinets; • Web frame case construction	IWWT 151: Cabinet Construction 2 IWWT 208: Cabinet Construction 3
	5.1. Install drawer and door components in a bank of cabinets using standard European style kitchen hardware.	IWWT 151: Cabinet Construction 2 IWWT 208: Cabinet Construction 3
10. Install residential and commercial cabinets.	5.1. Install drawer and door components in a bank of cabinets using standard European style kitchen hardware.	IWWT 151: Cabinet Construction 2
	5.3. Scribe an upper cabinet to a typically uneven wall using portable power tools to simulate installation onsite.	IWWT 210: Installation, Site Work and Repair

44300 (Certificate)	Humber Cabinetmaking Program Outcomes	Courses
11. Produce sketches and shop drawings of common furniture and cabinet units and component parts; and interpret blueprints for production planning and estimating.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3
	2.1. Identify and demonstrate correct use of manual drafting equipment.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	2.2. Produce lettering and line work suitable for working shop drawings.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	2.3. Identify and properly use typical terminology and abbreviations in regards to shop drawings.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
11. Produce sketches and shop drawings of common furniture and cabinet units and component parts; and interpret blueprints for production planning and estimating.	2.4. Identify and properly use typical drawing symbols, graphics and conventions in regards to shop drawings.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	2.5. Demonstrate dimensioning skills in both Imperial and Metric scales.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	2.6. Describe and demonstrate the drawing techniques of orthographic projection.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2

44300 (Certificate)	Humber Cabinetmaking Program Outcomes	Courses
	2.7. Draw an isometric drawing of a given object. Produce a rendering (perspective drawing) of a given object.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	2.8. Prepare typical shop drawings for a given object, using proper symbols and conventions: (a) front view, top view and right side or end; (b) sections views where necessary; (c) title box and specifications	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
12. Develop acceptable business practices and communication skills to ensure customer and employer satisfaction throughout industry.	Included in courses but not captured in program outcomes. See next column	IWWT 207: Operating Your Own Business IWWT 208: Cabinet Construction 3
13. Perform basic computer keyboard operations.	Included in courses but not captured in program outcomes.	IWWT 100: General Drafting and Blueprint Reading

54300 (Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
1. Understand the structure of wood, and how this structure and wood's mechanical and physical properties relate to the working properties of wood and its performance in use.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 101: Shop Practices and Material Handling IWWT 105: Cabinet Construction 1
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 151: Cabinet Construction 2 IWWT 208: Cabinet Construction 3
2. Set-up and operate a wide range of machinery and equipment used in wood products manufacturing.	1.1. Identify and apply the safety rules related to the application and operation of the various hand tools, portable power tools and stationary machines covered in IWWT 102 Power Tools 1 and IWWT 150 Power Tools	IWWT 102: Power Tools 1 IWWT 150: Power Tools 2 IWWT 105: Cabinet Construction 1
3. Perform basic sharpening and maintenance of saws and cutters.	Included in courses but not captured in program outcomes. See next column	IWWT 101: Shop Practices and Material Handling
4. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	Included in courses but not captured in program outcomes. See next column	IWWT 103: Fundamentals of Design and Joinery IWWT 153: Bending and Laminating Methods IWWT 209: Shaping Operations
5. Perform basic wood finishing techniques.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 105: Cabinet Construction 1 IWWT 152: Finishing 1 IWWT 205: Finishing 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3
6. Use basic hand tools.	1.1. Identify and apply the safety rules related to the application and operation of the various hand tools, portable power tools and stationary machines covered in IWWT 102 Power Tools 1 and IWWT 150 Power Tools	IWWT 102: Power Tools 1

54300 (Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
7. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 101: Shop Practices and Material Handling IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3
8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	7.1 Describe and or construct the following types of case construction at a basic level: • Traditional (face frame) construction; • 32 millimetre construction systems; • Kitchen cabinets; • Web frame case construction	IWWT 151: Cabinet Construction 2 IWWT 103: Fundamentals of Design and Joinery
	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 208: Cabinet Construction 3 IWWT 210: Installation, Site Work and Repair
9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3
10. Have an appreciation of the history of furniture styles.	Included in courses but not captured in program outcomes. See next column	IWWT 101: Shop Practices and Material Handling IWWT 103: Fundamentals of Design and Joinery

54300 (Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
11. Practice teamwork, accomplishing objectives.	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 103: Fundamentals of Design and Joinery IWWT 151: Cabinet Construction 2 IWWT 153: Bending and Laminating Methods
12. Communicate effectively.	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 103: Fundamentals of Design and Joinery IWWT 151: Cabinet Construction 2 IWWT 153: Bending and Laminating Methods
13. Be aware of basic microcomputer applications	8.1 The students will demonstrate basic knowledge of the following using ToolPath software designed for use on the AXYZ CNC router: Safety operations and regulations; Introduction to ToolPath	IWWT 206: Computer Woodworking Applications IWWT 208: Cabinet Construction 3
14. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 101: Shop Practices and Material Handling IWWT 206: Computer Woodworking Applications IWWT 151: Cabinet Construction 2
15. Understand the product development process and the role of the product engineer.	Included in courses but not captured in program outcomes. See next column	IWWT 207: Operating Your Own Business
16. Apply simple business practice procedures.	Included in courses but not captured in program outcomes. See next column	IWWT 207: Operating Your Own Business
17. Evaluate, estimate repair costs and restore antique furniture.	5.2. Identify and complete basic repairs to a piece of broken furniture. The repairs shall be of a level suitable to the nature of the furniture, the structural demands imposed by use and also take into account the ability of the student.	IWWT 210: Installation, Site Work and Repair
18. Design and construct a variety of kitchen cabinets.	5.1. Install drawer and door components in a bank of cabinets using standard European style kitchen hardware.	IWWT 151: Cabinet Construction 2 IWWT 210: Installation, Site Work and Repair
	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 151: Cabinet Construction 2 IWWT 103: Fundamentals of Design and Joinery

54300 (Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
19. Design and construct a variety of architectural millwork products.	Included in courses but not captured in program outcomes. See next column	IWWT 101: Shop Practices and Material Handling IWWT 153: Bending and Laminating Methods IWWT 209: Shaping Operations
21. Design, construct and use complex jigs and patterns;	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3 IWWT 209: Shaping Operations
22. Understand the programming and operation of computer-controlled machines;	8.1 The students will demonstrate basic knowledge of the following using ToolPath software designed for use on the AXYZ CNC router: Safety operations and regulations; Introduction to ToolPath	IWWT 208: Cabinet Construction 3 IWWT 206: Computer Woodworking Applications
23. Create, dimension and plot part drawings using autocad computer program; or	8.1 The students will demonstrate basic knowledge of the following using ToolPath software designed for use on the AXYZ CNC router: Safety operations and regulations; Introduction to ToolPath	IWWT 154: Basics of CAD (Auto Sketch) IWWT 206: Computer Woodworking Applications
24. Design and construct chairs of a variety of styles.	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3 IWWT 210: Installation, Site Work and Repair
25. Finish a variety of woodworking projects using sophisticated finishing procedures and using production techniques.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 151: Cabinet Construction 2 IWWT 152: Finishing 1

54300 (Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3 IWWT 205: Finishing 2
26. Do a materials take-off from architects' drawings.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3
27. Understand the operation of a lumber drying kiln.	Included in courses but not captured in program outcomes. See next column	IWWT 101: Shop Practices and Material Handling IWWT 153: Bending and Laminating Methods
28. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 151: Cabinet Construction 2 IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 101: Shop Practices and Material Handling IWWT 208: Cabinet Construction 3 IWWT 207: Operating Your Own Business

64300 (Advanced Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
1.a. Understand how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood products.	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 151: Cabinet Construction 2 IWWT 208: Cabinet Construction 3 IWWT 105: Cabinet Construction 1
1.b. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 101: Shop Practices and Material Handling IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
2.a. Set up and operate a wide range of machinery and equipment used in wood products manufacturing.	1.1. Identify and apply the safety rules related to the application and operation of the various hand tools, portable power tools and stationary machines covered in IWWT 102 Power Tools 1 and IWWT 150 Power Tools	IWWT 102: Power Tools 1 IWWT 150: Power Tools 2 IWWT 151: Cabinet Construction 2 IWWT 208: Cabinet Construction 3
2.b. Perform the skills of basic sharpening and maintenance of saws and cutters.	Included in courses but not captured in program outcomes. See next column	IWWT 101: Shop Practices and Material Handling
2.c. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	Included in courses but not captured in program outcomes. See next column	IWWT 103: Fundamentals of Design and Joinery IWWT 153: Bending and Laminating Methods IWWT 209: Shaping Operations
2.d. Finish a variety of woodworking projects using state-of-the-art finishing procedures and production techniques.	7.1 Describe and or construct the following types of case construction at a basic level: • Traditional (face frame) construction; • 32 millimetre construction systems; • Kitchen cabinets; • Web frame case construction	IWWT 152: Finishing 1 IWWT 205: Finishing 2 IWWT 208: Cabinet Construction 3

64300 (Advanced Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 208: Cabinet Construction 3 IWWT 210: Installation, Site Work and Repair
2.e. Use basic hand tools.	1.1. Identify and apply the safety rules related to the application and operation of the various hand tools, portable power tools and stationary machines covered in IWWT 102 Power Tools 1 and IWWT 150 Power Tools	IWWT 102: Power Tools 1
3.a. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	7.1 Describe and or construct the following types of case construction at a basic level: • Traditional (face frame) construction; • 32 millimetre construction systems; • Kitchen cabinets; • Web frame case construction	IWWT 151: Cabinet Construction 2 IWWT 103: Fundamentals of Design and Joinery IWWT 105: Cabinet Construction 1
	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 208: Cabinet Construction 3 IWWT 210: Installation, Site Work and Repair
3.b. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 100: General Drafting and Blueprint Reading IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 208: Cabinet Construction 3
3.c. Develop complete working drawings using AutoCAD.	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 154: Basics of CAD (Auto Sketch) IWWT 206: Computer Woodworking Applications

64300 (Advanced Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
4.a. Understand basic principles of work measurements, methods analysis, quality control, production control and supervision.	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 101: Shop Practices and Material Handling IWWT 206: Computer Woodworking Applications IWWT 207: Operating Your Own Business
4.b. Understand the product development process and the role of the product engineer.	Included in courses but not captured in program outcomes. See next column	IWWT 207: Operating Your Own Business
4.c. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	1.2. Complete a required project based on course requirements. The student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project.	IWWT 151: Cabinet Construction 2
	1.3. Design/build or build a final project based on course requirements. The student must have his or her design checked by the instructor prior to commencing the project. Once the project has been approved, the student will produce a working drawing, a bill of materials, and an order of operations prior to commencing the project. Students will be expected to obtain their own materials through a local supplier.	IWWT 101: Shop Practices and Material Handling IWWT 208: Cabinet Construction 3 IWWT 207: Operating Your Own Business
4.d. Carry out time studies and develop standard data applying the principles of work measurement.		Not covered
4.e. Apply the principles of methods analysis, work station efficiency, and productive work flow for typical manufacturing processes.		Not covered
4.f. Understand and assist in layout and materials handling analysis, equipment selection, and plant support system planning.		Not covered
4.g. Perform operations planning and scheduling as well as inventory and materials requirement analysis.		Not covered
5.a. Appreciate the design and construction fundamentals of kitchen cabinetry.	Included in courses but not captured in program outcomes. See next column	IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2

64300 (Advanced Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
5.b. Appreciate how architectural millwork products differ from furniture in design, construction and installation.	9.1 Describe and demonstrate the following types of bending at a basic level: • Lay-up and pressing of flat and curved veneered panels; • Vacuum pressing; • Cold pressing; • Steam bending; • Laminating a curve; • Brick laying a curve; • Kerf-cutting; • Form work; some of the bending listed above done in a group setting.	IWWT 153: Bending and Laminating Methods IWWT 209: Shaping Operations IWWT 210: Installation, Site Work and Repair
6.a. Understand the programming and operation of computer-controlled machines, and create, dimension and plot part drawings using AutoCAD computer program.	Included in courses but not captured in program outcomes. See next column	IWWT 154: Basics of CAD (Auto Sketch) IWWT 206: Computer Woodworking Applications
6.b. Understand the concepts of computer-integrated manufacturing and apply the principles of computer control in the woodworking manufacturing environment.	Included in courses but not captured in program outcomes. See next column	IWWT 206: Computer Woodworking Applications
6.c. Transfer the data generated by software programs through to CNC machinery for part manufacturing.	Included in courses but not captured in program outcomes. See next column	IWWT 206: Computer Woodworking Applications
7.a. Develop a quality assurance program for wood manufacturing operation applying the principles of statistical process control.	0	Not covered
7.b. Apply testing techniques including simple computer analysis on a variety of raw materials and assembled products.	0	Not covered
8. Appreciate the history of furniture styles.	Included in courses but not captured in program outcomes. See next column	IWWT 103: Fundamentals of Design and Joinery IWWT 101: Shop Practices and Material Handling

64300 (Advanced Diploma)	Humber Industrial Woodworking Technician Program Outcome	Courses
9. Practice teamwork in accomplishing objectives.	9.2 Construct a cabinet in a partnership with another student during a deadline period demonstrating: • Following directions; • Division of labour; • Working to a deadline; • The ability to collaborate; • Working as a team.	IWWT 103: Fundamentals of Design and Joinery IWWT 151: Cabinet Construction 2 IWWT 153: Bending and Laminating Methods
10. Apply simple business procedures.	Included in courses but not captured in program outcomes. See next column	IWWT 207: Operating Your Own Business
11. Restore antique furniture based on the evaluation and estimation of repair costs.	Included in courses but not captured in program outcomes. See next column	IWWT 210: Installation, Site Work and Repair
12. Apply the fundamentals of effective supervision and personnel management.		Not covered
13. Understand the responsibility and methods of maintaining a safe working environment.	3.1. Identify and describe safety issues related to woodworking.	IWWT 101: Shop Practices and Material Handling IWWT 102: Power Tools 1 IWWT 150: Power Tools 2
14. Communicate effectively in speech and writing as well as graphically.	Included in courses but not captured in program outcomes. See next column	IWWT 207: Operating Your Own Business IWWT 105: Cabinet Construction 1 IWWT 151: Cabinet Construction 2

Table 2: MTCU Vocational Outcomes Comparison Georgian College



Georgian MTCU
Comparison Map.xls

44300 (Certificate)	Georgian Cabinetmaking Techniques Program Outcomes	Courses
1. Apply the fundamentals of mathematics to the solution of routine problems in their discipline.	9. apply mathematical solutions for cabinetmaking applications.	MATH1007 Mathematics Techniques
2. Perform all Industrial Woodworking activities safely and demonstrate the ability to react to emergency situations properly.	1. perform cabinetmaking activities safely to industry standards	CABT1010 Hand and Power Tools CABT1014 Cabinet Construction and Installation
3. Store, test and select the various grades of wood and related building materials.	5. select various grades of lumber and building materials	CABT1017 Cabinetmaking Materials
4. Select, maintain and operate hand tools, portable power tools and stationary powered machinery.	4. select, maintain and operate hand tools, portable power tools and stationary machinery.	CABT1010 Hand and Power Tools
5. Determine joinery requirements for various types of construction through the assessment of material characteristics and end use suitability.	2. determine joinery requirements for various types of cabinetmaking construction including sketches and shop drawings of common furniture and cabinet units	CABT1013 Joinery and Fastening
6. Perform sanding operations to the determined industrial standards.	6. perform sanding and adhesive operations to industry standards	CABT1016 Finishing Applications CABT1020 Advanced Projects
7. Select and apply adhesives common to the trade, utilizing related clamping and applying tools and equipment.	6. perform sanding and adhesive operations to industry standards	CABT1016 Finishing Applications CABT1020 Advanced Projects
8. Perform finishing operations utilizing materials and processes common to the wood products industry.	7. select and apply finishes and hardware used in manufacturing of furniture, cabinets and millwork	CABT1016 Finishing Applications CABT1020 Advanced Projects
9. Select and apply hardware and fasteners used in the manufacturing of furniture, cabinets, and millwork.	7. select and apply finishes and hardware used in manufacturing of furniture, cabinets and millwork	CABT1016 Finishing Applications CABT1020 Advanced Projects
10. Install residential and commercial cabinets.	8. produce cabinets and other architectural specialties including millwork and mouldings to be installed in residential and commercial applications	CABT1018 Construction Applications

44300 (Certificate)	Georgian Cabinetmaking Techniques Program Outcomes	Courses
11. Produce sketches and shop drawings of common furniture and cabinet units and component parts; and interpret blueprints for production planning and estimating.	2. determine joinery requirements for various types of cabinetmaking construction including sketches and shop drawings of common furniture and cabinet units	CABT1013 Joinery and Fastening
12. Develop acceptable business practices and communication skills to ensure customer and employer satisfaction throughout industry.	Included in courses but not captured in program outcomes. See next column	CABT1019 Preproduction Planning
13. Perform basic computer keyboard operations.	Included in courses but not captured in program outcomes. See next column	DRFT1009 Technical Drawings

54300 (Diploma)	Georgian Cabinetmaking Techniques Program Outcomes	Courses
1. Understand the structure of wood, and how this structure and wood's mechanical and physical properties relate to the working properties of wood and its performance in use.	Included in courses but not captured in program outcomes. See next column	CABT1017 Cabinetmaking Materials
2. Set-up and operate a wide range of machinery and equipment used in wood products manufacturing.	4. select, maintain and operate hand tools, portable power tools and stationary machinery.	CABT1010 Hand and Power Tools
3. Perform basic sharpening and maintenance of saws and cutters.	Not covered	
4. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	Not covered	
5. Perform basic wood finishing techniques.	7. select and apply finishes and hardware used in manufacturing of furniture, cabinets and millwork	CABT1016 Finishing Applications
6. Use basic hand tools.	4. select, maintain and operate hand tools, portable power tools and stationary machinery.	CABT1010 Hand and Power Tools
7. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	5. select various grades of lumber and building materials	CABT1017 Cabinetmaking Materials
8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	8. produce cabinets and other architectural specialties including millwork and mouldings to be installed in residential and commercial applications	CABT1018 Construction Applications
9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	Included in courses but not captured in program outcomes. See next column	CABT1020 Advanced Projects
10. Have an appreciation of the history of furniture styles.	Included in courses but not captured in program outcomes. See next column	CABT1021 Furniture Design
11. Practice teamwork, accomplishing objectives.	Included in courses but not captured in program outcomes. See next column	CABT1014 Cabinet Construction and Installation Communications Course
12. Communicate effectively.	Included in courses but not captured in program outcomes. See next column	Communications Course
13. Be aware of basic microcomputer applications	Included in courses but not captured in program outcomes. See next column	DRFT1009 Technical Drawings

54300 (Diploma)	Georgian Cabinetmaking Techniques Program Outcomes	Courses
14. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	Not covered	
15. Understand the product development process and the role of the product engineer.	Not covered	
16. Apply simple business practice procedures.	Not covered	
17. Evaluate, estimate repair costs and restore antique furniture.	Not covered	
18. Design and construct a variety of kitchen cabinets.	8. produce cabinets and other architectural specialties including millwork and mouldings to be installed in residential and commercial applications	CABT1014 Cabinet Construction and Installation CABT1020 Advanced Projects
19. Design and construct a variety of architectural millwork products.	8. produce cabinets and other architectural specialties including millwork and mouldings to be installed in residential and commercial applications	CABT1011 Cabinetmaking Applications CABT1020 Advanced Projects
Depending on the optional practical modules chosen:		
21. Design, construct and use complex jigs and patterns;	Not covered	
22. Understand the programming and operation of computer-controlled machines;	Not covered	
23. Create, dimension and plot part drawings using autocad computer program; or	Not covered	
24. Design and construct chairs of a variety of styles.	8. produce cabinets and other architectural specialties including millwork and mouldings to be installed in residential and commercial applications	CABT1015 Trim and Mouldings CABT1021 Furniture Design
25. Finish a variety of woodworking projects using sophisticated finishing procedures and using production techniques.	6. perform sanding and adhesive operations to industry standards	CABT1012 Finishing Processes CABT1020 Advanced Projects
26. Do a materials take-off from architects' drawings.	Not covered	

54300 (Diploma)	Georgian Cabinetmaking Techniques Program Outcomes	Courses
27. Understand the operation of a lumber drying kiln.	Included in courses but not captured in program outcomes. See next column	CABT1017 Cabinetmaking Materials
28. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	Included in courses but not captured in program outcomes. See next column	CABT1014 Cabinet Construction and Installation

64300 (Advanced Diploma)	Georgian Cabinetmaking Techniques Program Outcome	Courses
1.a. Understand how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood products.	Included in courses but not captured in program outcomes. See next column	CABT1017 Cabinetmaking Materials
1.b. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	5. select various grades of lumber and building materials	CABT1017 Cabinetmaking Materials
2.a. Set up and operate a wide range of machinery and equipment used in wood products manufacturing.	4. select, maintain and operate hand tools, portable power tools and stationary machinery.	CABT1010 Hand and Power Tools
2.b. Perform the skills of basic sharpening and maintenance of saws and cutters.	Not covered	
2.c. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	Not covered	
2.d. Finish a variety of woodworking projects using state-of-the-art finishing procedures and production techniques.	7. select and apply finishes and hardware used in manufacturing of furniture, cabinets and millwork	CABT1012 Finishing Processes CABT1016 Finishing Applications
2.e. Use basic hand tools.	4. select, maintain and operate hand tools, portable power tools and stationary machinery.	CABT1010 Hand and Power Tools
3.a. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	7. select and apply finishes and hardware used in manufacturing of furniture, cabinets and millwork	CABT1012 Finishing Processes CABT1016 Finishing Applications
	8. produce cabinets and other architectural specialties including millwork and mouldings to be installed in residential and commercial applications	CABT1018 Construction Applications
3.b. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	3. interpret drawings for production planning and estimating	DRFT1009 Technical Drawings CABT1014 Cabinet Construction and Installation
3.c. Develop complete working drawings using AutoCAD.	Not covered	

64300 (Advanced Diploma)	Georgian Cabinetmaking Techniques Program Outcome	Courses
4.a. Understand basic principles of work measurements, methods analysis, quality control, production control and supervision.	Included in courses but not captured in program outcomes. See next column	CABT1014 Cabinet Construction and Installation CABT1019 Preproduction Planning
4.b. Understand the product development process and the role of the product engineer.		Not covered
4.c. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.		Not covered
4.d. Carry out time studies and develop standard data applying the principles of work measurement.		Not covered
4.e. Apply the principles of methods analysis, work station efficiency, and productive work flow for typical manufacturing processes.		Not covered
4.f. Understand and assist in layout and materials handling analysis, equipment selection, and plant support system planning.		Not covered
4.g. Perform operations planning and scheduling as well as inventory and materials requirement analysis.		Not covered
5.a. Appreciate the design and construction fundamentals of kitchen cabinetry.	8. produce cabinets and other architectural specialties including millwork and mouldings to be installed in residential and commercial applications	CABT1018 Construction Applications
5.b. Appreciate how architectural millwork products differ from furniture in design, construction and installation.		Not covered
6.a. Understand the programming and operation of computer-controlled machines, and create, dimension and plot part drawings using AutoCAD computer program.		Not covered
6.b. Understand the concepts of computer-integrated manufacturing and apply the principles of computer control in the woodworking manufacturing environment.		Not covered
6.c. Transfer the data generated by software programs through to CNC machinery for part manufacturing.		Not covered
7.a. Develop a quality assurance program for wood manufacturing operation applying the principles of statistical process control.		Not covered
7.b. Apply testing techniques including simple computer analysis on a variety of raw materials and assembled products.		Not covered
8. Appreciate the history of furniture styles.	Included in courses but not captured in program outcomes. See next column	CABT1021 Furniture Design
9. Practice teamwork in accomplishing objectives.		Not covered
10. Apply simple business procedures.		Not covered

64300 (Advanced Diploma)	Georgian Cabinetmaking Techniques Program Outcome	Courses
11. Restore antique furniture based on the evaluation and estimation of repair costs.		Not covered
12. Apply the fundamentals of effective supervision and personnel management.		Not covered
13. Understand the responsibility and methods of maintaining a safe working environment.	1. perform cabinetmaking activities safely to industry standards	CABT1010 Hand and Power Tools CABT1014 Cabinet Construction and Installation
14. Communicate effectively in speech and writing as well as graphically.	Included in courses but not captured in program outcomes. See next column	Communications Course

Table 3: MTCU Vocational Outcomes Comparison St.Clair College



St.Clair MTCU
Comparison Map.xls

44300 (Certificate)	St. Clair College Woodworking Technician Program Outcomes	Courses
1. Apply the fundamentals of mathematics to the solution of routine problems in their discipline.	14. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	BDT 106 CARPENTRY CALCULATIONS BDT 117 PRINT READING & ESTIMATING
2. Perform all Industrial Woodworking activities safely and demonstrate the ability to react to emergency situations properly.	2. Set-up and operate a wide range of machinery and equipment used in wood products manufacturing.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 216 WOOD FINISHING BDT 221 CUSTOM CABINETRY BDT 219 RENOVATION CARPENTRY BDT 309 ARCHITECTURAL MILLWORK
3. Store, test and select the various grades of wood and related building materials.	1. Understand the structure of wood, and how this structure and wood's mechanical and physical properties relate to the working properties of wood and its performance in use.	BDT 302 MATERIALS I
4. Select, maintain and operate hand tools, portable power tools and stationary powered machinery.	2. Set-up and operate a wide range of machinery and equipment used in wood products manufacturing.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 309 ARCHITECTURAL MILLWORK BDT 216 WOOD FINISHING BDT 219 RENOVATION CARPENTRY BDT 221 CUSTOM CABINETRY
5. Determine joinery requirements for various types of construction through the assessment of material characteristics and end use suitability.	18. Design and construct a variety of kitchen cabinets.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 404 WPCOMPUTERIZED KITCHEN DESIGN BDT 407 COMPUTER NUMERIC CONTROL BDT 221 CUSTOM CABINETRY BDT 404 WPCOMPUTERIZED KITCHEN DESIGN BDT 407 COMPUTER NUMERIC CONTROL
6. Perform sanding operations to the determined industrial standards.	5. Perform basic wood finishing techniques.	BDT 216 WOOD FINISHING
7. Select and apply adhesives common to the trade, utilizing related clamping and applying tools and equipment.	18. Design and construct a variety of kitchen cabinets.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 407 COMPUTER NUMERIC CONTROL BDT 221 CUSTOM CABINETRY BDT 404 WPCOMPUTERIZED KITCHEN DESIGN
8. Perform finishing operations utilizing materials and processes common to the wood products industry.	5. Perform basic wood finishing techniques.	BDT 216 WOOD FINISHING
9. Select and apply hardware and fasteners used in the manufacturing of furniture, cabinets, and millwork.	8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	BDT 125 MACHINING PRACTICE I BDT 221 CUSTOM CABINETRY BDT 308 DESIGN STUDIO BDT 309 ARCHITECTURAL MILLWORK

44300 (Certificate)	St. Clair College Woodworking Technician Program Outcomes	Courses
10. Install residential and commercial cabinets.	8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	BDT 125 MACHINING PRACTICE I BDT 221 CUSTOM CABINETRY BDT 308 DESIGN STUDIO BDT 309 ARCHITECTURAL MILLWORK
11. Produce sketches and shop drawings of common furniture and cabinet units and component parts; and interpret blueprints for production planning and estimating.	9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	BDT 106 CARPENTRY CALCULATIONS ARC 125 BUILDING CAD I ARC 204 BUILDING CAD II
12. Develop acceptable business practices and communication skills to ensure customer and employer satisfaction throughout industry.	16. Apply simple business practice procedures.	BDT 117 PRINT READING & ESTIMATING
13. Perform basic computer keyboard operations.	13. Be aware of basic microcomputer applications.	ARC 125 BUILDING CAD I ARC 204 BUILDING CAD II BDT 404 WPCOMPUTERIZED KITCHEN DESIGN BDT 407 COMPUTER NUMERIC CONTROL

54300 (Diploma)	St. Clair College Woodworking Technician Program Outcomes	Courses
1. Understand the structure of wood, and how this structure and wood's mechanical and physical properties relate to the working properties of wood and its performance in use.	1. Understand the structure of wood, and how this structure and wood's mechanical and physical properties relate to the working properties of wood and its performance in use.	BDT 302 MATERIALS I
2. Set-up and operate a wide range of machinery and equipment used in wood products manufacturing.	2. Set-up and operate a wide range of machinery and equipment used in wood products manufacturing.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 216 WOOD FINISHING BDT 219 RENOVATION CARPENTRY BDT 221 CUSTOM CABINETRY BDT 309 ARCHITECTURAL MILLWORK
3. Perform basic sharpening and maintenance of saws and cutters.	3. Perform basic sharpening and maintenance of saws and cutters.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 309 ARCHITECTURAL MILLWORK
4. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	4. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	BDT 221 CUSTOM CABINETRY BDT 303 MACHINING THEORY II BDT 308 DESIGN STUDIO BDT 309 ARCHITECTURAL MILLWORK BDT 410 STAIR DESIGN/ MANUFACTURING
5. Perform basic wood finishing techniques.	5. Perform basic wood finishing techniques.	BDT 216 WOOD FINISHING
6. Use basic hand tools.	6. Use basic hand tools.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 406 MILLWORK INSTALLATION MECHANICS
7. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	7. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	BDT 302 MATERIALS I
8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	BDT 125 MACHINING PRACTICE I BDT 221 CUSTOM CABINETRY BDT 308 DESIGN STUDIO BDT 309 ARCHITECTURAL MILLWORK
9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	BDT 106 CARPENTRY CALCULATIONS ARC 125 BUILDING CAD I ARC 204 BUILDING CAD II

54300 (Diploma)	St. Clair College Woodworking Technician Program Outcomes	Courses
10. Have an appreciation of the history of furniture styles.	10. Have an appreciation of the history of furniture styles.	BDT 221 CUSTOM CABINETRY
11. Practice teamwork, accomplishing objectives.	11. Practice teamwork, accomplishing objectives.	BDT 219 RENOVATION CARPENTRY CRP 211 OUTDOOR STRUCTURES BDT 308 DESIGN STUDIO BDT 410 STAIR DESIGN/ MANUFACTURING
12. Communicate effectively.	12. Communicate effectively.	
13. Be aware of basic microcomputer applications	13. Be aware of basic microcomputer applications.	ARC 125 BUILDING CAD I ARC 204 BUILDING CAD II BDT 404 WPCOMPUTERIZED KITCHEN DESIGN BDT 407 COMPUTER NUMERIC CONTROL
14. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	14. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	BDT 106 CARPENTRY CALCULATIONS BDT 117 PRINT READING & ESTIMATING
15. Understand the product development process and the role of the product engineer.	15. Understand the product development process and the role of the product engineer.	
16. Apply simple business practice procedures.	16. Apply simple business practice procedures.	BDT 117 PRINT READING & ESTIMATING
17. Evaluate, estimate repair costs and restore antique furniture.		not covered
18. Design and construct a variety of kitchen cabinets.	18. Design and construct a variety of kitchen cabinets.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 221 CUSTOM CABINETRY BDT 404 WPCOMPUTERIZED KITCHEN DESIGN BDT 407 COMPUTER NUMERIC CONTROL
19. Design and construct a variety of architectural millwork products.	19. Design and construct a variety of architectural millwork products.	BDT 221 CUSTOM CABINETRY BDT 308 DESIGN STUDIO BDT 309 ARCHITECTURAL MILLWORK BDT 410 STAIR DESIGN/ MANUFACTURING
Depending on the optional practical modules chosen:		

54300 (Diploma)	St. Clair College Woodworking Technician Program Outcomes	Courses
21. Design, construct and use complex jigs and patterns;	20. Depending on the optional practical modules chosen: (a) design, construct and use complex jigs and patterns; (b) understand the programming and operation of computer-controlled machines; (c) create, dimension and plot part drawings using autocrat computer program; or (d) design and construct chairs of a variety of styles.	BDT 309 ARCHITECTURAL MILLWORK
22. Understand the programming and operation of computer-controlled machines;	20. Depending on the optional practical modules chosen: (a) design, construct and use complex jigs and patterns; (b) understand the programming and operation of computer-controlled machines; (c) create, dimension and plot part drawings using autocrat computer program; or (d) design and construct chairs of a variety of styles.	BDT 407 COMPUTER NUMERIC CONTROL
23. Create, dimension and plot part drawings using autocrat computer program; or	20. Depending on the optional practical modules chosen: (a) design, construct and use complex jigs and patterns; (b) understand the programming and operation of computer-controlled machines; (c) create, dimension and plot part drawings using autocrat computer program; or (d) design and construct chairs of a variety of styles.	ARC 204 BUILDING CAD II
24. Design and construct chairs of a variety of styles.		not covered
25. Finish a variety of woodworking projects using sophisticated finishing procedures and using production techniques.	21. Finish a variety of woodworking projects using sophisticated finishing procedures and using production techniques.	BDT 218 WOOD FINISHING BDT 303 MACHINING THEORY II
26. Do a materials take-off from architects' drawings.	22. Do a materials take-off from architects' drawings.	BDT 117 PRINT READING & ESTIMATING
27. Understand the operation of a lumber drying kiln.	23. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	BDT 117 PRINT READING & ESTIMATING
28. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	24. Understand the operation of a lumber drying kiln.	BDT 302 MATERIALS I

64300 (Advanced Diploma)	St. Clair College Woodworking Technician Program Outcomes	Courses
1.a. Understand how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood products.	1. Understand the structure of wood, and how this structure and wood's mechanical and physical properties relate to the working properties of wood and its performance in use.	BDT 302 MATERIALS I
1.b. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	7. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	BDT 302 MATERIALS I
2.a. Set up and operate a wide range of machinery and equipment used in wood products manufacturing.	2. Set-up and operate a wide range of machinery and equipment used in wood products manufacturing.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 221 CUSTOM CABINETRY BDT 309 ARCHITECTURAL MILLWORK BDT 216 WOOD FINISHING BDT 219 RENOVATION CARPENTRY
2.b. Perform the skills of basic sharpening and maintenance of saws and cutters.	3. Perform basic sharpening and maintenance of saws and cutters.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 309 ARCHITECTURAL MILLWORK
2.c. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	4. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	BDT 221 CUSTOM CABINETRY BDT 303 MACHINING THEORY II BDT 308 DESIGN STUDIO BDT 309 ARCHITECTURAL MILLWORK BDT 410 STAIR DESIGN/ MANUFACTURING
2.d. Finish a variety of woodworking projects using state-of-the-art finishing procedures and production techniques.	5. Perform basic wood finishing techniques.	BDT 216 WOOD FINISHING
2.e. Use basic hand tools.	6. Use basic hand tools.	BDT 116 MACHINING THEORY I BDT 125 MACHINING PRACTICE I BDT 406 MILLWORK INSTALLATION MECHANICS
3.a. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	BDT 125 MACHINING PRACTICE I BDT 221 CUSTOM CABINETRY BDT 308 DESIGN STUDIO BDT 309 ARCHITECTURAL MILLWORK
3.b. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	BDT 106 CARPENTRY CALCULATIONS ARC 125 BUILDING CAD I ARC 204 BUILDING CAD II
3.c. Develop complete working drawings using AutoCAD.	9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	ARC 125 BUILDING CAD I ARC 204 BUILDING CAD II

64300 (Advanced Diploma)	St. Clair College Woodworking Technician Program Outcomes	Courses
4.a. Understand basic principles of work measurements, methods analysis, quality control, production control and supervision.	14. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	BDT 106 CARPENTRY CALCULATIONS BDT 117 PRINT READING & ESTIMATING
4.b. Understand the product development process and the role of the product engineer.	15. Understand the product development process and the role of the product engineer.	
4.c. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	23. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	BDT 117 PRINT READING & ESTIMATING
4.d. Carry out time studies and develop standard data applying the principles of work measurement.		not covered
4.e. Apply the principles of methods analysis, work station efficiency, and productive work flow for typical manufacturing processes.		not covered
4.f. Understand and assist in layout and materials handling analysis, equipment selection, and plant support system planning.		not covered
4.g. Perform operations planning and scheduling as well as inventory and materials requirement analysis.		not covered
5.a. Appreciate the design and construction fundamentals of kitchen cabinetry.	8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	BDT 125 MACHINING PRACTICE I BDT 221 CUSTOM CABINETS BDT 308 DESIGN STUDIO BDT 309 ARCHITECTURAL MILLWORK
5.b. Appreciate how architectural millwork products differ from furniture in design, construction and installation.	9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	BDT 106 CARPENTRY CALCULATIONS ARC 125 BUILDING CAD I ARC 204 BUILDING CAD II
6.a. Understand the programming and operation of computer-controlled machines, and create, dimension and plot part drawings using AutoCAD computer program.	20. Depending on the optional practical modules chosen: (a) design, construct and use complex jigs and patterns; (b) understand the programming and operation of computer-controlled machines; (c) create, dimension and plot part drawings using autocad computer program; or (d) design and construct chairs of a variety of styles.	BDT 309 ARCHITECTURAL MILLWORK

Table 4: MTCU Vocational Outcomes Comparison Conestoga College



Conestoga MTCU
Comparison Map.xls

44300 (Certificate)	Conestoga Woodworking Technology Program Outcomes	Courses
1. Apply the fundamentals of mathematics to the solution of routine problems in their discipline.	16. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	OPER2120 Shop Management MGMT1230 Time And Motion Study II: Work Measurement MGMT1220 Time And Motion Study I: Work Design QUAL3030 Quality Control
2. Perform all Industrial Woodworking activities safely and demonstrate the ability to react to emergency situations properly.	2. Safely use basic hand tools, and portable power tools.	WOOD1010 Woodworking Techniques I WOOD1025 Machining I - Practical
	3. Safely set-up and operate a wide range of production machinery and equipment used in wood products manufacturing.	MANU3060 Automated Manufacturing MACH2045 Computer Machining Theory/Practical WOOD2015 Architectural Millwork/Kitchen Cabinets
	37. Understand the responsibility and methods of maintaining a safe working environment.	PLAN1010 Woodworking Facilities Planning I PLAN1020 Woodworking Facilities Planning II
3. Store, test and select the various grades of wood and related building materials.	1. Understand how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood products.	MATR1030 Materials WOOD1025 Machining I - Practical
	7. Describe the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	MATR1030 Materials
	24. Understand the operation of a lumber drying kiln.	MATR1030 Materials WOOD2020 Woodworking Techniques III
4. Select, maintain and operate hand tools, portable power tools and stationary powered machinery.	2. Safely use basic hand tools, and portable power tools.	WOOD1025 Machining I - Practical
	3. Safely set-up and operate a wide range of production machinery and equipment used in wood products manufacturing.	MACH1020 CNC (Woodworking) WOOD1080 Machining II - Practical WOOD2037 Machining 3 - Practical WOOD2015 Architectural Millwork/Kitchen Cabinets

44300 (Certificate)	Conestoga Woodworking Technology Program Outcomes	Courses
	4. Perform the skills of basic sharpening and maintenance of hand tools.	WOOD1025 Machining I - Practical
5. Determine joinery requirements for various types of construction through the assessment of material characteristics and end use suitability.	3. Safely set-up and operate a wide range of production machinery and equipment used in wood products manufacturing.	WOOD1025 Machining I - Practical WOOD1080 Machining II - Practical
	5. Design, construct and use jigs and patterns for machining, and assembly operations.	WOOD1080 Machining II - Practical WOOD2037 Machining 3 - Practical WOOD2055 Machining 4 - Practical
	21. Appreciate how architectural millwork products differ from furniture in design, construction and installation.	WOOD2100 Architectural Techniques
	36. Understand the fundamentals of product testing and analysis and perform strength tests on a variety of furniture joints and components.	QUAL3030 Quality Control
6. Perform sanding operations to the determined industrial standards.	3. Safely set-up and operate a wide range of production machinery and equipment used in wood products manufacturing.	WOOD1025 Machining I - Practical WOOD1080 Machining II - Practical
	5. Design, construct and use jigs and patterns for machining, and assembly operations.	WOOD1080 Machining II - Practical WOOD2037 Machining 3 - Practical WOOD2055 Machining 4 - Practical
	21. Appreciate how architectural millwork products differ from furniture in design, construction and installation.	WOOD1080 Machining II - Practical WOOD2037 Machining 3 - Practical WOOD2055 Machining 4 - Practical
7. Select and apply adhesives common to the trade, utilizing related clamping and applying tools and equipment.	5. Design, construct and use jigs and patterns for machining, and assembly operations.	WOOD1080 Machining II - Practical WOOD2037 Machining 3 - Practical WOOD2055 Machining 4 - Practical
	8. Construct and finish a variety of furniture and cabinetry projects applying the appropriate production techniques.	WOOD1080 Machining II - Practical WOOD2037 Machining 3 - Practical WOOD2055 Machining 4 - Practical
8. Perform finishing operations utilizing materials and processes common to the wood products industry.	6. Perform a variety of industrial wood finishing techniques.	WOOD1045 Finishing Theory/Practical WOOD1170 Finishing 2 - Theory WOOD1070 Finishing II - Practical
9. Select and apply hardware and fasteners used in the manufacturing of furniture, cabinets, and millwork.	8. Construct and finish a variety of furniture and cabinetry projects applying the appropriate production techniques.	WOOD1080 Machining II - Practical

44300 (Certificate)	Conestoga Woodworking Technology Program Outcomes	Courses
10. Install residential and commercial cabinets.	8. Construct and finish a variety of furniture and cabinetry projects applying the appropriate production techniques.	WOOD2015 Architectural Millwork/Kitchen Cabinets
11. Produce sketches and shop drawings of common furniture and cabinet units and component parts; and interpret blueprints for production planning and estimating.	9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	DRWG1095 Drafting And Blueprint Reading DSGN1020 Product Engineering
12. Develop acceptable business practices and communication skills to ensure customer and employer satisfaction throughout industry.	18. Apply simple business practice procedures.	ENTR1011 Entrepreneurship
13. Perform basic computer keyboard operations.	13. Be aware of basic microcomputer applications.	DRWG1095 Drafting And Blueprint Reading COMP1250 Computer Drafting

54300 (Diploma)	Conestoga Woodworking Technology Program Outcomes	Courses
1. Understand the structure of wood, and how this structure and wood's mechanical and physical properties relate to the working properties of wood and its performance in use.	1. Understand how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood products.	MATR1030 Materials
2. Set-up and operate a wide range of machinery and equipment used in wood products manufacturing.	3. Safely set-up and operate a wide range of production machinery and equipment used in wood products manufacturing.	WOOD1010 Woodworking Techniques I WOOD1025 Machining I - Practical
3. Perform basic sharpening and maintenance of saws and cutters.	4. Perform the skills of basic sharpening and maintenance of hand tools.	WOOD1025 Machining I - Practical
4. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	5. Design, construct and use jigs and patterns for machining, and assembly operations.	WOOD1080 Machining II - Practical WOOD2037 Machining 3 - Practical
5. Perform basic wood finishing techniques.	6. Perform a variety of industrial wood finishing techniques.	WOOD1045 Finishing Theory/Practical WOOD1070 Finishing II - Practical WOOD2065 Finishing 3 - Practical WOOD2055 Machining 4 - Practical
6. Use basic hand tools.	2. Safely use basic hand tools, and portable power tools.	WOOD1025 Machining I - Practical WOOD1080 Machining II - Practical WOOD2037 Machining 3 - Practical WOOD2055 Machining 4 - Practical
7. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	7. Describe the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	MATR1030 Materials
8. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	8. Construct and finish a variety of furniture and cabinetry projects applying the appropriate production techniques.	WOOD1025 Machining I - Practical WOOD1080 Machining II - Practical
9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	DRWG1095 Drafting And Blueprint Reading WOOD3020 Computer Applications In Wood Products II DSGN2130 Computerized Product Development II DRWG2115 Computerized Product Development I
10. Have an appreciation of the history of furniture styles.	10. Appreciate the history of furniture styles.	LIBS1510 History of Furniture Styles DRWG2115 Computerized Product Development I

54300 (Diploma)	Conestoga Woodworking Technology Program Outcomes	Courses
11. Practice teamwork, accomplishing objectives.	11. Practice teamwork in accomplishing objectives.	WOOD1080 Machining II - Practical HRM3010 Effective Supervision Practicum II HRM1130 Effective Supervision HRM3000 Effective Supervision Practicum I
12. Communicate effectively.	12. Communicate effectively.	COMM1085 College Reading & Writing Skills DRWG2115 Computerized Product Development I
13. Be aware of basic microcomputer applications	13. Be aware of basic microcomputer applications.	DRWG1095 Drafting And Blueprint Reading COMP1250 Computer Drafting
14. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	16. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	MATH1227 Numerical Woodworking Applications OPER2120 Shop Management
	29. Develop a quality assurance program for a wood manufacturing operation applying the principles of statistical process control.	QUAL3030 Quality Control
15. Understand the product development process and the role of the product engineer.	17. Understand the product development process and the role of the product engineer.	DSGN1020 Product Engineering
16. Apply simple business practice procedures.	18. Apply simple business practice procedures.	ENTR1011 Entrepreneurship OPER2120 Shop Management
17. Evaluate, estimate repair costs and restore antique furniture.	25. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	WOOD1045 Finishing Theory/Practical WOOD1170 Finishing 2 - Theory
18. Design and construct a variety of kitchen cabinets.	20. Appreciate the design and construction fundamentals of kitchen cabinetry and architectural millwork.	WOOD2015 Architectural Millwork/Kitchen Cabinets WOOD2100 Architectural Techniques MACH2045 Computer Machining Theory/Practical
	23. Finish a variety of woodworking projects using sophisticated finishing procedures using production processes.	WOOD1080 Machining II - Practical PLAN1010 Woodworking Facilities Planning I
19. Design and construct a variety of architectural millwork products.	20. Appreciate the design and construction fundamentals of kitchen cabinetry and architectural millwork.	WOOD2015 Architectural Millwork/Kitchen Cabinets WOOD2100 Architectural Techniques MACH2045 Computer Machining Theory/Practical

54300 (Diploma)	Conestoga Woodworking Technology Program Outcomes	Courses
	23. Finish a variety of woodworking projects using sophisticated finishing procedures using production processes.	WOOD1080 Machining II - Practical PLAN1010 Woodworking Facilities Planning I
20. Depending on the optional practical modules chosen:		
21. Design, construct and use complex jigs and patterns;	5. Design, construct and use jigs and patterns for machining, and assembly operations.	WOOD1080 Machining II - Practical
22. Understand the programming and operation of computer-controlled machines;	33. Understand the concepts of computer-integrated manufacturing and apply the principles of computer control in the woodworking manufacturing environment.	MACH2045 Computer Machining Theory/Practical MACH1020 CNC (Woodworking)
23. Create, dimension and plot part drawings using autocad computer program; or	22. Understand the programming and operation of computer-controlled machines, and create, dimension and plot part drawings using AutoCAD computer program.	
24. Design and construct chairs of a variety of styles.		
25. Finish a variety of woodworking projects using sophisticated finishing procedures and using production techniques.	23. Finish a variety of woodworking projects using sophisticated finishing procedures using production processes.	
26. Do a materials take-off from architects' drawings.	25. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	WOOD1045 Finishing Theory/Practical WOOD1170 Finishing 2 - Theory
27. Understand the operation of a lumber drying kiln.	24. Understand the operation of a lumber drying kiln.	
28. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	25. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	WOOD1045 Finishing Theory/Practical WOOD1170 Finishing 2 - Theory

64300 (Advanced Diploma)	Conestoga Woodworking Technology Program Outcomes	Courses
1.a. Understand how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood products.	1. Understand how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood products.	MATR1030 Materials
1.b. Know the variety, grades and uses of materials commonly used in the trade, including lumber, veneer, particleboard, fibreboard, plastic laminates, adhesives, abrasives and preservatives.	1. Understand how the structure of wood and its mechanical and physical properties relate to the quality and performance of wood products.	MATR1030 Materials
2.a. Set up and operate a wide range of machinery and equipment used in wood products manufacturing.	3. Safely set-up and operate a wide range of production machinery and equipment used in wood products manufacturing.	WOOD1010 Woodworking Techniques I WOOD1025 Machining I - Practical
2.b. Perform the skills of basic sharpening and maintenance of saws and cutters.	4. Perform the skills of basic sharpening and maintenance of hand tools.	WOOD1025 Machining I - Practical
2.c. Design, construct and use jigs and patterns for machining, sanding and assembly operations.	5. Design, construct and use jigs and patterns for machining, and assembly operations.	WOOD1080 Machining II - Practical
2.d. Finish a variety of woodworking projects using state-of-the-art finishing procedures and production techniques.	23. Finish a variety of woodworking projects using sophisticated finishing procedures using production processes.	WOOD1045 Finishing Theory/Practical WOOD1170 Finishing 2 - Theory WOOD1070 Finishing II - Practical WOOD2070 Finishing III Theory
2.e. Use basic hand tools.	2. Safely use basic hand tools, and portable power tools.	WOOD1025 Machining I - Practical
3.a. Construct and finish a variety of furniture and cabinetry projects applying production techniques.	8. Construct and finish a variety of furniture and cabinetry projects applying the appropriate production techniques.	WOOD1025 Machining I - Practical WOOD1080 Machining II - Practical
3.b. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	9. Prepare and use drawings and specifications for furniture, cabinets and architectural millwork.	DRWG1095 Drafting And Blueprint Reading COMP1250 Computer Drafting DSGN1020 Product Engineering DRWG2115 Computerized Product Development I
3.c. Develop complete working drawings using AutoCAD.	34. Develop complete working drawings using 3D CAD software.	MATH1227 Numerical Woodworking Applications COMP1250 Computer Drafting DSGN1020 Product Engineering DRWG2115 Computerized Product Development I
4.a. Understand basic principles of work measurements, methods analysis, quality control, production control and supervision.	16. Understand basic principles of work measurement, methods analysis, quality control, production control and supervision.	QUAL3030 Quality Control OPER1150 Planning and Control Systems II OPER1140 Planning and Control Systems I MGMT1230 Time And Motion Study II: Work Measurement

64300 (Advanced Diploma)	Conestoga Woodworking Technology Program Outcomes	Courses
4.b. Understand the product development process and the role of the product engineer.	17. Understand the product development process and the role of the product engineer.	DSGN1020 Product Engineering
4.c. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	25. Prepare cost estimates for furniture, cabinetry and architectural millwork projects.	WOOD1045 Finishing Theory/Practical WOOD1170 Finishing 2 - Theory DRWG2115 Computerized Product Development I
4.d. Carry out time studies and develop standard data applying the principles of work measurement.	27. Carry out time studies and develop standard data applying the principles of work measurement.	MGMT1220 Time And Motion Study I: Work Design MGMT1230 Time And Motion Study II: Work Measurement
4.e. Apply the principles of methods analysis, work station efficiency, and productive work flow for typical manufacturing processes.	28. Apply the principles of methods analysis, work station efficiency, and productive work flow for typical manufacturing processes.	OPER1150 Planning and Control Systems II
4.f. Understand and assist in layout and materials handling analysis, equipment selection, and plant support system planning.	31. Understand and assist in plant layout and materials handling analysis, equipment selection, and plant support system planning.	PLAN1020 Woodworking Facilities Planning II PLAN1010 Woodworking Facilities Planning I
4.g. Perform operations planning and scheduling as well as inventory and materials requirement analysis.	32. Perform operations planning and scheduling as well as inventory and materials requirement analysis.	OPER1140 Planning and Control Systems I OPER1150 Planning and Control Systems II
5.a. Appreciate the design and construction fundamentals of kitchen cabinetry.	20. Appreciate the design and construction fundamentals of kitchen cabinetry and architectural millwork.	WOOD2015 Architectural Millwork/Kitchen Cabinets WOOD2100 Architectural Techniques
5.b. Appreciate how architectural millwork products differ from furniture in design, construction and installation.	21. Appreciate how architectural millwork products differ from furniture in design, construction and installation.	WOOD2015 Architectural Millwork/Kitchen Cabinets WOOD2100 Architectural Techniques
6.a. Understand the programming and operation of computer-controlled machines, and create, dimension and plot part drawings using AutoCAD computer program.	22. Understand the programming and operation of computer-controlled machines, and create, dimension and plot part drawings using AutoCAD computer program.	MACH2045 Computer Machining Theory/Practical MACH1020 CNC (Woodworking)
6.b. Understand the concepts of computer-integrated manufacturing and apply the principles of computer control in the woodworking manufacturing environment.	33. Understand the concepts of computer-integrated manufacturing and apply the principles of computer control in the woodworking manufacturing environment.	MACH2045 Computer Machining Theory/Practical MACH1020 CNC (Woodworking) MANU3060 Automated Manufacturing
6.c. Transfer the data generated by software programs through to CNC machinery for part manufacturing.	35. Transfer the data generated by software programs through to CNC machinery for part manufacturing.	MACH2045 Computer Machining Theory/Practical MANU3060 Automated Manufacturing

64300 (Advanced Diploma)	Conestoga Woodworking Technology Program Outcomes	Courses
7.a. Develop a quality assurance program for wood manufacturing operation applying the principles of statistical process control.	29. Develop a quality assurance program for a wood manufacturing operation applying the principles of statistical process control.	QUAL3030 Quality Control
7.b. Apply testing techniques including simple computer analysis on a variety of raw materials and assembled products.	36. Understand the fundamentals of product testing and analysis and perform strength tests on a variety of furniture joints and components.	QUAL3030 Quality Control
8. Appreciate the history of furniture styles.	10. Appreciate the history of furniture styles.	LIBS1510 History of Furniture Styles
9. Practice teamwork in accomplishing objectives.	11. Practice teamwork in accomplishing objectives.	WOOD1025 Machining I - Practical HRM3000 Effective Supervision Practicum I HRM3010 Effective Supervision Practicum II
10. Apply simple business procedures.	18. Apply simple business practice procedures.	ENTR1011 Entrepreneurship OPER2120 Shop Management
11. Restore antique furniture based on the evaluation and estimation of repair costs.		Not covered
12. Apply the fundamentals of effective supervision and personnel management.	30. Apply the fundamentals of effective supervision and personnel management.	HRM3000 Effective Supervision Practicum I HRM3010 Effective Supervision Practicum II
13. Understand the responsibility and methods of maintaining a safe working environment.	37. Understand the responsibility and methods of maintaining a safe working environment.	MGMT1230 Time And Motion Study II: Work Measurement MGMT1220 Time And Motion Study I: Work Design
14. Communicate effectively in speech and writing as well as graphically.	38. Communicate effectively in speech and writing as well as graphically.	COMM1085 College Reading & Writing Skills COMM1085 College Reading & Writing Skills