

Arborist — Utility Arborist Curriculum	
Trade Name & Code	444A Arborist and 444B Utility Arborist
Implementation Date of New Standard	January 3 rd , 2023
Implementation Plan	<ul style="list-style-type: none"> All apprentices with initial training agreements registered on or after 01/03/23 must be trained to this new curriculum.
Impact on the Training Standard	<ul style="list-style-type: none"> The curriculum references in the current training standards for 444A Arborist and 444B Utility Arborist reflect the existing/old curriculum and should be ignored upon implementation of this curriculum standard. When both of the training standards are updated, they will be matched against the curriculum.
Impact on changes to the Curriculum on Delivery	<ul style="list-style-type: none"> Minimal impact to the TDAs.
Curriculum Standard Access	<ul style="list-style-type: none"> As of 01/03/23 the new Curriculum Standard for 444A and 444B will be available on the Skilled Trades Ontario website.
Impetus for curriculum Revision	<p>In 2009, as a result of Ontario’s cosmetic Pesticides Ban (2008), additional hours were added to the Arborist and Utility Arborist in-school programs to allow for the introduction of content into the curriculum on Integrated Pest Management (IPM). In 2017, instructors from Humber College conducted an evaluation of the program, requesting feedback on the effectiveness of the courses, particularly those that were allocated additional hours. This evaluation served as the start of the needs assessment, as instructors commented on the courses, identified gaps, and made recommendations for changes. The recommendations from Humber College were then discussed by all 3 Training Delivery Agents (TDA’s) for the trades of Arborist and Utility Arborist. Comments and feedback regarding the need for changes and revisions were the impetus for the 2018 curriculum revision.</p>
Overview of Changes	<p>In general, the changes are a structural reorganization of the curriculum- reallocation of hours and the merging of content and reportable subjects. Though there are fewer reportable subjects the totality of the content was not reduced. In fact, new content was added to the curriculum, with more detail added to many of the learning outcomes for context and make the intent more explicit. The addition of new content was accomplished by removing repetition, restructuring some content, placing it where it was deemed to be a better “fit” within another skill or skill set and noting that the expectation going forward is that content be reinforced in context (e.g., safety).</p>

This new Curriculum Standard includes **23 total Reportable subjects**

Level one Arborist and Utility Arborist - 7 Common Core reportable subjects

Level two Arborist - 8 reportable subjects

Level two Utility Arborist - 8 reportable subjects

- 6 reportable subjects unique to Level 2 Arborist
- 6 reportable subjects unique to Level 2 Utility Arborist
- 2 Common Core reportable subjects for both 444A and 444B
 - 3451 Tree Identification II
 - 3453 Aerial Devices and Other Equipment

In comparison, the previous curriculum standard, had 24 total reportable subjects

- 7 Level 1 Common Core reportable subjects
- 8 reportable subjects unique to Level 2 Arborist
- 9 reportable subjects unique to Level 2 Utility Arborist

The Working Committee agreed with recommendations from the initial needs assessment that apprentices could benefit from more time to learn theoretical content such as plant identification and Arboriculture sciences. For this reason:

- 3 hours were added to 3445 Arboricultural Sciences (Level 1)
- 3 hours were added to 3446 Arborist Tree Identification (Level 1)

Training hours were reallocated by:

- Removing 3-hours from S0246 Arborist Workplace Health and Safety I. It was noted that concepts related to health and safety are continually reinforced in context throughout the program.
- Removing 9-hours from S0247 Arborist Theory 1. The reportable was renamed as "Arborist Safe Work Practices" (3441) and is 48 hours versus the previous 57 hours.

Content related to felling was removed from Level 1 Arborist Theory S0247 (renamed Arborist Safe Work Practices) and placed into (3443) Arborist Tools and Felling Techniques. It was determined that felling could be taught in context with the practical learning outcomes in that reportable subject.

(3444) Arborist Equipment (formerly S0250 Arborist Equipment) - The Working Group recommended that arborist equipment be taught earlier in the program to support the needs of industry. As such, 18 hours were added to this subject to introduce the operation, maintenance and transportation of stumpers and mini grapple machines. The additional hours will provide apprentices with more time to learn how to safely operate various types of arborist equipment. The inclusion of this content seemed particularly important in light of recent arborist incidents. Learning outcomes were added for example, to the operation of chippers, including the identification of safety features and emergency shut off procedures.

	<p>(3441) Arborist Safe Work Practices/ (3448) Arborist Practices-Pruning & Removal Techniques- An observation/comment, from the program review of the 2009 curriculum, noted that the hours added to the practical courses, Level 1 S0248 Arborist Practices and Level 2 S0402-Arborist Practices II, had not made the significant difference to improving climbing skills as was anticipated. It was concluded that these skills are best gained over time through experience in the field. The Working Group determined additional hours would be better used to add new content and strengthen theoretical courses. For this reason, 12 hours from each of the practice courses were removed and dispersed then into other areas of the program.</p> <p>(3451) Tree Identification II - There is a similar requirement for arborist and utility apprentices to identify tree species as part of their programs. For this reason, 3541 Tree Identification II was structured as a common core reportable subject for both programs.</p> <p>(3453) Aerial Devices and other Equipment was developed as a new common reportable subject for both the arborist and utility arborist program in level two. Content from <i>S0262 Utility Arborist Practices II-Aerial Device</i> was revised and used as the basis of the content for the new reportable subject. While not all employers are currently using aerial devices for arborist work, the use of this equipment is becoming increasingly more common. Providing apprentices with knowledge and experience on the use of these devices is future focused, providing them with experience that can assist with career mobility.</p> <p>(3454) Tree planting Practice – was developed as a new reportable subject and includes content on tree planting, installing/transplanting, transporting, and monitoring the health of woody plant so apprentice learn how to adhere to the new Ontario tree planting guideline. Similar content was previously in S0401 Arborist Theory II. The 12 hours required for this program were allocated from (S0408)- Arborist Calculations). Learning outcomes for arborist calculations were placed within (3452) Crane Assisted Rigging as the theory could be taught in context to rigging.</p>
<p>New Content</p>	<p>Arborist/Utility Arborist Level 1 New Content</p> <ul style="list-style-type: none"> • (3441) Arborist Safe Work Practices - Theory on the use of single rope systems for climbing (formerly SRT) is introduced in 3441 Arborist Safe Work Practices and then practiced in 3442 Arborist Practices- Climbing. It has become a widely used method that is not always being used correctly. • (3444) Arborist Equipment- The introduction of theory related to the operation, maintenance and transportation of stumpers and mini grapple machines was added as new content, as well, additional learning outcomes on the operation of chippers. • (3446) Arborist Tree Identification- apprentices are now expected to describe 57 woody plants and 5 poisonous plants, previously, the expectation was to describe 45 woody plants as the learning outcome in (S0252) Arborist Tree

	<p>Identification. The Working Group agreed that apprentices need to increase their knowledge of tree species.</p> <p>Arborist Level 2</p> <ul style="list-style-type: none"> • (3447) Arborist Theory- The principles and goals of urban forestry were added to Arborist Theory (S3447) as this knowledge is increasingly becoming part of an arborist’s responsibility. This includes concepts related to risk assessment and requirements for completing arborist reports, business reports. <p>Level 2- Arborist and Utility Arborist</p> <ul style="list-style-type: none"> • (3451) Tree Identification II - Learning outcomes were added requiring apprentices to describe 9 compatible plants commonly found in Ontario in addition to describing 52 woody plants. In the 2009 curriculum, the expectation was only to describe 50 woody plants. As with the level one course, the Working Group felt there was a need to increase apprentices’ knowledge of tree species. • (3453) Aerial Devices and Other Equipment – learning outcomes related to aerial Device preparation, operation, preventative maintenance, were added along with the content from the previous reportable subject Arborist Equipment II to develop a new common reportable subject. The learning outcome related to describing an aerial tree rescue (S0247.2.15) was removed from Arborist Theory and placed into (3453) Aerial Devices and Other Equipment as it fit within this context.
<p>Content Structural Changes</p>	<p>Level 1 Arborist and Utility Arborist</p> <ul style="list-style-type: none"> • (3441) Arborist Safe Work Practices - content regarding identifying the physical condition and soundness of interim and final anchor points based on tree size, condition, and species (S0251.6.4) was removed from Arboricultural Sciences (S0251) as it is covered in (3441) Arborist Safe Work Practices. • (3443) Arborist Tools and Felling Techniques. This new reportable subject incorporates the content from (S0249) <i>Arborist Hand Tools</i> and includes content on felling (“Demonstrate removing woody plants using directional felling techniques without rigging equipment”), previously in S0248.3.3 Arborist Practices. Apprentices will practice using hand tools and directional felling techniques. <p>Level 2 Arborist</p> <ul style="list-style-type: none"> • (3451) Tree Identification II was restructured as a common core course with Utility Arborist Level 2. • (3452) Crane Assisted Rigging was restructured, repetition removed and concepts from (S0408) Arborist Calculations, into this reportable subject. Arborist calculations are required as part of the planning for performing tree and limb removals when using crane assisted rigging. • (3453) Aerial Devices and Other Equipment is now a common core reportable subject for level 2 Arborist and Level 2 Utility Arborist. This replaces S0407 Arborist Equipment II and S0262 Utility Arborist Practices II -Aerial Device.

	<p>Level 2 Utility Arborist</p> <ul style="list-style-type: none"> • 3453 Aerial Devices and Other Equipment was restructured S0262 Utility Arborist Practices II was restructured as: and is a common core reportable subject for level 2 Arborist and Level 2 Utility Arborist. • 3456 Vegetation Management was restructured as a 30-hour reportable subject and using content from the 36-hour S0260 Utility Arborist Theory II. <ul style="list-style-type: none"> ○ 3 of the 6 hours were reallocated to 3453 Aerial Devices and Other Equipment to provide additional practical experience ○ The additional 3 hours were added as practical hours for (3461) Utility Line Clearing to become a 15-hour reportable subject. • 3458 Utility Arborist Tools and Equipment Practical is a new 18-hour reportable subject that merges content from (S0263) Utility Arborist Equipment II - Brush Chippers and Aerial Devices (12-hours) and (S0265) Utility Arborist Hand Tools II (6-hours). Content on brush chippers was removed from S0263 and placed in Level one 3444 Arborist Equipment.
<p>Reallocation of hours and content changes</p>	<p>The Working Group agreed with recommendations from the initial needs assessment that apprentices could benefit from more time to learn theoretical content such as plant identification and Arboriculture sciences. For this reason:</p> <ul style="list-style-type: none"> - 3 hours were added to 3445 Arboricultural Sciences (Level 1) - 3 hours were added to 3446 Arborist Tree Identification (Level 1) <p>Arborist and Utility Arborist Level 1</p> <p>Training hours were reallocated by:</p> <ul style="list-style-type: none"> - 3440 Workplace Health and Safety was reduced to 36 hours- removing 3-hours from S0246 Arborist Workplace Health and Safety I. It was noted that concepts related to health and safety are continually reinforced in context throughout the program. - 3441 Arborist Safe Work Practices was restructured as a 48- hour reportable subject, removing 9-hours from the previous 57-hour S0247 Arborist Theory 1 reportable subject. This was accomplished by removing learning outcomes on felling. While theoretical content on felling is introduced 3441 Arborist Safe Work Practice (formerly S0247 Arborist Theory) much of the content related to felling is placed into (3443) Arborist Tools and Felling Techniques. It was determined that felling could continue to be taught in context while accomplishing the practical learning outcomes within that content specific reportable subject. - 3442 Arborist Practices -Climbing became a 144-hour reportable subject reducing allocation by 12 hours - 3444 Arborist Equipment increased by 18 hours to 24 hours - 3445 Arboricultural Sciences I- increased by 3 hours to 36 hours - 3446 Arborist Tree Identification increased by 3 hours to 36 hours <p>Arborist Level 2</p> <ul style="list-style-type: none"> - 3447 Arborist Theory - increased by 12 hours to 36 hours - 3448 Arborist Practices-Pruning & Removal Techniques- decreased by 12 hours to 144 hours

- 3449 Plant Health Care - Pest Management- remained as 48 hours
- 3450 Arboricultural Science II increased by 6 hours to 36 hours
- 3451 Tree Identification II*- decreased by 3 hours
- 3452 Crane Assisted Rigging- decreased allocation by 6 hours to 24 hours
- 3453 Aerial Devices and Other Equipment *- increased by 3 hours to 27 hours
- 3454 Tree Planting Practices -new 12-hour reportable subject replacing the 12 hours previously allocated to Arborist Calculations (S0408)

Utility Arborist Level 2

- 3455 Utility Arborist Safe Work Practices – remained as an 18-hour reportable subject
- 3456 Vegetation Management- decreased allocation by 6-hours to 30 hours
- 3457 Utility Arborist Practices - Tree Climbing- remained at 144 hours
- 3453 Aerial Devices and Other Equipment* - increased by 3-hours to 27 hours
- 3458 Utility Arborist Tools and Equipment Practical- increased by 6 hours to 18- hours
- 3459 Utility Arboricultural Sciences II- remained as a 15-hour reportable subject
- 3451 Tree Identification II*- remained as a 33-hour reportable subject
- 3460 Utility Line Clearing- increased by 3-hours to 15-hours

For a detailed comparison, refer to chart on page 8.

Comparison of Structural Changes			
2009		2022	
Number	Reportable Subjects	Number	Reportable Subjects
Level 1 Arborist/Utility Arborist			
S0246	Arborist Workplace Health and Safety	3440	Workplace Health and Safety
S0247	Arborist Theory	3441	Arborist Safe Work Practices
S0248	Arborist Practices	3442	Arborist Safe Work Practices -Climbing
S0249	Arborist Hand Tools	3443	Arborist Tools and Felling Techniques
S0250	Arborist Equipment	3444	Arborist Equipment
S0251	Arboricultural Sciences	3445	Arboricultural Sciences I
S0252	Arborist Tree Identification I	3446	Arborist Tree Identification I
Level 2 Arborist			
S0401	Arborist Theory II	3447	Arborist Theory
S0402	Arborist Practices II	3448	Arborist Practices-Pruning & Removal Techniques
S0403	Plant Health Care - Pest Management	3449	Plant Health Care - Pest Management
S0404	Arboricultural Science II	3450	Arboricultural Science II
S0405	Tree Identification II	3451	Tree Identification II *
S0406	Crane Assisted Rigging	3452	Crane Assisted Rigging
S0407	Arborist Equipment II	3453	Aerial Devices *
S0408	Arborist Calculations	3454	Tree Planting Practices
Level 2 Utility Arborist			
S0259	Utility Arborist Workplace Safety	3455	Utility Arborist Safe Work Practices
S0260	Utility Arborist Theory II	3456	Vegetation Management
S0261	Utility Arborist Practices II – Tree Climbing	3457	Utility Arborist Practices-Tree Climbing
S0262	Utility Arborist Practices II – Aerial Device	3453	Aerial Devices *
S0263 S0265	Utility Arborist Equipment II – Brush Chippers and Aerial Devices Utility Arborist Hand Tools II	3458	Utility Arborist Tools and Equipment Practical
S0264	Utility Arboricultural Sciences II	3459	Utility Arboricultural Sciences
S0266	Utility Arborist Tree Identification II	3451	Tree Identification II *
S0267	Utility Arborist Transmission Line Clearing	3460	Utility Line Clearing

Arborist & Utility Arborist Program Hours Comparison 2009 – 2022

Unit of Learning	2009			2022		Total	Hours Change
	Theory	Practical	Total	Theory	Practical		
Level 1 Arborist/Utility Arborist							
3440 Workplace Health and Safety	39	0	39	36	0	36	-3
3441 Arborist Safe Work Practices <i>(formerly Arborist Theory S0247)</i>	57	0	57	48	0	48	-9
3442 Arborist Practices -Climbing	0	156	156	0	144	144	-12
3443 Arborist Tools and Felling Techniques	0	36	36	0	36	36	0
3444 Arborist Equipment I	0	6	6	12	12	24	+18
3445 Arboricultural Sciences I	33	0	33	36	0	36	+3
3446 Arborist Tree Identification I	33	0	33	36	0	36	+3
Total	162	198	360	168	192	360	
Level 2 Arborist							
3447 Arborist Theory	24	0	24	36	0	36	+12
3448 Arborist Practices-Pruning & Removal Techniques		156	156	0	144	144	- 12
3449 Plant Health Care - Pest Management	48	0	48	48	0	48	
3450 Arboricultural Science II	30	0	30	36	0	36	+6
3451 Tree Identification II*	36	0	36	33	0	33	-3
3452 Crane Assisted Rigging <i>(Incorporates Arborist Calculations, S0408 content</i>	24	6	30	18	6	24	-6
3453 Aerial Devices and Other Equipment *	8	16	24	8	19	27	+ 3
3454 Tree Planting Practices <i>(replaces Arborist calculations, S0408)</i>	12	0	12	12	0	12	+12
							-12
Total	182	178	360	191	169	360	
Level 2 Utility Arborist							
3455 Utility Arborist Safe Work Practices	18	0	18	18	0	18	0
3456 Vegetation Management <i>(formerly UA Theory 11, S0260)</i>	36	0	36	18	12	30	-6
3457 Utility Arborist Practices- Tree Climbing	0	144		0	144	144	0
3453 Aerial Devices and Other Equipment*(replaces S0262 UA Practices II-Aerial Devices)	0	24	24	8	19	27	+3
3458 Utility Arborist Tools and Equipment Practical <i>(merged S0263/ S0265- Brush chipper and Hand Tools) Hand Tools II)</i>	6	6	12	6	12	18	+6
		6	0				-6
3459 Utility Arboricultural Sciences II	9	6	15	15		15	0

3451 Tree Identification II*	33	0	33	33	0	33	0
3460 Utility Line Clearing (replaces UA Transmission Line Clearing II, S0267)	6	6	12	9	6	15	+3
Total	108	192	300	107	193	300	

*Common Reportable – Arborist and Utility Arborist

**Stakeholder
Engagement**

In 2009, as a result of Ontario's cosmetic Pesticides Ban (2008), additional hours were added to the Arborist and Utility Arborist in-school programs to allow for the addition of content on Integrated Pest Management (IPM) to the curriculum. In 2017, instructors from Humber College provided feedback on the effectiveness of the courses, particularly those that were allocated additional hours, commenting on gaps, and made recommendations for changes and these recommendations were discussed with all 3 TDA's

The Curriculum Revision Committee was comprised of representatives from all 3 TDAs that provide the program:

Humber College (Level 1 and Level 2 Arborist)

Hydro One Training Centre (Level 1 and Level 2 Utility Arborist)

Sault College (Level 1 and Level 2 Utility Arborist)

The draft was discussed with all Humber College Arborist program instructors at a full day meeting in January 2019 and changes implemented as required.

A survey and draft curriculum were sent out for further review and validation in June 2019 to a broad representation of the sector. This survey was sent to all trainers at the Hydro One Training Centre and to Sault College and Humber College Instructors. In addition, the survey was sent to industry members, former members of both the Arborist and Utility Arborist Trade Boards, representatives from Ontario Commercial Arborist Association, International Society of Arboriculture (ON), and various industry representatives such as the Regional Safety Specialist from Davey Tree Canada and the Canadian Corporate Safety Advisor from Asplundh Canada ULC

Comments on the survey were received from additional individual respondents and detailed comments provided on the draft by additional industry representatives.

Industry supports the changes to the curriculum.