

Changes to Oil Burner Technician – 3 Curriculum

Summary of Changes

The Technical Standards and Safety Authority (TSSA) is introducing new Oil Burner Technician – 3 (OBT3) curricula to align with the CSA B139 – Series 24, which will be adopted in the coming months.

Changes to individual modules

2023 Module Title	Comment	
Module 1T - FASTENERS, HAND AND POWER TOOLS	Was Module 1T in 2021 curriculum.	
Estimated theory hours: 4	Major update to equipment and references to OBT-3 work.	
	Moved info on electrical instruments to Module 9 and info on combustion analyzers to Module 12.	
Module 1P - FASTENERS, HAND AND POWER TOOLS	Was Module 1P in 2021 curriculum.	
Estimated practical hours: 2	Completely re-wrote since 2021 version did not address Module subject.	
	Modelled after G.3 curriculum including checklist for assessing practical skills.	
Module 2T - PROTECT SELF AND OTHERS	Added this module modelled on the one from the G.3 curriculum.	
Estimated theory hours: 4	Practical assessment of the theory presented in this Module is required during all other lab exercises.	
Module 2P - PROTECT SELF AND OTHERS	Added this module modelled on the one from the	
Estimated Practical hours: 2	G.3 curriculum.	
	Practical assessments of the theory presented in this Module are required during all other lab exercises.	



2023 Module Title	Comment		
Module 3T - PROPERTIES, CHARACTERISTICS AND SAFE HANDLING OF FUEL OIL AND BIOFUEL	Separated this topic from Module 5T in the 2021 version.		
Estimated theory hours: 4	Added info on biofuel and diesel.		
	Added info on safe handling and spill response		
Module 3P - PROPERTIES, CHARACTERISTICS AND SAFE HANDLING OF FUEL OIL AND BIOFUEL	Separated this topic from Module 5P in the 2021 version.		
Estimated practical hours: 2	Added this Module with practical exercises regarding fuel properties/characteristics and spill response.		
	Moved both labs in Module 5P of the 2021 curriculum regarding combustion chamber sizing to 2023 Module 12.		
Module 4T - INSTALLATION CODES, ACTS AND	Was Module 2T in 2021 curriculum.		
REGULATIONS	Updated info on TSSA and governing bodies.		
Estimated theory hours: 8	Increased topics to cover regarding the Act, Regulations, and current B139 Code		
	Emphasis placed on responsibilities with focus on OBT-3 role.		
Module 5T - INTRODUCTION TO PIPING AND TUBING	Was Module 8T in 2021 curriculum		
SYSTEMS Estimated theory hours: 12	Added significantly more detail on the piping/tubing materials, joining equipment, code requirements, and leak testing.		
	Minimized references to brazing since, like welding, it requires B&PV certification.		
	Emphasis placed on allowed scope of OBT-3.		
Module 5P - INTRODUCTION TO PIPING AND TUBING	Was Module 8P in 2021 curriculum		
SYSTEMS	Added an instructor demonstration lab similar to that in the G.3 curriculum.		



2023 Module Title	Comment
Estimated practical hours: 16	Added significantly more detail on the piping/tubing construction lab.
Module 6T - FUEL OIL SUPPLY TANK AND DELIVERY SYSTEMS Estimated theory hours: 12	Was Module 9T in 2021 curriculum. Expanded info on tank construction, types, sizes, and code requirements. Removed info on installing USTs, anchors/ supports, and piping sizing and joining Updated info on leak testing.
Module 6P - FUEL OIL SUPPLY TANK AND DELIVERY SYSTEMS Estimated practical hours: 8	Was Module 9P in 2021 curriculum. Removed lab on testing primary controls. Added lab on assessing tank installations. Updated lab on one- and two-line systems
Module 7T - INTRODUCTION TO FUEL OIL APPLIANCES Estimated theory hours: 8	Was Module 10T in 2021 curriculum. Added info on terminology of appliance categorization. Added significantly more detail about info to cover on a wider variety of appliances including engines. Added info about safety and regulatory issues for each type of appliance.
Module 7P - INTRODUCTION TO FUEL OIL APPLIANCES Estimated practical hours: 2	Added this practical module. There was no practical for Module 10 in 2021 curriculum. Lab with sample evaluation sheet requires student to prove understanding of the theory presented in this Module.
Module 8T - BURNER TYPES AND OIL BURNER NOZZLES	Was Module 11T in 2021 curriculum.



2023 Module Title	Comment	
Estimated theory hours: 12	Added significantly more detail about info to cover on a wider variety of modern burners.	
Module 8P - BURNER TYPES AND OIL BURNER NOZZLES Estimated practical hours: 12	Was Module 11P in 2021 curriculum. Moved lab on testing primary control to 2023 Module 10P on Controls.	
Module 9T - INTRODUCTION TO ELECTRICITY	Was Module 3T in 2021 curriculum.	
Estimated theory hours: 12	Added significantly more detail about info to cover on basic electrical concepts, circuits, and components.	
	Added info on motors.	
	Emphasis placed on allowed electrical work within the OBT-3 scope.	
Module 9P - INTRODUCTION TO ELECTRICITY	Was Module 3P in 2021 curriculum.	
Estimated practical hours: 12	Added a lab to build a series circuit.	
	Added significantly more detail for lab materials, procedures, and assessment criteria.	
Module 10T – CONTROLS	Was Module 6T in 2021 curriculum.	
Estimated theory hours: 10	Moved info on motors to 2023 Electrical Module 9T.	
	Added info on control terminology.	
	Added info on sequence of operation.	
	Added significantly more detail about info to cover for a wider variety of control types.	
	Added detailed info on the maintenance, test, and reset procedures for primary controls.	



2023 Module Title	Comment
Module 10P – CONTROLS	Was Module 6P in 2021 curriculum.
Estimated practical hours: 8	Removed both labs from 2021 version regarding wiring motors.
	Added lab about sequence of operation and identifying type, function, and location of controls on oil-fired appliances.
	Added lab to conduct a trial for ignition (TFI) test and flame failure response (FFR) test along with soft and hard lockout resets of a primary control.
Module 11T- INTRODUCTION TO AIR SUPPLY &	Separated this from Module 12T in 2021 curriculum.
VENTING Estimated theory hours: 6	Added significantly more detail about info to cover for a wider variety of vent materials and venting systems.
	Added new info on air supply systems
	Added info on identifying venting and air supply problems.
	Removed info about installing draft regulators but increased info on the operation and adjustment of draft regulators.
Module 11P- INTRODUCTION TO AIR SUPPLY &	Separated this from Module 12P in 2021 curriculum.
VENTING Estimated practical hours: 4	Removed 2021 lab regarding installation of draft regulators since it is outside of OBT-3 scope.
	Added lab about identifying vent materials.
	Added lab about identifying venting and air supply problems.
	Added labs about taking and interpreting draft measurements.



2023 Module Title	Comment	
Module 12T - COMBUSTION THEORY AND ANALYSIS	Separated this from Module 12T in 2021 curriculum.	
Estimated theory hours: 6	Added significantly more detail about info to cover about combustion, flue gases, and combustion analysis equipment.	
	Added info on code requirements regarding combustion analysis.	
Module 12P - COMBUSTION THEORY AND ANALYSIS	Separated this from Module 12P in 2021 curriculum.	
Estimated practical hours: 6	Moved lab in Module 5P of the 2021 curriculum regarding combustion chamber sizing to 2023 Module 12P.	
Module 13T - TECHNICAL MANUALS,	Was Module 4T in 2021 curriculum.	
SPECIFICATIONS, SCHEMATICS, DRAWINGS AND GRAPHS	Added significantly more detail about reference materials	
Estimated theory hours: 4		
Module 13P - TECHNICAL MANUALS,	Was Module 4P in 2021 curriculum.	
SPECIFICATIONS, SCHEMATICS, DRAWINGS AND GRAPHS	Added significantly more detail about the procedure and assessment criteria required for this	
Estimated practical hours: 2	lab on reading and interpreting manufacturer's instructions.	
Module 14T - ANNUAL MAINTENANCE AND	Was Module 13T in 2021 curriculum.	
COMPLIANCE INSPECTIONS Estimated theory hours: 4	Added significantly more detail about how to conduct maintenance on a variety of appliance types.	
	Added info on the regulatory requirements and procedures for conducting compliance (comprehensive) inspections.	
	Emphasis placed on the allowed scope of OBT-3 regarding annual maintenance.	



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2023 Module Title	Comment	
Module 14P - ANNUAL MAINTENANCE AND COMPLIANCE INSPECTIONS	Was Module 13P in 2021 curriculum.	
Estimated practical hours: 14	Added a lab to conduct a compliance inspection.	
Module 15T - CUSTOMER RELATIONS	Was Module 7T in 2021 curriculum. Essentially the same in the 2023 version but the formatting is significantly improved.	
Estimated theory hours: 2		
Module 15P - CUSTOMER RELATIONS	Was eliminated from Module 7 in 2021 curriculum	
Estimated practical hours: 2	but reinstated in 2023 version.	

Changes to all modules

Formatting:

- The "Reference Material" column was removed since it was often blank or contained obvious references in the 2021 version
- Font, spacing, and bulletining are standardized in the 2023 version

Terminology:

- Changes made to meet recommended terms in MTCU's Procedures for Development of Curriculum Standards include:
 - o "Enabling objectives" changed to "Learning objectives"
 - o "Task" changed to "Performance objective" in practical modules
 - o "Learner" changed to "student"
 - o "Teacher" changed to "instructor"
- Module names and order were changed with an increase in the number of modules from 13 to 15 and two new practical modules were added.
 - o See Appendix A for the module titles in the 2023 version
 - o See Appendix B for the module titles in the 2021 version
- Estimated hours for each theory and practical module are provided in the 2023 version, which
 was not the case in the 2021 version.
 - o The estimated hours have been reduced from 392 hours (227 theory and 165 practical) in the 2021 version to 200 hours (110 theory and 90 practical) in the 2023 version



- o See Appendices A and B for details on estimated hours
- Any references that indicated that an OBT-3 could conduct work beyond their scope of certificate were removed in the 2023 version. Emphasis is placed on understanding the scope of the certificate and supervision.
- Modern oil appliances and equipment are emphasized in the 2023 version and references to older equipment are either eliminated or minimized. Reference is also made to stationary engines (as appropriate).



Changes to Oil Burner Technician – 3 Curriculum

APPENDIX A 2025 OIL BURNER TECHNICIAN 3 (OBT-3) CURRICULUM

TABLE OF CONTENTS

including Theory (T) and Practical (P) estimated hours

Module	Title	Theory Hours	Practical Hours
1	FASTENERS, HAND TOOLS, AND POWER TOOLS	4	2
2	PROTECT SELF AND OTHERS	4	2
3	PROPERTIES, CHARACTERISTICS, SAFE HANDLING OF FUEL OIL AND BIOFUELS	4	2
4	INSTALLATION CODES, ACTS AND REGULATIONS	8	0
5	INTRODUCTION TO PIPING AND TUBING SYSTEMS	12	16
6	FUEL OIL SUPPLY TANK AND DELIVERY SYSTEMS	12	8
7	INTRODUCTION TO FUEL OIL FIRED APPLIANCES	8	2
8	BURNER TYPES AND OIL BURNER NOZZLES	12	12
9	INTRODUCTION TO ELECTRICITY	12	12
10	INTRODUCTION TO CONTROLS	10	8
11	INTRODUCTION TO AIR SUPPLY AND VENTING	6	4
12	COMBUSTION THEORY AND ANALYSIS	6	6
13	TECHNICAL MANUALS, SPECIFICATIONS, SCHEMATICS, DRAWINGS AND GRAPHS	4	2



14	ANNUAL MAINTENANCE AND COMPLIANCE INSPECTION	4	14
15	CUSTOMER RELATIONS	2	2
	SUBTOTAL	108	92



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APPENDIX B 2021 OIL BURNER TECHNICIAN 3 (OBT-3) CURRICULUM

TABLE OF CONTENTS

including Theory (T) and Practical (P) estimated hours

Module	Title	Theory Hours	Practical Hours
1	FASTENERS/HAND & POWER TOOLS	3	3
2	INSTALLATION CODES/ACTS & REGULATIONS	8	0
3	INTRODUCTION TO ELECTRICITY	30	18
4	TECHNICAL MANUALS/SPECIFICATIONS/SCHEMATICS/DRAWINGS GRAPHS	N/I	N/I
5	THEORY OF COMBUSTION	18	N/I
6	CONTROLS	18	30
7	CUSTOMER RELATIONS	6	6
8	INTRODUCTION TO PIPING AND TUBING SYSTEMS	60	N/I
9	FUEL OIL STORAGE AND DELIVERY SYSTEMS	12	36
10	INTRODUCTION TO FUEL OIL APPLIANCES	24	0



11	BURNER TYPES AND OIL BURNER NOZZLES	36	36
12	CHIMNEY, DRAFTS AND COMBUSTION EFFICIEINCY	12	12
13	ANNUAL SERVICING	N/I	24
	SUBTOTAL	227	165

[&]quot;N/I" = Not Indicated