Course ID #	Subject #	Sec #	Course Title	Room	Lec	Lab	Weeks
000165	TRAN1503	1	General Service	1-194	1	2	1-8
000152	TRAN1504	1	Electrical Principles	1-194	1	2	1-8
000170	TRAN1517	2	Scan Tool Data Acquis.	1-192	2	0	1-8
000156	AUTO1508	1	Wheel Alignment	1-192	2	2	9-16
000161	AUTO1510	2	Chassis Electrical	1-192	2	2	9-16
000174	TRAN1518	1	Hazardous Material		1	0	1-16

Fall, 2023 Automotive
Section 1 17 credits

	Monday	Tuesday	Wednesday	Thursday	Friday
7:00					
8:00	Electrical P Lec *Chassis Elec Lec*	Electrical P Lec *Chassis Elec Lec*	1 Gen. Serv. Lec *Wheel Align Lec*	1 Gen. Serv. Lec *Wheel Align Lec*	
9:00	Electrical P Lab *Chassis Elec Lab*	Electrical P Lab *Chassis Elec Lab*	1 Gen. Serv. Lab *Wheel Align Lab*	1 Gen. Serv. Lab *Wheel Align Lab*	
10:00	Electrical P Lab *Chassis Elec Lab*	Electrical P Lab *Chassis Elec Lab*	1 Gen. Serv. Lab *Wheel Align Lab*	1 Gen. Serv. Lab *Wheel Align Lab*	
11:00	**Hazardous Mat.**				
12:00	Electrical P Lab *Chassis Elec Lec*	Electrical P Lab *Chassis Elec Lec*	1 Gen. Serv. Lab *Wheel Align Lec*	*Wheel Align Lec*	
1:00	Electrical P Lab *Chassis Elec Lab*	Electrical P Lab *Chassis Elec Lab*	1 Gen. Serv. Lab *Wheel Align Lab*	Scan Tool Data *Wheel Align Lab*	
2:00	*Chassis Elec Lab*	*Chassis Elec Lab*	1 Gen. Serv. Lab *Wheel Align Lab*	Scan Tool Data *Wheel Align Lab*	
3:00			1 Gen. Serv. Lab	Scan Tool Data	
4:00				Scan Tool Data	

Key:
Weeks 1-8 upper
Weeks 1-16 middle
Weeks 9-16 lower

Course ID #	Subject #	Sec #	Course Title	Room	Lec	Lab	Weeks
000166	TRAN1503	02	General Service	1-192	1	2	1-8
000164	AUTO1516	01	Brakes	1-194	2	2	1-8
000155	TRAN1504	02	Electrical Principles	1-194	1	2	9-16
000154	AUTO1510	01	Chassis Electrical	1-194	2	2	9-16
000169	TRAN1517	01	Scan Tool Data Acquis.	1-190	2	0	1-8
000176	TRAN1518	02	Hazardous Material	1-192	1	0	1-16

Fall, 2023 - Automotive
Section 2 17 credits

	Monday	Tuesday	Wednesday	Thursday	Friday
7:00					
8:00	*Scan Tool Data* *Brakes. Lec*	*. Brakes. Lec*	Gen. Serv. Lec *Electrical P. Lec.*	Gen. Serv. Lec *Chassis Elec Lec*	*Chassis Elec Lec*
9:00	*Scan Tool Data* *Brakes. Lab*	*Brakes. Lab*	Gen. Serv. Lab *Electrical P. Lab*	Gen. Serv. Lab *Chassis Elec Lab*	*Chassis Elec Lab*
10:00	*Scan Tool Data* *Brakes. Lab*	*Brakes. Lab*	Gen. Serv. Lab *Electrical P. Lab*	Gen. Serv. Lab *Chassis Elec Lab*	*Chassis Elec Lab*
11:00	*Scan Tool Data*				
12:00	*Brakes. Lec*	*Brakes. Lec*	Gen. Serv. Lab *Electrical P. Lab*	*Chassis Elec Lec*	*Chassis Elec Lec*
1:00	**Hazardous Mat.** **ID# 176** *Brakes. Lab*	*Electrical P. Lab*	Gen. Serv. Lab *Electrical P. Lab*	*Chassis Elec Lab*	
2:00	**Hazardous Mat.** *Brakes. Lab*	*Electrical P. Lab*	Gen. Serv. Lab *Electrical P. Lab*	*Chassis Elec Lab*	*Chassis Elec Lab*
3:00	*Brakes. Lab*	*Electrical P. Lec*	Gen. Serv. Lab *Electrical P. Lab*	*Chassis Elec Lab*	
4:00	*Brakes. Lab*				

Key:
Weeks 1-8 upper
Weeks 1-16 middle
Weeks 9-16 lower

Automotive Service Technician AAS
72 credits

Suggested Technical Studies Semester I		
AUTO1508	Automotive Suspension and Alignment	4 Credits
AUTO1510	Chassis Electrical	4 Credits
TRAN1503	General Service	3 Credits
TRAN1504	Electricity and Electronic Principles	3 Credits
TRAN1517	Scan Tool Data Acquisition	2 Credits
TRAN1518	Transportation Hazardous Materials	1 Credits
Suggested Technical Studies Semester II		
AUTO1512	Engine Repair Theory	2 Credits
AUTO1516	Brakes	4 Credits
AUTO2514	Heating and Air Conditioning	3 Credits
Suggested Technical Studies Semester III		
AUTO2502	Engine Ignition and Emission Systems	4 Credits
AUTO2505	Engine Fuel and Emission Systems	5 Credits
AUTO2506	Principles of Torque Transfer	7 Credits
TRAN1520	Workplace Perceptions and Expectations	2 Credits
Suggested Technical Studies Semester IV		
AUTO2513	Automatic Transmission and Transaxle Overhaul	4 Credits
AUTO2520	Engine Driveability	3 Credits
AUTO2523	Advanced Electronic Systems	2 Credits
Technical Electives *Choose 4 Credits*		
AUTO1514	Engine Repair Lab	4 Credits
AUTO2512	Driveline Repair	3 Credits
AUTO2530	Automotive High Performance Systems	3 Credits
AUTO2540	Light Duty Diesel	2 Credits
General Education		
	MNTC Goal 1 - Communications	6 Credits
	MNTC Goal 2 - Critical Thinking	3 Credits
	MNTC Goals 3 through 10	6 Credits

Estimated cost for books and supplies: $6710

Automotive Service Technician Diploma
67 Credits

Suggested Technical Studies Semester I		
AUTO1508	Automotive Suspension and Alignment	4 Credits
AUTO1510	Chassis Electrical	4 Credits
TRAN1503	General Service	3 Credits
TRAN1504	Electricity and Electronic Principles	3 Credits
TRAN1517	Scan Tool Data Acquisition	2 Credits
TRAN1518	Transportation Hazardous Materials	1 Credits
Suggested Technical Studies Semester II		
AUTO1512	Engine Repair Theory	2 Credits
AUTO1514	Engine Repair Lab	4 Credits
AUTO1516	Brakes	4 Credits
AUTO2514	Heating and Air Conditioning	3 Credits
Suggested Technical Studies Semester III		
AUTO2502	Engine Ignition and Emission Systems	4 Credits
AUTO2505	Engine Fuel and Emission Systems	5 Credits
AUTO2506	Principles of Torque Transfer	7 Credits
TRAN1520	Workplace Perceptions and Expectations	2 Credits
Suggested Technical Studies Semester IV		
AUTO2513	Automatic Transmission and Transaxle Overhaul	4 Credits
AUTO2512	Driveline Repair	3 Credits
AUTO2520	Engine Driveability	3 Credits
AUTO2523	Advanced Electronic Systems	2 Credits
General Education/Studies		
	General Education/Studies	7 Credits

Estimated cost for books and supplies: $6300

ST. CLOUD TECHNICAL & COMMUNITY COLLEGE

A member of Minnesota State

Dear SCTCC Automotive Student:

There is a Program Information and Tool Day on Thursday, June 8, 2023. Come to meet the instructors, see the shop, and we will be available to answer your questions.

Check-in is at 9 am in Room 190/192. You may enter at the Main entrance and you will be directed. This is where you may ask questions about the college, financial aid and scholarships, and about the program.

On this day, we will also be running our Transportation Tool Day in the Truck Shop. The Truck Shop in Room 270 is located on the West side of the campus, near Door 15. There will be several vendors displaying their products. We plan to visit the Tool vendors at 10 am. To place an order for tools through the vendors, you may need about 15-20% down. Actual prices vary by vendor.

Student tools should **not** be delivered to St. Cloud Technical and Community College - have them delivered to your residency (home) so you can do an accurate inventory before bringing them to campus. Toolboxes can be dropped off the week before school starts between 8 am and 1 pm or the first week of school.

Automotive Tools - The approximate cost is $4,000.

It is strongly recommended that you attend Tool Day. After this day, you will be responsible to contact the tool vendors and make arrangements to receive your tools by the time school starts.

Financial Aid is not paid out until the second week of school. Please make sure to make financial arrangements.

Thank you,
SCTCC Transportation Programs

2023 - 2024
SCTCC AUTOMOTIVE SERVICE TECHNICIAN TOOL LIST

½ - 3/8" adaptor
¼" 6-point Deep and shallow sockets 5.5 – 15mm
¼" Ratchet standard length
¼" Extensions 2",4" and 10"
¼" Universal joint

3/8" 6-point Shallow and deep sockets 8-19mm chrome
3/8" 12-point shallow sockets 8-19mm chrome
3/8" Metric impact swivel sockets 10-24
3/8" Ratchet standard length
3/8" Extensions 3", 6", & 12"
3/8" Impact universal joint

½" 6-point shallow sockets 10-19mm chrome
½" Metric impact sockets Deep 10-24
½" ratchet standard length
½" Extensions 3", 5" & 10"
½ " Impact universal joint
½ " Breaker Bar at least 16"
3/8" Torque wrench 5-100 lbft
1/2" Torque wrench 250 lbft.
½" Impact wrench

Torx sockets T8-T60
Inverted Torx sockets E4-E18 or E20

Pliers set (needle nose, diagonal, regular, comb)
Adjustable joint pliers 24in.
10" Vice grips
Standard comb wrench set 3/8 - 1
Metric comb wrench set 6 – 24 or higher
Flare nut wrench set ¼ - 3/4
Metric flare nut wrench set 9 – 21 mm
24 oz ball peen hammer
32 oz dead blow hammer
Drill bit set from 1/16 to 3/8
Metric hex key sockets- medium 4 – 12 mm
Screwdriver set 8 pc
Brake spring hold down tool
Brake return spring tool

Spark plug gap tool
Adjustable Spark tester
Swivel spark plug socket 5/8
Tire valve core tool
Tire pressure gauge
Thread depth tool
Tire air chuck
10" Mill file with handle
Medium rat tail file with handle

Angle Die grinder
3M scotch lock pad holder 3"
12 V test light
Wire crimper/ strippers
OSHA approved blow gun
Tape measure 25 ft
Utility knife
Punch and chisel set
Gasket scraper – semi flex
Magnetic pickup tool
4 piece pry bar set (no screwdrivers)
Cordless LED or Fluorescent light
(no flashlights)

Large oil filter wrench
Small oil filter wrench
6" steel rule
Inspection mirror
Safety glasses
Wire brush
Thermometer
Coolant Hydrometer
Fender cover
Soldering gun - Butane
Feeler gauge Metric/standard 25 blade
Trans pick set
Tool box
2 Auto tech shirts
(purchase from bookstop only)
DVOM (Purchase from bookstop)