

The Illinois School for the Deaf
Transportation, Distribution, and Logistics (TDL) Program of Study
June 20, 2013

Introduction

Career Pathways in Transportation, Distribution, and Logistics (TDL) at the secondary level at the Illinois School for the Deaf (ISD) provide preparation for a variety of occupations and assist students with developing skills as family and community members. The targeted occupations require product knowledge and skills and technology expertise that takes into consideration specialized technology and assistive devices for individuals with hearing loss in addition to excellent human relation skills. The Transportation, Distribution, and Logistics program cover occupations in a wide array of areas, including: automotive technician, automotive collision repair/refinishing technician, auto detailer, estimator/service writer, and small engine mechanic.

ISD's programs in TDL prepare students for employment in entry level occupations and further career preparation at the postsecondary level. Some students may choose to enter a career right out of high school whereas others may decide to further their education before entering a career. The TDL program prepares students for lifelong learning. The tasks, skills and standards identified by business and industry as necessary for success in these occupations are used as the basis for the instructional program development. To assist students in achieving success in their chosen careers, the ISD TDL programs emphasize the development of skills and knowledge that are transferable to a variety of settings. Additionally, students acquire the competencies and strategies necessary to improve the quality of life in their homes, communities and workplaces and to prepare them to become self-supporting citizens.

The following job outlook for occupations in TDL was summarized from information provided by the Occupational Outlook Handbook. This information was updated in 2010. Jobs in automotive body repair are projected to increase by 19% from 2010-2020 which is about as fast as the average for all occupations. The growing number of vehicles in use should increase overall demand for collision repair services during the next decade however overall job growth will be limited because new repair technology allows fewer workers to do more work. Jobs as an auto service technician are projected to increase by 17% from 2010-2020 which is about as fast as the average for all occupations. As the number of vehicles in use continues to grow, more entry-level service technicians will be needed to do basic maintenance and repair. The increasing lifespan of late-model cars and light trucks will further increase demand for qualified workers.

ISD developed its TDL program from statewide labor market information (LMI). Occupations with related skills have been grouped together to develop instructional programs which provide students with a wide range of opportunities for entry-level employment, career advancement and further education. As new occupations emerge and employment needs are demonstrated, additional programs will be developed. The ISD TDL program includes the following areas:

- ☐ Automotive Detailing and Reconditioning
- ☐ Automotive Mechanics/Technician
- ☐ Automotive Body Repair and Refinishing

The TDL program prepares students for assuming the multiple roles of being a wage earner and community member. The program focuses on time management, work ethic, and how to adapt to the ever changing field of automotive repair and technology.

ISD follows a planned sequence of courses in its TDL program. The content and learning experiences are defined in subject-specific course descriptions. ISD offers two semesters for each course rather than the one semester recommended because generally students who are deaf or hard of hearing face academic challenges and require additional time to learn the skills necessary for these courses. These skills must be formally taught. Because of the intense nature of the teaching, more time is required to cover the course content.

Components of ISD's Secondary Transportation, Distribution, and Logistics Program

ISD's program includes the following components in its instructional programs.

1. **Qualified, Certified Professional Educator**—ISD's educator is fully qualified and certified as secondary Career Technical Education educator and possesses non-teaching work experience. The educator is also a member of the Illinois College Automotive Instructors Association.
2. **Student Services**--ISD employs appropriate support services and these services are available to all students in the TDL program. Students at ISD have Individualized Education Plans (IEPs); individualized career plans; and individual advisement by the educator and counselor on a regular basis.
3. **Sequentially Structured, Aligned Programs**--The instruction in the TDL program is based on worker competencies and includes the skills, knowledge and attitudes required for successful employment in the occupations served by the program. Programs include practical, logical, sequentially structured courses and are aligned with the Illinois Learning Standards, Common Core Standards, and utilizing resources aligned with the National Automotive Technician's Education Foundation (NATEF).
4. **Active Career and Technical Education Student Organizations** – ISD is investigating the possibility of establishing a vocational organization for students in the TDL program of study.
5. **Facilities and Equipment**—the facilities and equipment used in teaching the TDL program is appropriate for the students enrolled in the program. It is adequately designed, installed and maintained to ensure safe operation and use. There is appropriate instructional and storage space. Students participate in hands-on experiences in classroom and shop areas. Students also have the opportunity for job shadowing experiences and student work experiences.
6. **Active CTE Advisory Council**—ISD has a CTE Advisory Council that held its first meeting on May 9, 2013. The initial meeting was held as a whole group. Meetings and smaller meetings of the whole will continue to meet and provide direction and support for development and evaluation of instructional programs. Membership of the committee is comprised of employers/employees, students, educators, instructors, DRS staff, LLCC staff, ISBE staff, and DRS staff.

Transportation, Distribution, and Logistics Course Structure

Orientation-level courses introduce students to all aspects of automotive repair and refinishing and serve as a background for all ISD TDL classes offered. A two-part comprehensive course, Automotive Mechanics-Comprehensive & Automotive Body Repair and Refinishing - Comprehensive, is a two semester course which is generally offered to 10th grade students and older without a background in automotive repair and refinishing. This orientation course exposes students to a variety of automotive occupations, procedures, and to the knowledge and basic skills necessary to enable students to make meaningful decisions regarding further TDL occupational studies.

Preparation-level courses provide students with experiences that support the acquisition of occupational standards and skills required for developing independent skills and employment. The 11th, 12th, and Transition grade preparation-level courses provide students with the opportunity to develop marketable job skills as well as preparation for further postsecondary training. All TDL programs include logical, practical, sequential learning experiences for the essential technical skills and are designed to achieve that goal. The goal of ISD is to collaborate with postsecondary programs in order to complete the full scope of instruction.

ISD provides classes that utilize work-sites that give real life experience in TDL areas. The structure and content of the courses follows child labor laws and state rules and regulations. Examples of TDL work sites are: local automotive dealers, automotive repair shops, and automotive detailing shops.

Transportation, Distribution, and Logistics

This program offers a sequence of planned educational classroom and laboratory experiences including career exploration, record keeping, content knowledge, practical work experiences provided by ISD staff and stakeholders.

Emphasis is placed on developing competencies in the following areas:

- ☐ Work place/employability skills
- ☐ Record keeping
- ☐ Content knowledge

ISD Transportation, Distribution, and Logistics Program of Study Sequence

Orientation Courses

ISBE Course Number	Course Title	Credits Per Semester	Semester Length	Grade Levels
20104A000	Automotive Mechanics - Comprehensive	0.5	1	10, 11, 12, TLP
20116A000	Automotive Body Repair and Refinishing - Comprehensive	0.5	1	10, 11,12, TLP

Preparation Courses

ISBE Course Number	Course Title	Credits Per Semester	Semester Length	Grade Levels
20115A000	Automotive Detailing	0.5	2	10,11,12, TLP

	and Reconditioning			
20104A001	Automotive Technician I	0.5	2	11,12, TLP
20104A002	Automotive Technician II	0.5	2	12, TLP
20116A001	Auto Body I	0.5	2	11,12, TLP
20116A002	Auto Body II	0.5	2	12, TLP

Student Work Experience

ISBE Course Number	Course Title	Credits Per Semester	Semester Length	Grade Levels
22206A000	Life Skills	0.5	2	11
22208A000	**Consumer Family Living	0.5	2	12
22210A000	**Consumer Economics/Personal Finance	0.5	2	12
22152A000	Transition Employability Skills	0.5	2	TLP
22998A000	Student Work Experience	0.5	2	12, TLP

** Students will be enrolled in either Consumer Family Living or Consumer Economics/Personal Finance during their 12th grade year.

Course Descriptions for the listed classes are in Appendix A.

Curricular Outlines for the listed classes are in Appendix B.

APPENDIX A – COURSE DESCRIPTIONS

Course Title: Automotive Mechanics—Comprehensive (ISBE # 20104A000)

Course Description: This is a course designed to establish a foundation and introduction the area of Automotive Mechanics and Service. This course will be a rigorous classroom experience with short lab experiences. This course will emphasize the diagnosis and repair of automobile engines and support systems such as brakes, cooling, drive trains, electrical/electronic components, emissions, fuel, ignition, steering, suspension and transmissions. This is a one semester course.

Course Title: Automotive Body Repair and Refinishing—Comprehensive (ISBE # 20116A000)

Course Description: This is a course designed to establish a foundation and introduction the area of Automotive Mechanics and Service. This course will be a rigorous classroom experience with short lab experiences. This course will emphasize theory and information regarding metal working, welding, automotive materials, paint removal, body filler application and sanding, paint preparation, component identification, remove, and replace procedures and components, and refinishing. This is a one semester course.

Course Title: Automotive Detailing and Reconditioning - Comprehensive (ISBE # 20115A000)

Course Description: This course offers hands-on experience with various types of cleaning agents and the techniques to use them properly and efficiently. The course emphasizes cleaning the interior and exterior of automobiles. Students work, both independently and cooperatively, in order to restore a vehicle's shine and luster. Safe working habits and mastery of products and materials are taught in order to prepare students for an expanding field in the Automotive Industry.

Course Title: Automotive Technician I (ISBE #20104A001)

Course Description: This course builds on the foundations laid in Automotive Mechanics—Comprehensive and provides experiences related to maintenance, repair and servicing of a variety of transportation and maintenance equipment. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to automotive mechanics and various forms of internal combustion engines. This course will emphasize skills in engine performance diagnostics, brakes, steering and suspension, computer systems, lubrication, tires, drivability and power train management.

Course Title: Automotive Technician II (ISBE #20104A002)

Course Description: This course builds on the foundations laid in Automotive Mechanics—Comprehensive and Automotive Technician 1 and provides experiences related to maintenance, repair and servicing of a variety of transportation and maintenance equipment. Planned learning activities will allow students to become knowledgeable of fundamental principles and methods and to develop technical skills related to automotive mechanics and various forms of internal

combustion engines. This course will emphasize skills in engine performance diagnostics, transmissions, HVAC, testing and diagnostics, input and output sensors, and overall automobile performance.

Course Title: Auto Body I (ISBE # 20116A001)

Course Description: This is a course designed to build on the foundation established in Automotive Body Repair and Refinishing - Comprehensive and further the students' understanding of the professional field of Automotive Collision Repair and Restoration. In this course, students will put into practice the basic theory and tools used in the Auto Body industry. They will develop these skills by repairing and restoring automobiles. The students use some of the latest technologies and theories in Auto Body repair, while maintaining a grasp and use of the foundational principals. While students will experience the full spectrum of the work field, from initial damage analysis, to repair, refinishing, and delivery preparation, focus will be on safe practices, component and tool identification, damage analysis and repair, corrosion repair, body filler application and sanding, and priming.

Course Title: Auto Body II (ISBE # 20116A002)

Course Description: This is a course designed to build on the foundation established in Automotive Body Repair and Refinishing - Comprehensive and Auto Body I to further the students' understanding of the professional field of Automotive Collision Repair and Restoration. In this course, students will put into practice the basic theory and tools used in the Auto Body industry. They will develop these skills by repairing and restoring automobiles. The students use some of the latest technologies and theories in Auto Body repair, while maintaining a grasp and use of the foundational principals. While students will experience the full spectrum of the work field, from initial damage analysis, to repair, refinishing, and delivery preparation, focus will be on safe practices, paint preparation sanding, masking, priming, topcoat application, topcoat inspection and repairing, and delivery preparation.

Course Title: Student Work Experience (ISBE # 22998A000)

Course Description: Workplace Experience courses provide students with work experience in a field related to their interests. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

Appendix B – Course Outline

Automotive Mechanics – Comprehensive

Topic	# Weeks	ILS Standards	ELA CCSS Standards
Course Introduction	1	21.A; 21.B; 1.C;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Automotive Background and History	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Automotive Ownership	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Automotive and Shop Safety	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Basic Tools	1	21.A; 21.B; 1.C; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Fluid Level Check	1	21.A; 21.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Internal Combustion Engines	2	21.A; 21.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Lubrication Systems	1	21.A; 21.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.Math.Content.HSN-Q.A.1
Electrical Systems	1	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Fuel Systems	1	21.A; 21.B; 5.A; 5.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Ignition	1	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1 CCSS.ELA-Literacy.RST.11-12.3
Cooling and Climate Control	1	21.A; 21.B; 13.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Suspension and Steering	1	21.A; 21.B; 13.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Brakes	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.Math.Content.HSN-Q.A.1
Transmissions/Drive Train	1	21.A; 21.B; 5.A; 5.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Exhaust and Emissions	1	21.A; 21.B; 5.A; 5.B; 9.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Accessory Systems	1	21.A; 21.B; 13.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1

Automotive Body Repair & Refinishing - Comprehensive

Topic	# weeks	ILS Standards	ELA CCSS Standards
Careers in Collision Repair	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Tools	1	21.A; 21.B; 1.C; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Fasteners	1	21.A; 21.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Body Shop Materials	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Welding, Heating and Cutting	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Vehicle Construction	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Metal Straightening	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Plastic and Composite Repair	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.Math.Content.HSN-Q.A.1
Replacing Hoods, Bumpers, Doors	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Vehicle Surface Preparation	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Shop and Equipment Preparation	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1 CCSS.ELA-Literacy.RST.11-12.3
Painting Fundamentals		21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Color Matching	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Paint Problems	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.Math.Content.HSN-Q.A.1
Decals, Custom Painting and Trim	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Measuring Vehicle Damage	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Replacing Structural Parts	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1
Estimating and Entrepreneurship	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.Math.Content.HSN-Q.A.1

Automotive Detailing and Reconditioning

Topic	# weeks	ILS Standards	ELA CCSS Standards
Introduction/ Syllabi/ Career Exploration	1	21.A; 21.B; 1.C;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Safety/ History/ Automobile Construction/ Identification	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Tools and Measuring	1	21.A; 21.B; 1.C; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Cleaning Products and Product Application	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Proper Exterior Cleaning Techniques	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Proper Interior Cleaning Techniques	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Wheel and Tire Detailing	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Field Preparation/ Procedures	29	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1

Automotive Technician I

Topic	# weeks	ILS Standards	ELA CCSS Standards
Introduction/ Syllabi/ Career Exploration	1	21.A; 21.B; 1.C;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2
Safety/ History/ Automobile Construction/ Identification	2	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2
Tools	2	21.A; 21.B; 1.C; 7.A	CCSS.Math.Content.HSN-Q.A.1
Measuring Tools/ Fasteners	1.5	21.A; 21.B; 7.A	CCSS.Math.Content.HSN-Q.A.1
Engine Types	.5	21.A; 21.B;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2

Small Engines	6 (3 fall, 3 spring)	21.A; 21.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7
Multi Cylinder Engines	1	21.A; 21.B;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Oil/ Oil Change Procedures	1	21.A; 21.B;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Tires	3	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Brakes Disc	3	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Brakes Drum	2	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Suspension	1	21.A; 21.B; 13.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Steering	1	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Ignition Systems	2	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Fuel Systems	2	21.A; 21.B; 5.A; 5.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Intake	1.5	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Exhaust/ Emissions	1.5	21.A; 21.B; 5.A; 5.B; 9.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
OBD I and OBD II	1	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Sensors	1	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1

Cooling System	1	21.A; 21.B; 13.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Climate Control	1	21.A; 21.B; 13.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1

Automotive Technician II

Topic	# weeks	ILS Standards	ELA CCSS Standards
Introduction/ Syllabi/ Career Exploration	1	21.A; 21.B; 1.C;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2
Safety/ History/ Automobile Construction/ Identification	2	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2
Tools	1.5	21.A; 21.B; 1.C; 7.A	CCSS.Math.Content.HSN-Q.A.1
Measuring Tools/ Fasteners	1.5	21.A; 21.B; 7.A	CCSS.Math.Content.HSN-Q.A.1
Small Engines	6 (3 fall, 3 spring)	21.A; 21.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7
Multi Cylinder Engines	1	21.A; 21.B;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Oil/ Oil Change Procedures	1	21.A; 21.B;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Tires	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Brakes Disc	1	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Brakes Drum	1	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Traction Control/ Stability Control/ ABS	1	21.A; 21.B; 5.A; 5.B; 9.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Drive trains: Automatic	3	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1

Drive trains: Manual	2	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Ignition Systems	2	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Fuel Systems	2	21.A; 21.B; 5.A; 5.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Intake	1.5	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Exhaust/ Emissions	1.5	21.A; 21.B; 5.A; 5.B; 9.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Diagnostics	2	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Sensors	2	21.A; 21.B; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Cooling System	1	21.A; 21.B; 13.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Climate Control	1	21.A; 21.B; 13.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1

Auto Body I

Topic	# weeks	ILS Standards	ELA CCSS Standards
Introduction/ Syllabi/ Career Exploration	1	21.A; 21.B; 1.C;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Safety/ History/ Automobile Construction/ Identification	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Tools	1	21.A; 21.B; 1.C; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Measuring Tools/ Fasteners	2	21.A; 21.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2

			CCSS.Math.Content.HSN-Q.A.1
Proper Dent Straightening Procedures/ Sanding Techniques	8	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Body Filler Application/ Sanding Techni	9	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Masking Techniques/ Prep for Paint/ Spraying Techniques: Primer Application / Wet Sanding Techniques	6	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Spraying Techniques: Primer/Sealer Application/ Base-Clear Coat Application/	5	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Paint Problems and Finishing/ Delivery Procedures.	3	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1

Auto Body II

Topic	# weeks	ILS Standards	ELA CCSS Standards
Introduction/ Syllabi/ Career Exploration	1	21.A; 21.B; 1.C;	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Safety/ History/ Automobile Construction/ Identification	1	21.A; 21.B; 1.C	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Tools	1	21.A; 21.B; 1.C; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Measuring Tools/ Fasteners	2	21.A; 21.B; 7.A	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Proper Dent Straightening Procedures/ Sanding Techniques	5	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Body Filler Application/ Sanding Techni	5	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Masking Techniques/ Prep for Paint/ Spraying Techniques: Primer Application / Wet Sanding Techniques	6	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1

Spraying Techniques: Primer/Sealer Application/ Base-Clear Coat Application/	9	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1
Paint Problems and Finishing/ Delivery Procedures.	6	21.A; 21.B; 7.A; 5.A; 5.B	CCSS.ELA-Literacy.RI.11-12.7 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.WHST.11-12.2 CCSS.Math.Content.HSN-Q.A.1