

Connecting Career Pathways • Resources

Industry-Based Certifications for Transportation Careers



Helping the next generation move Texas forward

What is CCP?

The Texas Department of Transportation Civil Rights Division (TxDOT CIV) has designed the Connecting Career Pathways (CCP) Program to introduce and integrate transportation infrastructure career awareness and exploration experiences in K-12 classrooms to connect existing curriculum and skill-building to pathways into the industry through innovative and interactive initiatives.

This resource compiles all Industry-Based Certification (IBC) offerings available through programs of study that equip students to pursue transportation infrastructure careers, in accordance with the Texas Education Agency's (TEA) [2025-2030 Industry-Based Certification \(IBC\) List for Public School Accountability](#). In this document, you will learn what IBCs are, how students benefit from earning IBCs, how students get involved, and which IBCs are relevant to transportation infrastructure careers.

If you have any questions about the information in this resource, please contact CCP@txdot.gov.

Why Does CCP Matter?

Texas faces a critical workforce challenge: 94% of construction firms report staffing shortages, which can delay projects, raise costs, and impact safety statewide. CCP addresses this by building early awareness and engagement with transportation careers, creating a strong talent pipeline for the future.



For more information email: CCP@txdot.gov

Visit us online at www.txdot.gov/about/programs/civil-rights/connecting-career-pathways.html

What are Industry-Based Certifications (IBCs)?

IBCs validate the skills and competencies that employers recognize as essential for workforce readiness, ensuring strong industry alignment. High school students can jump-start their futures by earning IBCs, giving them a powerful advantage in pursuing successful career pathways. To earn an IBC, students must show they can use equipment, technology, and techniques safely and correctly through passing performance-based exams.

Programs of study embed IBC preparation directly into coursework through practical, hands-on learning. Earning an IBC is often seen as a capstone accomplishment that demonstrates a student is ready for the workplace. Students are more likely to earn IBCs when they receive early exposure to certification options, follow coherent course sequences in programs of study, and benefit from meaningful career advising.



Why should students pursue an IBC?

IBCs are freely available to high school students as their school districts can request reimbursement from the Texas Education Agency (TEA) for the cost of the certification exams. When students attain these certifications, it also helps their school districts. TEA keeps a list of IBCs that count toward College, Career, and Military Readiness (CCMR) accountability. CCMR scores are a big part of how Texas schools are graded and impact how much funding schools receive.

How do students get involved?

High school counselors serve as valuable advisors, helping students identify the certifications that align with their career goals and program of study. Counselors help students understand the requirements for specific certifications. Many IBCs require students to complete a specific sequence of courses or training programs as a prerequisite. Students must then pass a certification exam or assessment to earn an IBC.

Which IBCs are relevant to transportation infrastructure careers?

All states maintain an approved IBC list to ensure that certifications are aligned to high-skill, high-wage, and in-demand careers and workforce needs. In addition, states tie funding incentives to certifications on the approved list. The full approved IBC list contains the IBC ID, the IBC name, the certifying entity name, and the aligned program of study (the coherent sequence of courses to prepare students for success in career pathways).

The **Transportation, Distribution, and Logistics (TDL)** career cluster focuses on the planning, management, and movement of people, goods, and materials by road, air, rail, water, and pipeline. It also involves related support services such as infrastructure, logistics, and equipment maintenance. These career pathways are most directly related to transportation infrastructure careers. The IBCs specifically aligned to TDL are found in the ***IBCs in Transportation, Distribution, and Logistics*** list below. See additional ***IBCs Related to Transportation Infrastructure Careers*** on page 6.

Table 1 -IBCs in Transportation, Distribution, and Logistics (TDL)

IBC ID	IBC Name	Aligned Program of Study Name
191	ASE Entry Level Automobile Maintenance and Light Repair (MR)	Automotive and Collision Repair
121	ASE Entry-Level Automobile Automatic Transmission/ Transaxle (AT)	Automotive and Collision Repair
141	ASE Entry-Level Automobile Brakes (BR)	Automotive and Collision Repair
151	ASE Entry-Level Automobile Electronic/Electrical Systems (EE)	Automotive and Collision Repair
161	ASE Entry-Level Automobile Engine Performance (EP)	Automotive and Collision Repair
171	ASE Entry-Level Automobile Engine Repair (ER)	Automotive and Collision Repair
182	ASE Entry-Level Automobile Heating and Air Conditioning (AC)	Automotive and Collision Repair
201	ASE Entry-Level Automobile Manual Drive Train and Axles (MD)	Automotive and Collision Repair
131	ASE Entry-Level Automobile Service Technology	Automotive and Collision Repair
261	ASE Entry-Level Automobile Suspension and Steering (SS)	Automotive and Collision Repair
211	ASE Entry-Level Collision Mechanical and Electrical Components (ME)	Automotive and Collision Repair
221	ASE Entry-Level Collision Non-Structural Analysis and Damage Repair (SR)	Automotive and Collision Repair
231	ASE Entry-Level Collision Painting and Refinishing (PR)	Automotive and Collision Repair
1097	ASE Entry-Level Collision Repair and Refinish Fundamentals	Automotive and Collision Repair
251	ASE Entry-Level Collision Structural Analysis and Damage Repair	Automotive and Collision Repair
1098	ASE Entry-Level Inspection Maintenance & Minor Repair, Medium/Heavy Truck	Automotive and Collision Repair
240	ASE Refrigerant Recovery and Recycling	Automotive and Collision Repair
600	Industrial Technology Maintenance (ITM) - Basic Mechanical Systems	Automotive and Collision Repair
601	Industrial Technology Maintenance (ITM) - Basic Pneumatic Systems	Automotive and Collision Repair
602	Industrial Technology Maintenance (ITM) - Electrical Systems	Automotive and Collision Repair
604	Industrial Technology Maintenance (ITM) - Maintenance Operations	Automotive and Collision Repair
606	Industrial Technology Maintenance (ITM) - Maintenance Welding	Automotive and Collision Repair
1034	Principles of Small Engine Technology Certification	Automotive and Collision Repair
1040	Small Engine Technology	Automotive and Collision Repair
40	Aerospace Manufacturing Certification	Aviation Maintenance

IBCs in Transportation, Distribution, and Logistics (TDL) – Page 2

IBC ID	IBC Name	Aligned Program of Study Name
1116	Certificate of Aviation Maintenance Engineer (AME)	Aviation Maintenance
1117	Certificate of Aviation Maintenance Technician (AMT)	Aviation Maintenance
533	FAA Aviation Mechanic- Airframe (AMT-A)	Aviation Maintenance
1214	FAA Aviation Mechanic-Power Plant (AMT-P)	Aviation Maintenance
600	Industrial Technology Maintenance (ITM) - Basic Mechanical Systems	Aviation Maintenance
601	Industrial Technology Maintenance (ITM) - Basic Pneumatic Systems	Aviation Maintenance
602	Industrial Technology Maintenance (ITM) - Electrical Systems	Aviation Maintenance
604	Industrial Technology Maintenance (ITM) - Maintenance Operations	Aviation Maintenance
1090	Advanced Unmanned Safety Level 3 - AUSO Ground	Aviation Pilots
1091	Advanced Unmanned Safety Level 4 - AUSO Flight	Aviation Pilots
534	FAA Part 107 Remote Drone Pilot	Aviation Pilots
1233	Introduction to Aerodynamics	Aviation Pilots
1234	Introduction to Electricity	Aviation Pilots
1285	sUAS Safety Level 1	Aviation Pilots
1309	Visual Line of Sight Systems Ground	Aviation Pilots
191	ASE Entry Level Automobile Maintenance and Light Repair (MR)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
161	ASE Entry-Level Automobile Engine Performance (EP)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
171	ASE Entry-Level Automobile Engine Repair (ER)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
182	ASE Entry-Level Automobile Heating and Air Conditioning (AC)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
221	ASE Entry-Level Collision Non-Structural Analysis and Damage Repair (SR)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
231	ASE Entry-Level Collision Painting and Refinishing (PR)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
251	ASE Entry-Level Collision Structural Analysis and Damage Repair	Diesel and Heavy Equipment Maintenance and Commercial Drivers

IBCs in Transportation, Distribution, and Logistics (TDL) – Page 3

IBC ID	IBC Name	Aligned Program of Study Name
271	ASE Entry-Level Medium/Heavy Truck, Brakes (TB)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
281	ASE Entry-Level Medium/Heavy Truck, Diesel Engines (DE)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
301	ASE Entry-Level Medium/Heavy Truck, Electrical/Electronic Systems (TE)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
321	ASE Entry-Level Medium/Heavy Truck, Suspension and Steering (TS)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
240	ASE Refrigerant Recovery and Recycling	Diesel and Heavy Equipment Maintenance and Commercial Drivers
1200	Commercial Drivers License (CDL)	Diesel and Heavy Equipment Maintenance and Commercial Drivers
607	Industrial Technology Maintenance (ITM) - Process Control Systems	Distribution, Logistics, and Warehousing
1259	Logistics & Transportation Operations Strategies (LTOS)	Distribution, Logistics, and Warehousing
1286	Supply Chain Framework and Strategy (SCFS)	Distribution, Logistics, and Warehousing
1308	Transportation Dispatcher	Distribution, Logistics, and Warehousing
841	Certified Logistics Technician (CLT)	Maritime
1259	Logistics & Transportation Operations Strategies (LTOS)	Maritime

Source: [IBCs to Program of Study Crosswalk 2025-2030](#) (October 31, 2025), The Texas Education Agency

IBCs from Related Career Clusters and Programs of Study

Given the breadth and complexity of transportation infrastructure careers, Transportation, Distribution, and Logistics is only one career cluster that provides pathways for students to succeed in the transportation workforce. There are several other career clusters (and programs of study) that provide career and technical education to equip students for success in various transportation careers. Some of these additional career clusters include Energy, Agriculture, Food, and Natural Resources, Manufacturing, Engineering, Law and Public Service, and Architecture and Construction. Additional IBCs aligned to programs of study within other career clusters can be found in the ***IBCs Related to Transportation Infrastructure Careers*** list below.

Table 2 - IBCs Related to Transportation Infrastructure Careers

IBC ID	IBC Name	Aligned Program of Study Name
1096	Applied Robotics	Advanced Manufacturing and Industrial Technology
960	C-200 Certified Industry 4.0 Automation Systems Specialist I - 208 Programmable Controller Troubleshooting 1	Advanced Manufacturing and Industrial Technology
964	Certified Manufacturing Associate (CMfgA)	Advanced Manufacturing and Industrial Technology
842	Certified Production Technician (CPT) 4.0	Advanced Manufacturing and Industrial Technology
845	CNC Lathe Operations	Advanced Manufacturing and Industrial Technology
846	CNC Lathe Programming Setup and Operations	Advanced Manufacturing and Industrial Technology
1013	CNC Milling II	Advanced Manufacturing and Industrial Technology
1015	CNC Turning II	Advanced Manufacturing and Industrial Technology
630	Core	Advanced Manufacturing and Industrial Technology
1235	Fundamentals of Electricity - AC/DC	Advanced Manufacturing and Industrial Technology
670	Industrial Maintenance Mechanic Level I	Advanced Manufacturing and Industrial Technology
1024	Industrial Maintenance Support Mechanic	Advanced Manufacturing and Industrial Technology
600	Industrial Technology Maintenance (ITM) - Basic Mechanical Systems	Advanced Manufacturing and Industrial Technology
1236	Introduction to Electronics	Advanced Manufacturing and Industrial Technology
843	Machining CNC Mill Operations	Advanced Manufacturing and Industrial Technology
844	Machining CNC Mill Programming Setup and Operations	Advanced Manufacturing and Industrial Technology

IBCs Related to Transportation Infrastructure Careers – Page 2

IBC ID	IBC Name	Aligned Program of Study Name
847	Machining Drill Press I	Advanced Manufacturing and Industrial Technology
848	Machining Grinding I	Advanced Manufacturing and Industrial Technology
850	Machining Measurement, Material, and Safety	Advanced Manufacturing and Industrial Technology
936	Agriculture Mechanics	Agricultural Technology and Mechanical Systems
100	API 1104 Welding Pipelines and Related Facilities	Agricultural Technology and Mechanical Systems
351	AWS Certified Welder	Agricultural Technology and Mechanical Systems
340	AWS D1.1 Structural Steel	Agricultural Technology and Mechanical Systems
350	AWS D9.1 Sheet Metal Welding	Agricultural Technology and Mechanical Systems
360	AWS SENSE Level 1: Entry Welder	Agricultural Technology and Mechanical Systems
630	Core	Agricultural Technology and Mechanical Systems
537	Feedyard Technician in Machinery Operation, Repair and Maintenance	Agricultural Technology and Mechanical Systems
601	Industrial Technology Maintenance (ITM) - Basic Pneumatic Systems	Agricultural Technology and Mechanical Systems
606	Industrial Technology Maintenance (ITM) - Maintenance Welding	Agricultural Technology and Mechanical Systems
850	Machining Measurement, Material, and Safety	Agricultural Technology and Mechanical Systems
1050	Welding - Job Ready	Agricultural Technology and Mechanical Systems
1310	Welding and Fabrication	Agricultural Technology and Mechanical Systems
1311	Welding Level 2	Agricultural Technology and Mechanical Systems
760	Welding Level I	Agricultural Technology and Mechanical Systems
946	Autodesk Certified Professional in AutoCAD for Design and Drafting	Architectural Drafting and Design
1051	Autodesk Certified Professional in Civil 3D for Infrastructure Design	Architectural Drafting and Design

IBCs Related to Transportation Infrastructure Careers – Page 3

IBC ID	IBC Name	Aligned Program of Study Name
948	Autodesk Certified Professional in Revit for Architectural Design	Architectural Drafting and Design
949	Autodesk Certified Professional in Revit for Electrical Design	Architectural Drafting and Design
950	Autodesk Certified Professional in Revit for Structural Design	Architectural Drafting and Design
938	Autodesk Certified User 3ds MAX	Architectural Drafting and Design
939	Autodesk Certified User AutoCAD	Architectural Drafting and Design
940	Autodesk Certified User Fusion 360	Architectural Drafting and Design
942	Autodesk Certified User Revit	Architectural Drafting and Design
1056	Certified SOLIDWORKS Additive Manufacturing Associate (CSWA-AM)	Architectural Drafting and Design
1053	Certified SOLIDWORKS Associate (CSWA) - Academic	Architectural Drafting and Design
1054	Certified SOLIDWORKS Associate (CSWA) - Electrical	Architectural Drafting and Design
1058	Certified SOLIDWORKS CAD Design Professional (CSWP) - Academic	Architectural Drafting and Design
1062	Certified SOLIDWORKS Professional (CSWP) - Model Based Design	Architectural Drafting and Design
1063	Certified SOLIDWORKS Professional (CSWP) - Simulation	Architectural Drafting and Design
1064	Certified SOLIDWORKS Professional (CSWPA) - Drawing Tools	Architectural Drafting and Design
1011	LEED Green Associate	Architectural Drafting and Design
1009	Residential Plans Examiner - R3	Architectural Drafting and Design
1299	Tosa Certification for Autodesk AutoCAD (Advanced or Expert)	Architectural Drafting and Design
531	ArcGIS Pro Associate 2101	Civil Engineering
946	Autodesk Certified Professional in AutoCAD for Design and Drafting	Civil Engineering
1051	Autodesk Certified Professional in Civil 3D for Infrastructure Design	Civil Engineering
947	Autodesk Certified Professional in Inventor for Mechanical Design	Civil Engineering

IBCs Related to Transportation Infrastructure Careers – Page 4

IBC ID	IBC Name	Aligned Program of Study Name
948	Autodesk Certified Professional in Revit for Architectural Design	Civil Engineering
949	Autodesk Certified Professional in Revit for Electrical Design	Civil Engineering
950	Autodesk Certified Professional in Revit for Structural Design	Civil Engineering
938	Autodesk Certified User 3ds MAX	Civil Engineering
939	Autodesk Certified User AutoCAD	Civil Engineering
940	Autodesk Certified User Fusion 360	Civil Engineering
941	Autodesk Certified User Inventor	Civil Engineering
942	Autodesk Certified User Revit	Civil Engineering
1056	Certified SOLIDWORKS Additive Manufacturing Associate (CSWA-AM)	Civil Engineering
1053	Certified SOLIDWORKS Associate (CSWA) - Academic	Civil Engineering
1054	Certified SOLIDWORKS Associate (CSWA) - Electrical	Civil Engineering
1055	Certified SOLIDWORKS CAD Design Associate (CSWA) - Academic	Civil Engineering
1058	Certified SOLIDWORKS CAD Design Professional (CSWP) - Academic	Civil Engineering
1061	Certified SOLIDWORKS Professional (CSWP) - Mechanical Design	Civil Engineering
1062	Certified SOLIDWORKS Professional (CSWP) - Model Based Design	Civil Engineering
1063	Certified SOLIDWORKS Professional (CSWP) - Simulation	Civil Engineering
1064	Certified SOLIDWORKS Professional (CSWPA) - Drawing Tools	Civil Engineering
989	Engineering Technology Foundations	Civil Engineering
1215	FDM Certification for EDU – Level 1	Civil Engineering
999	HBI Pre-Apprenticeship Certificate Training (PACT), Building Construction Technology	Civil Engineering
1001	HBI Pre-Apprenticeship Certificate Training (PACT), Core	Civil Engineering
1010	Lean Six Sigma Green Belt Certification	Civil Engineering
1011	LEED Green Associate	Civil Engineering
1028	Pre-Engineering/Engineering Technology - Job Ready	Civil Engineering
1009	Residential Plans Examiner - R3	Civil Engineering
1299	Tosa Certification for Autodesk AutoCAD (Advanced or Expert)	Civil Engineering
367	Certified Associate in Project Management (CAPM)	Construction Management and Inspection
613	Construction Site Safety Technician	Construction Management and Inspection

IBCs Related to Transportation Infrastructure Careers – Page 5

IBC ID	IBC Name	Aligned Program of Study Name
620	Construction Technology Certification Level I	Construction Management and Inspection
630	Core	Construction Management and Inspection
999	HBI Pre-Apprenticeship Certificate Training (PACT), Building Construction Technology	Construction Management and Inspection
1001	HBI Pre-Apprenticeship Certificate Training (PACT), Core	Construction Management and Inspection
1011	LEED Green Associate	Construction Management and Inspection
1009	Residential Plans Examiner - R3	Construction Management and Inspection
750	Weatherization Technician Level I	Construction Management and Inspection
1096	Applied Robotics	Drone (Unmanned Vehicle)
1139	Certified Industrial Robotics Programmer (CIRP)	Drone (Unmanned Vehicle)
1140	Certified Industry 4.0 Technician Level 1	Drone (Unmanned Vehicle)
1141	Certified Industry 4.0 Technician Level 2	Drone (Unmanned Vehicle)
1142	Certified Industry 4.0 Technician Level 3	Drone (Unmanned Vehicle)
1144	Certified Mechanical Technician Level 1	Drone (Unmanned Vehicle)
1145	Certified Mechanical Technician Level 2	Drone (Unmanned Vehicle)
1146	Certified Mechanical Technician Level 3	Drone (Unmanned Vehicle)
1163	Certified Robotics Technician Level 1	Drone (Unmanned Vehicle)
1164	Certified Robotics Technician Level 2	Drone (Unmanned Vehicle)
1165	Certified Robotics Technician Level 3	Drone (Unmanned Vehicle)
534	FAA Part 107 Remote Drone Pilot	Drone (Unmanned Vehicle)
1220	Fundamentals of Robotics	Drone (Unmanned Vehicle)
1233	Introduction to Aerodynamics	Drone (Unmanned Vehicle)
1283	Robot Operations I	Drone (Unmanned Vehicle)
1096	Applied Robotics	Engineering Foundations
946	Autodesk Certified Professional in AutoCAD for Design and Drafting	Engineering Foundations
1051	Autodesk Certified Professional in Civil 3D for Infrastructure Design	Engineering Foundations
947	Autodesk Certified Professional in Inventor for Mechanical Design	Engineering Foundations
948	Autodesk Certified Professional in Revit for Architectural Design	Engineering Foundations
949	Autodesk Certified Professional in Revit for Electrical Design	Engineering Foundations

IBCs Related to Transportation Infrastructure Careers – Page 6

IBC ID	IBC Name	Aligned Program of Study Name
950	Autodesk Certified Professional in Revit for Structural Design	Engineering Foundations
939	Autodesk Certified User AutoCAD	Engineering Foundations
940	Autodesk Certified User Fusion 360	Engineering Foundations
941	Autodesk Certified User Inventor	Engineering Foundations
942	Autodesk Certified User Revit	Engineering Foundations
956	C-103 Certified 4.0 Associate III - Robot System Operations	Engineering Foundations
1139	Certified Industrial Robotics Programmer (CIRP)	Engineering Foundations
1140	Certified Industry 4.0 Technician Level 1	Engineering Foundations
1141	Certified Industry 4.0 Technician Level 2	Engineering Foundations
1142	Certified Industry 4.0 Technician Level 3	Engineering Foundations
841	Certified Logistics Technician (CLT)	Engineering Foundations
1144	Certified Mechanical Technician Level 1	Engineering Foundations
1145	Certified Mechanical Technician Level 2	Engineering Foundations
1146	Certified Mechanical Technician Level 3	Engineering Foundations
1153	Certified Process Control Technician Level 1	Engineering Foundations
1154	Certified Process Control Technician Level 2	Engineering Foundations
1155	Certified Process Control Technician Level 3	Engineering Foundations
842	Certified Production Technician (CPT) 4.0	Engineering Foundations
1163	Certified Robotics Technician Level 1	Engineering Foundations
1164	Certified Robotics Technician Level 2	Engineering Foundations
1165	Certified Robotics Technician Level 3	Engineering Foundations
1056	Certified SOLIDWORKS Additive Manufacturing Associate (CSWA-AM)	Engineering Foundations
1053	Certified SOLIDWORKS Associate (CSWA) - Academic	Engineering Foundations
1054	Certified SOLIDWORKS Associate (CSWA) - Electrical	Engineering Foundations
1055	Certified SOLIDWORKS CAD Design Associate (CSWA) - Academic	Engineering Foundations
1058	Certified SOLIDWORKS CAD Design Professional (CSWP) - Academic	Engineering Foundations
1061	Certified SOLIDWORKS Professional (CSWP) - Mechanical Design	Engineering Foundations
1062	Certified SOLIDWORKS Professional (CSWP) - Model Based Design	Engineering Foundations
1063	Certified SOLIDWORKS Professional (CSWP) - Simulation	Engineering Foundations
1064	Certified SOLIDWORKS Professional (CSWPA) - Drawing Tools	Engineering Foundations
989	Engineering Technology Foundations	Engineering Foundations
535	FANUC Certified Robot Operator with ROBOGUIDE	Engineering Foundations

IBCs Related to Transportation Infrastructure Careers – Page 7

IBC ID	IBC Name	Aligned Program of Study Name
1215	FDM Certification for EDU – Level 1	Engineering Foundations
1220	Fundamentals of Robotics	Engineering Foundations
1233	Introduction to Aerodynamics	Engineering Foundations
1234	Introduction to Electricity	Engineering Foundations
1241	Intuit Design for Delight Innovator	Engineering Foundations
1010	Lean Six Sigma Green Belt Certification	Engineering Foundations
1028	Pre-Engineering/Engineering Technology - Job Ready	Engineering Foundations
1283	Robot Operations I	Engineering Foundations
1299	Tosa Certification for Autodesk AutoCAD (Advanced or Expert)	Engineering Foundations
1070	Ducks Unlimited Ecology Conservation & Management Certification	Environmental and Natural Resources
1217	Forest Worker Credential	Environmental and Natural Resources
1023	Natural Resources Systems	Environmental and Natural Resources
830	Water Operators, Class D	Environmental and Natural Resources
531	ArcGIS Pro Associate 2101	Geospatial Engineering and Land Surveying
989	Engineering Technology Foundations	Geospatial Engineering and Land Surveying
1011	LEED Green Associate	Geospatial Engineering and Land Surveying
1028	Pre-Engineering/Engineering Technology - Job Ready	Geospatial Engineering and Land Surveying
934	Administrative Assisting	Government and Public Administration
995	General Management	Government and Public Administration
1108	Basic Hydraulic Systems	Industrial Maintenance
957	C-200 Certified Industry 4.0 Automation Systems Specialist I - 201 Electrical Systems 1	Industrial Maintenance
958	C-200 Certified Industry 4.0 Automation Systems Specialist I - 202 Electric Motor Control Systems 1	Industrial Maintenance
959	C-200 Certified Industry 4.0 Automation Systems Specialist I - 204 Motor Control Troubleshooting 1	Industrial Maintenance
610	Carpentry Level I	Industrial Maintenance
1135	Certified Fluid Power Level 1	Industrial Maintenance

IBCs Related to Transportation Infrastructure Careers – Page 8

IBC ID	IBC Name	Aligned Program of Study Name
1136	Certified Fluid Power Level 2	Industrial Maintenance
1137	Certified Fluid Power Level 3	Industrial Maintenance
841	Certified Logistics Technician (CLT)	Industrial Maintenance
842	Certified Production Technician (CPT) 4.0	Industrial Maintenance
965	Certified Technician-Supply Chain Automation (CT-SCA)	Industrial Maintenance
620	Construction Technology Certification Level I	Industrial Maintenance
630	Core	Industrial Maintenance
640	Electrical Level I	Industrial Maintenance
641	Electrical Level II	Industrial Maintenance
650	Electronic System Technician Level I	Industrial Maintenance
651	Electronic System Technician Level II	Industrial Maintenance
1071	Employment Ready Certification - Air Conditioning	Industrial Maintenance
1072	Employment Ready Certification - Electrical	Industrial Maintenance
1073	Employment Ready Certification - Gas Heat	Industrial Maintenance
1074	Employment Ready Certification - Heat Pumps	Industrial Maintenance
1075	Employment Ready Certification - Light Commercial Air Conditioning	Industrial Maintenance
1237	Fundamentals of Fluid Power - Hydraulics/Pneumatics	Industrial Maintenance
1001	HBI Pre-Apprenticeship Certificate Training (PACT), Core	Industrial Maintenance
1004	HBI Pre-Apprenticeship Certificate Training (PACT), Heating, Ventilation and Air Conditioning	Industrial Maintenance
1076	Heating, Electrical, & Air Conditioning Technology (H.E.A.T.)	Industrial Maintenance
660	HVACR Level I	Industrial Maintenance
670	Industrial Maintenance Mechanic Level I	Industrial Maintenance
1024	Industrial Maintenance Support Mechanic	Industrial Maintenance
1025	Industrial Millwright	Industrial Maintenance
600	Industrial Technology Maintenance (ITM) - Basic Mechanical Systems	Industrial Maintenance
601	Industrial Technology Maintenance (ITM) - Basic Pneumatic Systems	Industrial Maintenance
602	Industrial Technology Maintenance (ITM) - Electrical Systems	Industrial Maintenance
604	Industrial Technology Maintenance (ITM) - Maintenance Operations	Industrial Maintenance
1256	Licensed Service Technician	Industrial Maintenance
700	Millwright Level I	Industrial Maintenance
701	Millwright Level II	Industrial Maintenance
870	Refrigerant Handling (EPA 608)	Industrial Maintenance
740	Sheet Metal Level I	Industrial Maintenance

IBCs Related to Transportation Infrastructure Careers – Page 9

IBC ID	IBC Name	Aligned Program of Study Name
1092	AM Design and Prototyping	Manufacturing Technology
1094	Applied Industry 4.0	Manufacturing Technology
1100	Autodesk Certified Associate in CAM for 2.5 Axis Milling	Manufacturing Technology
1101	Autodesk Certified Associate in CAM for Turning	Manufacturing Technology
1102	Autodesk Certified Professional in CAM for 3 Axis Milling	Manufacturing Technology
340	AWS D1.1 Structural Steel	Manufacturing Technology
360	AWS SENSE Level 1: Entry Welder	Manufacturing Technology
955	C-101 Certified 4.0 Associate I - Basic Operations	Manufacturing Technology
956	C-103 Certified 4.0 Associate III - Robot System Operations	Manufacturing Technology
1113	CAM Milling I	Manufacturing Technology
1114	CAM Turning I	Manufacturing Technology
841	Certified Logistics Technician (CLT)	Manufacturing Technology
964	Certified Manufacturing Associate (CMfgA)	Manufacturing Technology
1153	Certified Process Control Technician Level 1	Manufacturing Technology
1154	Certified Process Control Technician Level 2	Manufacturing Technology
1155	Certified Process Control Technician Level 3	Manufacturing Technology
842	Certified Production Technician (CPT) 4.0	Manufacturing Technology
1059	Certified SOLIDWORKS Professional (CSWA) - Additive Manufacturing	Manufacturing Technology
1060	Certified SOLIDWORKS Professional (CSWP) - CAM	Manufacturing Technology
965	Certified Technician-Supply Chain Automation (CT-SCA)	Manufacturing Technology
1178	Classic Credential: CNC Lathe II	Manufacturing Technology
1179	Classic Credential: Diemaking II	Manufacturing Technology
1180	Classic Credential: Diemaking III	Manufacturing Technology
1181	Classic Credential: Drill Press II	Manufacturing Technology
1182	Classic Credential: EDM II (2-Axis Wire)	Manufacturing Technology
1183	Classic Credential: EDM II (Plunge)	Manufacturing Technology
1184	Classic Credential: Grinding II (Cylindrical)	Manufacturing Technology
1185	Classic Credential: Grinding II (Surface)	Manufacturing Technology
1186	Classic Credential: Job Planning, Benchwork & Layout	Manufacturing Technology
1187	Classic Credential: Milling II	Manufacturing Technology
1188	Classic Credential: Moldmaking II	Manufacturing Technology
1189	Classic Credential: Moldmaking III	Manufacturing Technology
1190	Classic Credential: Screw Machine Operations II (Multi-Spindle)	Manufacturing Technology
1191	Classic Credential: Screw Machine Operations II (Single Spindle)	Manufacturing Technology

IBCs Related to Transportation Infrastructure Careers – Page 10

IBC ID	IBC Name	Aligned Program of Study Name
1192	Classic Credential: Screw Machine Setup and Operations III (Multi-Spindle)	Manufacturing Technology
1193	Classic Credential: Turning I (Between Centers)	Manufacturing Technology
1194	Classic Credential: Turning I (Chucking)	Manufacturing Technology
1195	Classic Credential: Turning II (Between Centers)	Manufacturing Technology
1196	Classic Credential: Turning II (Chucking)	Manufacturing Technology
1198	CNC 5-Axis Mill Operations	Manufacturing Technology
1199	CNC 5-Axis Mill Setup and Operations	Manufacturing Technology
845	CNC Lathe Operations	Manufacturing Technology
846	CNC Lathe Programming Setup and Operations	Manufacturing Technology
1013	CNC Milling II	Manufacturing Technology
1015	CNC Turning II	Manufacturing Technology
630	Core	Manufacturing Technology
1208	Electronic Control Systems	Manufacturing Technology
1238	Introduction to Mechatronics	Manufacturing Technology
843	Machining CNC Mill Operations	Manufacturing Technology
844	Machining CNC Mill Programming Setup and Operations	Manufacturing Technology
847	Machining Drill Press I	Manufacturing Technology
848	Machining Grinding I	Manufacturing Technology
850	Machining Measurement, Material, and Safety	Manufacturing Technology
849	Machining Milling I	Manufacturing Technology
1260	Maintenance Technology	Manufacturing Technology
1017	Manufacturing Technology	Manufacturing Technology
1027	Precision Machining - Job Ready	Manufacturing Technology
1050	Welding - Job Ready	Manufacturing Technology
760	Welding Level I	Manufacturing Technology
40	Aerospace Manufacturing Certification	Mechanical and Aerospace Engineering
946	Autodesk Certified Professional in AutoCAD for Design and Drafting	Mechanical and Aerospace Engineering
1051	Autodesk Certified Professional in Civil 3D for Infrastructure Design	Mechanical and Aerospace Engineering
947	Autodesk Certified Professional in Inventor for Mechanical Design	Mechanical and Aerospace Engineering
948	Autodesk Certified Professional in Revit for Architectural Design	Mechanical and Aerospace Engineering
949	Autodesk Certified Professional in Revit for Electrical Design	Mechanical and Aerospace Engineering

IBCs Related to Transportation Infrastructure Careers – Page 11

IBC ID	IBC Name	Aligned Program of Study Name
950	Autodesk Certified Professional in Revit for Structural Design	Mechanical and Aerospace Engineering
939	Autodesk Certified User AutoCAD	Mechanical and Aerospace Engineering
940	Autodesk Certified User Fusion 360	Mechanical and Aerospace Engineering
941	Autodesk Certified User Inventor	Mechanical and Aerospace Engineering
942	Autodesk Certified User Revit	Mechanical and Aerospace Engineering
1056	Certified SOLIDWORKS Additive Manufacturing Associate (CSWA-AM)	Mechanical and Aerospace Engineering
1053	Certified SOLIDWORKS Associate (CSWA) - Academic	Mechanical and Aerospace Engineering
1054	Certified SOLIDWORKS Associate (CSWA) - Electrical	Mechanical and Aerospace Engineering
1055	Certified SOLIDWORKS CAD Design Associate (CSWA) - Academic	Mechanical and Aerospace Engineering
1058	Certified SOLIDWORKS CAD Design Professional (CSWP) - Academic	Mechanical and Aerospace Engineering
1061	Certified SOLIDWORKS Professional (CSWP) - Mechanical Design	Mechanical and Aerospace Engineering
1062	Certified SOLIDWORKS Professional (CSWP) - Model Based Design	Mechanical and Aerospace Engineering
1063	Certified SOLIDWORKS Professional (CSWP) - Simulation	Mechanical and Aerospace Engineering
1064	Certified SOLIDWORKS Professional (CSWPA) - Drawing Tools	Mechanical and Aerospace Engineering
989	Engineering Technology Foundations	Mechanical and Aerospace Engineering
1215	FDM Certification for EDU – Level 1	Mechanical and Aerospace Engineering
1233	Introduction to Aerodynamics	Mechanical and Aerospace Engineering
1234	Introduction to Electricity	Mechanical and Aerospace Engineering
1241	Intuit Design for Delight Innovator	Mechanical and Aerospace Engineering
1010	Lean Six Sigma Green Belt Certification	Mechanical and Aerospace Engineering
1028	Pre-Engineering/Engineering Technology - Job Ready	Mechanical and Aerospace Engineering

IBCs Related to Transportation Infrastructure Careers – Page 12

IBC ID	IBC Name	Aligned Program of Study Name
1299	Tosa Certification for Autodesk AutoCAD (Advanced or Expert)	Mechanical and Aerospace Engineering
957	C-200 Certified Industry 4.0 Automation Systems Specialist I - 201 Electrical Systems 1	Renewable Energy
630	Core	Renewable Energy
520	Electrical Apprenticeship Certificate Level 1	Renewable Energy
640	Electrical Level I	Renewable Energy
641	Electrical Level II	Renewable Energy
650	Electronic System Technician Level I	Renewable Energy
651	Electronic System Technician Level II	Renewable Energy
1235	Fundamentals of Electricity - AC/DC	Renewable Energy
1219	Fundamentals of Industrial Wiring	Renewable Energy
1002	HBI Pre-Apprenticeship Certificate Training (PACT), Basic Electrical	Renewable Energy
1001	HBI Pre-Apprenticeship Certificate Training (PACT), Core	Renewable Energy
602	Industrial Technology Maintenance (ITM) - Electrical Systems	Renewable Energy
607	Industrial Technology Maintenance (ITM) - Process Control Systems	Renewable Energy
1232	Interim Credential	Renewable Energy
1236	Introduction to Electronics	Renewable Energy
1281	Residential Appliance Installer	Renewable Energy
1282	Residential Wireman	Renewable Energy
1086	TRIO Electrical Pre-Apprenticeship (EPP) Certification	Renewable Energy
100	API 1104 Welding Pipelines and Related Facilities	Welding
351	AWS Certified Welder	Welding
340	AWS D1.1 Structural Steel	Welding
350	AWS D9.1 Sheet Metal Welding	Welding
360	AWS SENSE Level 1: Entry Welder	Welding
620	Construction Technology Certification Level I	Welding
630	Core	Welding
606	Industrial Technology Maintenance (ITM) - Maintenance Welding	Welding
1050	Welding - Job Ready	Welding
1310	Welding and Fabrication	Welding
1311	Welding Level 2	Welding
760	Welding Level I	Welding

Source: [IBCs to Program of Study Crosswalk 2025-2030](#) (October 31, 2025), The Texas Education Agency