ARCHITECTURE AND CONSTRUCTION

HISD Academics

Program of Study: Architectural Drafting and Design

The **Architectural Drafting and Design** program of study focuses on occupational and educational opportunities associated with developing, engineering, and designing building structures and facilities. This program of study includes reading, interpreting, and drawing blueprints for interior and exterior construction projects.

CAMPUSES

Jones HS

Barbara Jordan HS

INDUSTRY-BASED CERTIFICATIONS OFFERED

- Autodesk Associate (Certified User) AutoCAD
- Certified SOLIDWORKS Associate (CSWA) - Academic

CAREER OCCUPATIONS

HIGH SCHOOL DEGREE

Sheet Metal Worker
Median Salary: $61,727
Annual Openings: 11,500

ASSOCIATE'S DEGREE

Geographic Information Systems Technologists and Technicians
Median Salary: $125,113
Annual Openings: 34,800

BACHELOR'S DEGREE

Manufacturing Engineers
Median Salary: $130,495
Annual Openings: 25,200

DOCTORAL DEGREE

Veterinarians
Median Salary: $103,950
Annual Openings: 88

OTHER OCCUPATIONS

DESCRIPTION	MEDIAN SALARY	ANNUAL OPENINGS	10-YEAR GROWTH
Industrial Engineer	$103,655	483	24.6%

To learn more about our CTE Programs please visit https://www.HoustonISD.org/CareerReadiness or any of the campuses listed.

Cite Sources:
**Rice University Kinder Institute Workforce Demand Dashboard (Click Here)*
**"Employment Projections - Texas Wages and Employment Projections" (Click Here)*

HOUSTON INDEPENDENT SCHOOL DISTRICT

ARCHITECTURE AND CONSTRUCTION

HISD Academics

Program of Study: Carpentry

The **Carpentry** program teaches students how to build and fix things made of wood, like walls, stairs, and roofs. They also learn how to set up or move big machines by following plans or drawings.

CAMPUSES

Wisdom HS

Austin HS

Barbara Jordan HS

INDUSTRY-BASED CERTIFICATIONS OFFERED

- NCCER Core
- NCCER Carpentry Level I
- NCCER Carpentry Level II

CAREER OCCUPATIONS

HIGH SCHOOL DEGREE

Helpers-Pipelayers, Helpers-Plumbers, and Helpers-Pipefitters.
Median Salary: $42,033
Annual Openings: 1,113

Tile and Stone Setters
Median Salary: $42,827
Annual Openings: 267

Carpenters
Median Salary: $51,806
Annual Openings: 4,442

ASSOCIATE'S DEGREE

First-Line Supervisors of Construction Trades and Extraction Workers
Median Wage: $78,262
Openings: 9,193

BACHELOR'S DEGREE

Construction Managers
Median Salary: $99,366
Annual Openings: 1,942

GRADUATE

Architects, Except Landscape and Naval
Median Salary: $94,404
Annual Openings: 650

OTHER OCCUPATIONS

DESCRIPTION	MEDIAN SALARY	ANNUAL OPENINGS	10-YEAR GROWTH
Painters, Construction, and Maintenance	$45,333	2,416	8.9%
Roustabouts, Oil and Gas	$45,333	2,220	10.3%

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HOUSTON INDEPENDENT SCHOOL DISTRICT

ARCHITECTURE AND CONSTRUCTION

HISD Academics

Program of Study: HVAC and Sheet Metal

The **HVAC and Sheet Metal** program teaches students how to put in and fix heating and air conditioning systems. They also learn how to make and repair metal parts like air ducts, drainpipes, and parts of furnaces.

CAMPUSES

Jones HS

Milby HS

North Forest HS

Scarborough HS

Barbara Jordan HS

INDUSTRY-BASED CERTIFICATIONS OFFERED

- NCCER Core
- NCCER Heating, Ventilation, Air Conditioning Level I
- Refrigerant Handling (EPA 608)

CAREER OCCUPATIONS

HIGH SCHOOL DEGREE

Helpers-Pipelayers, Helpers-Plumbers, and Helpers-Pipefitters

Median Salary:	$42,033
Annual Openings:	1,113

Sheet Metal Workers

Median Salary:	$57,453
Annual Openings:	920

ASSOCIATE'S DEGREE

Heating, Air Conditioning, and Refrigeration Mechanics and Installers

Median Salary:	$66,149
Annual Openings:	3,519

OTHER OCCUPATIONS

DESCRIPTION	MEDIAN SALARY	ANNUAL OPENINGS	10-YEAR GROWTH
Electrical and Electronics Drafters	$87,497	316	12.9%

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ARCHITECTURE AND CONSTRUCTION

HISD Academics

Program of Study: Construction Management and Inspection

The **Construction Management and Inspection** program teaches students how to figure out how much a building project will cost. They also learn how to check buildings to make sure they are safe and built the right way by following rules and plans.

CAMPUSES

Barbara Jordan HS

INDUSTRY-BASED CERTIFICATIONS OFFERED

- NCCER Core
- NCCER Carpentry Level I

CAREER OCCUPATIONS

HIGH SCHOOL DEGREE

Construction Laborers
Median Salary: $41,802
Annual Openings: 16,750

Electrical Power-Line Installers and Repairers
Median Salary: $81,435
Annual Openings: 1,126

Septic Tank Servicers and Sewer Pipe Cleaners
Median Salary: $49,894
Annual Openings: 353

GRADUATE

Architects, Except Landscape and Naval
Median Salary: $94,404
Annual Openings: 650

ASSOCIATE'S DEGREE

Solar Thermal Installers and Technicians
Median Salary: $48,048
Annual Openings: 921

Electrical and Electronic Engineering Technologists and Technicians
Median Salary: $72,099
Annual Openings: 825

BACHELOR'S DEGREE

Occupational Health and Safety Specialists
Median Salary: $84,898
Annual Openings: 2,408

Project Management Specialists
Median Salary: $105,532
Annual Openings: 9,003

Construction Managers
Median Salary: $99,366
Annual Openings: 1,942

OTHER OCCUPATIONS

DESCRIPTION	MEDIAN SALARY	ANNUAL OPENINGS	10-YEAR GROWTH
Highway Maintenance Workers	$46,073	972	16.5%
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	$59,648	3,519	17.4%

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ARCHITECTURE AND CONSTRUCTION

HISD Academics

Program of Study: Electrical

The **Electrical** program teaches students how to put in, fix, and take care of wires and electrical equipment, like lights and outlets. They also learn how to work with special cables for phones and the internet, like fiber optics.

CAMPUSES

Barbara Jordan HS

INDUSTRY-BASED CERTIFICATIONS OFFERED

- NCCER Core
- NCCER Electrical Level I
- TRIO Electrical Pre-Apprenticeship (EPP) Certification

CAREER OCCUPATIONS

HIGH SCHOOL DEGREE

Electrical and Electronic Equipment Assemblers
Median Salary: $44,914
Annual Openings: 1,836

ASSOCIATE'S DEGREE

Surveying and Mapping Technicians
Median Salary: $56,386
Annual Openings: 1,325

Electricians
Median Salary: $59,077
Annual Openings: 7,798

BACHELOR'S DEGREE

Civil Engineers
Median Salary: $110,264
Annual Openings: 2,223

Chemical Engineers
Median Salary: $157,663
Annual Openings: 287

Cost Estimators
Median Salary: $74,138
Annual Openings: 493

OTHER OCCUPATIONS

DESCRIPTION	MEDIAN SALARY	ANNUAL OPENINGS	10-YEAR GROWTH
Industrial Engineer	$103,655	483	
Mechanical Engineers	$131,109	1,455	20.8%

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ARCHITECTURE AND CONSTRUCTION

HISD Academics

Program of Study: Plumbing and Pipefitting

The **Plumbing and Pipefitting** program teaches students how to work with pipes. They learn how to put pipes together, fix them, and make sure everything works right in systems that carry water, heat, or steam. This includes things like water for sinks, heating for buildings, and even sprinklers. Students also learn how to take care of the tools and equipment that help these systems work.

CAMPUSES

Barbara Jordan HS

Sam Houston HS

INDUSTRY-BASED CERTIFICATIONS OFFERED

- NCCER Core
- NCCER Plumbing Level I
- NCCER Plumbing Level II
- OSHA-30 Construction (non-CCMR)

CAREER OCCUPATIONS

HIGH SCHOOL DEGREE

Construction Laborers
Median Salary: $41,802
Annual Openings: 16,750

Helpers-Pipelayers, Helpers-Plumbers, and Helpers-Pipefitters.
Median Salary: $42,033
Annual Openings: 1,113

ASSOCIATE'S DEGREE

Plumbers, Pipefitters, and Steamfitters
Median Salary: $60,814
Annual Openings: 4,336

BACHELOR'S DEGREE

Cost Estimators
Median Salary: $74,138
Annual Openings: 493

Construction Managers
Median Salary: $99,366
Annual Openings: 1,942

OTHER OCCUPATIONS

DESCRIPTION	MEDIAN SALARY	ANNUAL OPENINGS	10-YEAR GROWTH
Maintenance and Repair Workers, General	$48,788	14,757	16.7%

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