



## Vocational Skill & Technical Diploma Program (Trade - Welding) - Hybrid Mode Training Module for Welder and Unskilled Workers - 2-Year Diploma Program

### Program Overview:

The 2-year diploma program at V Talk Institute is designed to equip welders and unskilled workers with the technical skills, practical knowledge, and safety standards required to succeed in the welding industry. The program focuses on foundational welding techniques, advanced welding methods, machine operation, and workplace safety, preparing graduates for a career in construction, manufacturing, and metal fabrication industries.

### Program Structure:

Duration: 2 Years                      Modules: 4 Semesters (6 months per semester)

Mode: Classroom Instruction, Practical Lab Sessions, Industry Exposure

Assessment: Written Exams, Practical Tests, Project Work, Internship

#### Year 1: Foundation Year

##### Semester 1: Introduction to Welding & Basic Skills

###### Module 1: Introduction to Welding

- History of Welding
- Types of Welding (Arc, Gas, MIG, TIG)
- Welding Terminology and Tools

###### Module 2: Basic Welding Techniques

- Hands-on practice of Arc Welding
- Basic cutting and shaping of metal
- Introduction to welding symbols and blueprints

###### Module 3: Safety Practices in Welding

- Welding safety guidelines
- Use of PPE (Personal Protective Equipment)
- Fire hazards and first aid

###### Module 4: Introduction to Metallurgy

- Properties of metals
- Basic metallurgy for welders

##### Semester 2: Basic Welding Operations & Workshop Practices

###### Module 5: Welding Equipment and Maintenance

- Identification and use of welding machines
- Maintenance and repair of welding tools

###### Module 6: Basic Cutting and Joining Techniques

- Plasma cutting, Gas cutting techniques
- Welding joints (Butt, Lap, Corner, T-joints)

###### Module 7: Practical Workshop

- Guided workshop practice in welding and cutting
- Individual project: Basic metal structures

###### Module 8: Introduction to Blueprint Reading

- Reading welding blueprints and schematics
- Basic welding symbols and interpretation

Specialised Course: -

Diploma Com App, Digital Marketing, Basic Computer, Tally & Busy, Taxation, Typing & English Spoken.



## **Year 2: Advanced Skills & Industry Integration**

### **Semester 3: Advanced Welding Techniques**

#### **Module 9: MIG/TIG Welding Techniques**

- Advanced MIG and TIG welding processes
- Hands-on practice with stainless steel and aluminum welding

#### **Module 10: Welding for Specialized Applications**

- Pipe welding, structural welding
- Welding in different positions (Flat, Vertical, Overhead)

#### **Module 11: Quality Control in Welding**

- Testing welded joints for strength and durability
- Non-destructive testing methods (NDT)

#### **Module 12: Advanced Workshop Practice**

- Individual projects with advanced welding techniques
- Group projects on large-scale metal fabrication

### **Semester 4: Industrial Training & Career**

#### **Preparation**

#### **Module 13: Industry Exposure and Internship**

- 3-month internship in a relevant industry (construction, manufacturing, automotive)
- Application of learned welding skills in a real-world setting

#### **Module 14: Workplace Safety and Standards**

- Industrial safety regulations
- Hazard assessment and preventive measures

#### **Module 15: Business Skills for Welders**

- Basics of setting up a welding business
- Estimating costs, pricing, and client management

#### **Module 16: Final Project and Certification**

- Capstone project: Fabrication of a complex metal structure
- Written exam, practical test, and project evaluation

### **Program Outcomes:**

By the end of this diploma, students will:

- Be proficient in a variety of welding techniques (Arc, MIG, TIG)
- Have the ability to interpret blueprints and welding symbols
- Be trained in the latest industry standards and safety protocols
- Be ready for entry-level positions in welding industries or start their own businesses

### **Eligibility:**

- Minimum Education: 10th grade or equivalent
- No prior welding experience required

### **Certification:**

Upon successful completion, participants will receive a recognized diploma from V Talk Institute, certifying them as skilled welders ready for the workforce.

Specialised Course: -

Diploma Com App, Digital Marketing, Basic Computer, Tally & Busy, Taxation, Typing & English Spoken.