



# Training Program: Construction Worker Skills Development

Institute of Construction Materials

## Program Overview:

The training program aims to equip participants with essential skills and knowledge in various construction trades, including civil engineering, bricklaying, electrical engineering, plumbing, metal fabrication, welding, and cabinet making. The program will be a blend of theoretical knowledge, practical hands-on training, and real-world applications.

## Program Duration:

36 months (1 year offshore + 2 years onshore in Australia)

## Occupational training to improve skills in an eligible occupation

This program is designed to help candidates improve their skills in at least one of the following eligible occupations:

- Civil Engineer (ANZSCO 233211) or,
- Bricklayer (ANZSCO 331111) or,
- Electrician (ANZSCO 341111) or,
- Plumber (ANZSCO 334111) or,
- Metal fabricator (ANZSCO 322311) or,
- Cabinet maker (ANZSCO 394111) or;

## Training Modules:

Each trainee will be provided with an specific program tailored to their passion and the current level of skill. Trainee's current level of skill is assessed based on the CV provided upon submitting the application. All theoretical modules are available from our website: <https://iconsmat.com.au/courses>

The general training module is as followed:

### 1. Introduction to Construction Industry (Beginner)

- Overview of the construction industry
- Importance of construction safety and regulations

## 2. Basic Mathematics and Measurements (Beginner)

- Mathematics in construction
- Measurement techniques and tools

## 3. Civil Engineering Fundamentals (Intermediate)

- Introduction to civil engineering concepts
- Site preparation and grading
- Foundations and concrete work

## 4. Bricklaying and Masonry (Optional)

- Bricklaying techniques and tools
- Mortar mixing and application
- Masonry structures and patterns

## 5. Electrical Engineering Basics (Optional)

- Electrical circuits and components
- Wiring methods and safety practices
- Introduction to electrical systems in construction

## 6. Plumbing Fundamentals (Optional)

- Plumbing materials and tools
- Pipe installation and repair
- Basic plumbing systems in buildings

## 7. Metal Fabrication and Welding (Optional)

- Introduction to metalworking tools and equipment
- Metal cutting, shaping, and joining techniques
- Welding processes and safety precautions

## 8. Cabinet Making and Woodworking (Optional)

- Wood selection and preparation
- Cabinet design and construction
- Finishing techniques and hardware installation

## 9. Research and development (Advanced)

- Practicing research projects relevant to the field of construction
- Authoring high quality journal papers
- Communicating research outcomes with the industry

## Training Methodology:

- **Online Lectures:** Theory sessions conducted by experienced instructors.
- **Hands-on Workshops:** Practical training sessions for each skill area.
- **Site Visits:** Visits to construction sites for real-world exposure and understanding.
- **Group Projects:** Collaborative projects to encourage teamwork and problem-solving skills.
- **Assessments:** Regular quizzes, assignments, and practical assessments to gauge learning progress.

## Evaluation and Certification:

Participants will be evaluated based on their performance in quizzes, practical assessments, and final projects. Successful completion of the program will lead to a certification acknowledging their proficiency in various construction trades.

## Additional Activities:

- **Guest Lectures:** Inviting industry experts to share insights and experiences.
- **Career Counseling:** Guidance on career opportunities and paths within the construction industry.
- **Soft Skills Training:** Communication, teamwork, and leadership skills development.

## Supervisors, trainers, and assessors

You may refer to the [course catalog](#) to know more about our training staff.

## Note:

- Regular feedback sessions should be conducted to understand the participants' challenges and provide necessary support.
- The program should be adaptive, allowing participants to focus on specific skills based on their interests and strengths.

This comprehensive training program will not only provide participants with a diverse skill set but also prepare them for a successful career in the construction industry.