

## SHIELDED METAL ARC WELDING



Short-Term Embedded Technical Diploma

## 30-442-4

Welding is the most common way of permanently joining metal parts. Heat is applied to the pieces to be joined, melting and fusing them to form a permanent bond. Because of its strength, welding is used to construct and repair parts of ships, automobiles, spacecraft, and thousands of other manufactured products. Welding is used to join beams and steel reinforcing rods when constructing buildings, bridges, and other structures, and also in utilities such as nuclear power plants.

Graduates of the program will gain experience in the Shielded Metal Arc Welding process. They will develop the ability of blueprint reading, sketching, and layout for welding. Major job skills learned will include: Shielded Metal Arc Welding (SMAW)

| Semester 1 |                              | Credits |
|------------|------------------------------|---------|
| 442-141    | Welding Shop Safety          | 1       |
| 442-142    | Introduction to Welding      | 1       |
| 442-153    | Welding Blueprint Reading 1  | 1       |
| 442-143    | Shielded Metal Arc Welding 1 | 1       |
| 442-144    | Shielded Metal Arc Welding 2 | 1       |
| 442-145    | Shielded Metal Arc Welding 3 | 1       |
| 442-146    | Shielded Metal Arc Welding 4 | 1       |
| 442-147    | Shielded Metal Arc Welding 5 | 1       |
| 442-154    | Thermal Cutting              | 1       |
| 442-168    | Welding Blueprint Reading 2  | 1       |
|            | Credits                      | 10      |
|            | Total Credits                | 10      |