-SQA-SCOTTISH QUALIFICATIONS AUTHORITY

Hanover House
24 Douglas Street
GLASGOW G2 7NG

NATIONAL CERTIFICATE MODULE DESCRIPTOR

-Module Number- **0074515** **-Session-1987-88**

-Superclass- **XR**

-Title- **VEHICLE BODY BUILDING: UNDERFRAMES (SPECIALISED VEHICLES) (x $^{1}/_{2}$)**

-DESCRIPTION-

Type and Purpose

A specialist module which develops the knowledge and skills required for the design, construction and mounting of specialised vehicles.

Preferred Entry Level

74506 Vehicle Body Building 2: Commercial Vehicle Underframes

Learning Outcomes

The student should:

1. know the different design requirements of the various body types;
2. relate the principles of underframe design and mounting to specialised body types;
3. apply the appropriate design criteria to specialised body underframes.

Content/ Context

Safety regulations and safe working practices and procedures should be observed at all times.

1. The requirements of a body structure for a specialised body type:

   e.g. demountables I.S.O. containers, skeletal subframes, crew cabs, light weight frameless/bearerless tippers, fire appliances.

2. The effects of the design requirements on the underframe and mounting arrangements.
3. Effective solutions to base frame design exercises.

Suggested Learning and Teaching Approaches

The lecturer should demonstrate the procedure and working methods used to achieve each learning outcome. This should be followed by student practical assignments on scale units if working space is restricted.

Lecturer/demonstrations should relate practical application and theory.

A practical activity should involve the design of a specialised body sub-structure.

Assessment Procedures

Acceptable performance in the module will be satisfactory achievement of the performance criteria specified for each Learning Outcome.

The following abbreviations are used below:

LO Learning Outcome
IA Instrument of Assessment
PC Performance Criteria

LO1 IA Assignment Report.

PC The student identifies the design requirements for three specialised body types.

LO2 IA Assignment report.

PC The student identifies the effects of design requirements in underframe and monitoring arrangements.

LO3 IA Written graphical exercise in which the student produces a design drawing of a specialised body underframe from given data.

PC The student:

(a) applies the appropriate design criteria for the given data;

(b) includes in the drawing:

(i) layout of the underframe;

(ii) details of how the underframe will be mounted onto the chassis

(c) takes account of any legislation which would affect the design.