

GRAPHICAL COMMUNICATION FORM 4

AIM: This course is a continuation of the SEC syllabus started in Form 3 for students who have made this option, with the intention of sitting for the MATSEC exam at the end of Form 5. The syllabus aims to develop the ability to communicate information and ideas using the appropriate graphical method. The option chosen for Paper 2 is Graphical Communications.

The Textbooks are:

Graphical Communication 1 by Stewart Bland

Graphical Communication 2 by Stewart Bland

FIRST TERM

Revision of Form 3 Syllabus.

1. The orthographic Projection in 1st and 3rd angle projection.
2. Sectional views of cut objects.
The use of ribs and webs in casting.
Half Section, Part Section, Revolved Section.
3. Auxiliary views: first view from plan and from a front elevation.
4. Specific loci of a moving part:
cycloid, involute
helix: square spring, square thread, round section spring. spirals

SECOND TERM

6. Pictorial Projections
Harder examples in Isometric Views.
Oblique Views with holes and curved lines on the 45° axis
Planometric Views
Perspective Views; 1 point assumed perspective and 2 point assumed perspective
Construction of static and working modules.
7. Design process and its application.

THIRD TERM

8. True shape of line
9. Development of surfaces, Prisms; triangular, rectangular, square, hexagonal, etc.
Right Pyramids, Cylinder.
Truncated at different angles, developments and true shapes.
10. Introduction to freehand drawing

Assessment scheme:

When	Criteria	Marks
Academic Assessment	Class test	50
Behaviour Assessment		10
Mid-Year Exam	Exam	100
Academic Assessment	Home works, class works	50
Behaviour Assessment		10
Annual Exam	Exam	100
Academic Assessment	Home works, class works	50
Behaviour Assessment		10