CIVIL ENGINEERING 2025/26 COURSE OUTLINE 100LVL FIRST SEMESTER

GNS 111 – COMMUNICATION IN ENGLISH, USE OF LIBRARY & ICT:

1. Use of Library and Information Sources
2. Sound Patterns in English Language
3. Morphemes and the Words of English
4. Word Classes in English and the Dictionary
5. Grammar and Usage
6. The Writing Process
7. Mechanics of Writing
8. Types of Writing
9. Reading Comprehension Strategies
10. The Art of Public Speaking and Listening
11. Copyright Laws, Citation Patterns, and Plagiarism Detection Tools
12. The Internet
13. Overview of Computer-Based Training (CBT) and Computer Accessories

CHM 101 – GENERAL CHEMISTRY I

1. Atomic and Molecular Structure of Matter
2. Periodicity and Electronic Configuration
3. Chemical Equations and Stoichiometry
4. Chemical Bonding and hybridization
5. Chemical Reactions
6. Chemical Kinetics and Equilibrium
7. Kinetic Theory Of Gases
8. Electrochemistry (Electrolysis)
9. Thermochemistry (Energy Changes)
10. Oxidation and Reduction
11. Simple Inorganic Practicals
12. Nuclear Chemistry and Radioactivity

PHY 101 – GENERAL PHYSICS I

1. Units and Dimensions
2. Vectors and Scalers Quantities
3. Kinematics
4. Dynamics
5. Circular Motion
6. Work, Energy and Power
7. Equilibrium of Rigid Bodies
8. Simple Harmonic Motion
9. Elasticity
10. Fluid Mechanics
11. Gravitational Field

MAT 101 – ELEMENTARY MATHEMATICS (ALGEBRA & TRIGONOMETRY)

1. Elementary Set Theory
2. Real Number System
3. Mathematics Induction
4. Functions
5. Polynomials
6. Binomial Theorem
7. Theory of Quadratic Equations
8. Inequalities
9. Sequence and Series
10. Trigonometry
11. Complex Numbers
12. Indices, Logarithms and Surd
13. Matrices and Determinants

MAT 161 – INTRODUCTORY STATISTICS I (DESCRIPTIVE STATISTICS)

1. The Meaning of Statistics
2. Graphical Representation of Data
3. Measure of Central Tendency
4. Measure of Dispersion
5. Measure of Skewness and Kurtosis
6. Correlation
7. Linear Regression

MEE 101 – ENGINEER IN SOCIETY

1. Introduction to Engineering
2. Engineering Profession and Cadres
3. Engineering Regulation in Nigeria
4. Engineering Professional Bodies
5. Engineering Functions and Branches
6. Engineering Skill and Competencies
7. Engineering Ethics and Code of Conduct
8. Engineering and Society

MEE 105 – ENGINEERING GRAPHICS

1. Introduction to Graphic Language
2. Geometrical Construction
3. Principle of tangency
4. Loci
5. Orthographic Projection
6. Projection of Points and Straight Lines
7. Projection of Planes
8. Projection of Solids
9. Section of Solids
10. Isometric Projections
11. Oblique Projections

CSC 101 – INTRODUCTION TO COMPUTER

1. Introduction to Computer and History of Computing
2. Basic Computer Configuration
3. Computer Hardware
4. Computer Software
5. Operating Systems
6. Application Packages and Their Uses
7. Program Development Tools (Algorithms and Flowcharts)
8. Introduction to Programming (BASIC / Visual Basic Fundamental)

CHM 107 - GENERAL CHEMISTRY PRACTICAL I

• Experiments arising from the theory courses of CHM 101

PHY 107 - GENERAL PHYSICS PRACTICAL I

• Experiments arising from the theory courses of Phy 101

STUDY TIME TABLE

Day	**Course(s)**
Monday	CHM 101 — General Chemistry I CHM 107 — General Chemistry Practical I
Tuesday	PHY 101 — General Physics I PHY 107 — General Physics Practical I
Wednesday	MAT 101 — Elementary Mathematics (Algebra & Trigonometry) CSC 101 — Introduction to Computer
Thursday	MAT 161 — Introduction to Statistics (Descriptive Statistics) MEE 101 — Engineer in Society
Friday	GNS 111 — Communication in English, Use of Library & ICT MEE 105 — Engineering Graphics

Introduction to Graphic Language

Geometrical Construction

Principle of tangency

Orthographic Projection

Projection of Points and Straight Lines

Projection of Planes

Projection of Solids

Section of Solids

Isometric Projections

Oblique Projections