

## **100 Level – Civil Engineering**

### **First Semester**

- GST 111: Communication in English (2, C)
- MTH 101: Elementary Mathematics I: Algebra and Trigonometry (2, C)
- PHY 101: General Physics I: Mechanics (2, C)
- PHY 107: General Practical Physics I (1, C)
- CHM 107: General Practical Chemistry I (1, C)
- CHM 101: General Chemistry I (2, C)
- BUT-CPE 103: Introduction to Computer Programming (2, C)
- BUT-MTH 103: General Mathematics III (2, C)
- BUT-STA 112: Probability I (2, C)
- BUT-GST 107: Use of Library (1, C)
- BUT-ICT 115: AutoCAD 2D (1, C)

**Total Units: 18**

### **Second Semester**

- GST 112: Nigerian Peoples and Culture (2, C)
- MTH 102: Elementary Mathematics II: Calculus (2, C)
- PHY 102: General Physics II: Behaviour of Matter (2, C)
- PHY 108: General Practical Physics II (1, C)
- GET 102: Engineering Graphics and Solid Modelling I (2, C)
- CEE 101: Introduction to Civil Engineering (1, C)
- GET 101: Engineer in Society (1, C)
- CHM 102: General Chemistry II (2, C)
- CHM 108: General Practical Chemistry II (1, C)
- BUT-PHY 104: General Physics IV (2, C)

- BUT-ICT 116: AutoCAD 3D (1, C)

**Total Units: 18**

## **200 Level – Civil Engineering**

### **First Semester**

- ENT 211: Entrepreneurship and Innovation (2, C)
  - GET 201: Applied Electricity I (3, C)
  - GET 203: Engineering Graphics & Solid Modelling II (2, C)
  - GET 205: Fundamentals of Fluid Mechanics (3, C)
  - GET 209: Engineering Mathematics I (3, C)
  - GET 211: Computing and Software Engineering (2, C)
  - GET 207: Applied Mechanics (2, C)
  - BUT-ICT 215: Robotics I (0, C)
  - BUT-GST 207: Life and Works of Olusegun Obasanjo I (0, C)
- Total Units: 18**

### **Second Semester**

- GST 212: Philosophy, Logic and Human Existence (2, C)
  - GET 202: Engineering Materials (3, C)
  - GET 204: Students Workshop Practice (2, C)
  - GET 206: Fundamentals of Thermodynamics (3, C)
  - GET 210: Engineering Mathematics II (3, C)
  - BUT-MCT 204: Industrial Health & Safety (1, R)
  - BUT-GET 208: Strength of Materials (2, C)
  - BUT-ICT 217: Robotics 2 (0, C)
  - BUT-GST 208: Life and Works of Olusegun Obasanjo II (0, C)
- Total Units: 17**

## **300 Level – Civil Engineering**

### **First Semester**

- CVE 301: Structural Mechanics I (2, C)
- CVE 303: Elements of Architecture (2, C)
- CVE 305: Fluid Mechanics I (2, C)
- CVE 307: Civil Engineering Materials (2, C)
- CVE 309: Engineering Surveying I (2, C)
- CVE 311: Engineering Geology (2, C)
- ENG 301: Engineering Mathematics III (3, C)
- CVE 313: Civil Engineering Practice (2, C)
- CVE 315: Laboratory Work I (2, C)
- ICT 323: Python Programming (1, C)
- BUS 311: Analysis Introduction to Entrepreneurial Studies (2, R)

**Total Units: 22**

### **Second Semester**

- CVE 302: Structural Mechanics II (2, C)
- CVE 304: Fluid Mechanics II (2, C)
- CVE 306: Soil Mechanics I (2, C)
- CVE 308: Design of Structures I (2, C)
- CVE 310: Engineering Surveying II (2, C)
- CVE 312: Elements of Highway Engineering (2, C)
- ENG 302: Engineering Mathematics IV (3, C)
- CVE 314: Laboratory Work II (2, C)
- GES 302: Introduction to Philosophy (2, R)
- ENG 320: Students Industrial Work Experience Scheme I (SIWES I) (2, C)

- ICT 324: Python Programming for Machine Learning I (1, C)

**Total Units: 22**

## **400 Level – Civil Engineering**

### **First Semester**

- CVE 401: Structural Analysis I (2, C)
- CVE 403: Soil Mechanics II (2, C)
- CVE 405: Hydrology & Hydraulics (2, C)
- CVE 407: Design of Structures II (2, C)
- CVE 409: Highway Engineering (2, C)
- ENG 401: Research Methods in Engineering (2, C)
- CVE 411: Water Resources Engineering (2, C)
- CVE 413: Laboratory Work III (2, C)
- CVE 415: Technical Report Writing (2, C)
- ICT 423: Python Programming for Machine Learning 2 (Deep Learning) (1, C)
- BUS 411: Entrepreneurial Skills Development Studies (2, R)

**Total Units: 21**

### **Second Semester**

- ENG 402: Students Industrial Work Experience (SIWES II) (6, C)

**Total Units: 6**

## **500 Level – Civil Engineering**

### **First Semester**

- CVE 501: Structural Analysis II (2, C)
- CVE 503: Geotechnical Engineering (2, C)

- CVE 505: Water & Wastewater Engineering (2, C)
- CVE 507: Design of Structures III (2, C)
- CVE 509: Transportation Engineering (2, C)
- CVE 511: Construction Engineering (2, C)
- ENG 501: Engineering Economics (2, R)
- MEE 527: Engineering Management (2, R)
- MEE 523: Operations Research (2, R)
- ISO 45001: Foundation and Lead Implementer (Occupational Health and Safety Management System) (1, C)
- ICT 515: ICT 515 Foundation and Lead Implementer (Occupational Health and Safety Management System) (1, C)
- Electives: 2 units (see below)

**Total Units: 20**

**Electives (Choose a minimum of 2 units):**

- CVE 513: Advanced Structural Design (2, E)
- CVE 515: Irrigation & Drainage Engineering (2, E)
- CVE 517: Traffic Engineering (2, E)
- CVE 519: Advanced Geotechnical Engineering (2, E)

**Second Semester**

- CVE 502: Foundation Engineering (2, C)
- CVE 504: Environmental Engineering (2, C)
- CVE 506: Design of Structures IV (2, C)
- CVE 508: Students' Research Project (6, C)
- EEE 512: Engineering Law (2, R)
- ICT 516: Design Thinking (1, C)

- Electives: 4 units (see below)

**Total Units: 19**

**Electives (Choose a minimum of 4 units):**

- CVE 510: Bridge Engineering (2, E)
- CVE 512: Coastal Engineering (2, E)
- CVE 514: Advanced Transportation Engineering (2, E)
- CVE 516: Solid Waste Management (2, E)
- BUS 520/MKT 202: Elements of Marketing (2, E)

**Notes:**

- **Status Definitions:**
  - **C:** Compulsory (must register and pass).
  - **R:** Required (must take, pass with at least 30% as per departmental rules).
  - **E:** Elective (optional, choose the specified minimum units).