

**FIELD : CIVIL ENGINEERING**

**SPECIALTY : CIVIL ENGINEERING TECHNOLOGY**

**1. OBJECTIVES OF TRAINING**

The Higher National Diploma Programme in Civil Engineering Technology is aimed at producing technologists with a good mastery of engineering knowledge and skill in executing civil engineering works.

**2. EXPECTED SKILLS**

**❖ Generic Skills**

- Work independently, collaborate as a team;
- Analysis and synthesis of professional documents (French, English);
- Oral, written and corporate communication skills within and without (French, English);
- Participate /engage in the management of the project;
- Know and make use of professional networks and institutions of the real estate maintenance sectors;
- Maintain comprehensive records of work-in-progress for the parties concerned;
- Carry out engineering surveys;
- Carry out supervision and prepare progress reports on Civil Engineering works.

**❖ Specific Skills**

- Design simple structural elements and prepare detailed drawings of such elements with minimum supervision;
- Carry out accurate interpretation of technical data related to Civil Engineering works;
- Test, analyse and interpret the result of materials tested for Civil Engineering works;
- Design simple transportation schemes and prepare working drawings for their construction;
- Supervise civil engineering construction works;
- Design simple water and waste water schemes and distribution networks;
- Prepare Bill of Engineering Measurements and Evaluation (BEME) and specifications for Civil Engineering works;
- Operate and maintain water works, waste water and solid waste installation and irrigation projects;
- Carry out environmental engineering and pollution control studies.

**3. CAREER OPPORTUNITIES**

- Site manager ;
- Work leader ;
- Drafting designer of public works structures ;
- Price manager ;
- In charge of general affairs.

#### 4. PROGRAM DURATION

For a period of two years, a set of theoretical and practical courses is administered to students with a view to obtaining a Higher National Diploma (NHD) sanctioned by MINESUP.

#### 5. CONDITION FOR ADMISSION

##### Direct registration on file study :

- A hand written application addressed to the Director of SOUTH POLYTECH ;
- A complete registration form available on campus ;
- A photocopy of birth certificate ;
- A photocopy of A/L certificate ;
- Registration fees : 35,000 FCFA ;
- File study fees : free of charge ;
- Annual medical coverage : 5000 F CFA.

#### 6. PEDAGOGICAL APPROACH

- Lectures ;
- Practical work and personal work ;
- Immersion courses in the professions accompanied by a teaching body and company executives.

#### 7. EVALUATION TECHNIQUES

- Continuous monitoring for each lecture ;
- An exam session (oral or written) at the end of each semester organised according to the subjects registered for the semester ;
- Writing of an internship report defended in front of a jury at the end of the cycle ;
- National HND exam.

#### 8. ORGANISATION OF THE TEACHINGS

##### FIRST SEMESTER

Code	Course titles	Number of credits
CET111	Mathematics I	5
CET112	Physics and chemistry I	4
CET113	Engineering Survey / Soil Mechanics	5
CET114	Hydraulics / Concrete Technology	5
CET115	Theory of Structures	4
CET116	Civil Engineering Quantities & Specifications	4
CET117	Bilingual Training	3
Total		30

## SECOND SEMESTER

Code	Course titles	Number of credits
<b>CET121</b>	Mathematics II	4
<b>CET122</b>	Computer Science I	5
<b>CET123</b>	Hydrology And Hydrogeology	5
<b>CET124</b>	Design of Structural Elements	5
<b>CET125</b>	Construction Technology	4
<b>CET126</b>	Industrial Management/ Engineering materials	4
<b>CET127</b>	Creation of company, Civic and Moral Education	3
<b>Total</b>		<b>30</b>

## THIRD SEMESTER

Code	Course titles	Number of credits
<b>CET 231</b>	Mathematics III	4
<b>CET 232</b>	Physics and Chemistry II	5
<b>CET 233</b>	Foundation Design / Hydraulic Structures	5
<b>CET 234</b>	Design of Structural Steel & Timber	4
<b>CET 235</b>	Traffic Engineering / Highway Engineering	5
<b>CET 236</b>	Environmental Engineering and Pollution Control	4
<b>CET237</b>	Methodology of drafting Internship report/LAW	3
<b>Total</b>		<b>30</b>

## FOURTH SEMESTER

Code	Course titles	Number of credits
<b>CET241</b>	Statistics	5
<b>CET242</b>	Computer science II	4
<b>CET243</b>	Geotechnical Engineering	5
<b>CET244</b>	Infrastructure Planning & Management	3
<b>CET245</b>	Irrigation and Drainage	4
<b>CET246</b>	Internship	6
<b>CET247</b>	Accounting and Economics	3
<b>Total</b>		<b>30</b>