***University Mohamed BOUDIAF- M’sila***

***Faculty of Technology***

***Course: Technical English***

**Introduction to Engineering**

**What is engineering?**

A branch of science and technology concerned with the design, building, and use of engines, machines, and structures.

هو فرع العلوم والتكنولوجيا يهتم بتصميم وبناء واستخدام المحركات والآلات والهياكل.

**Branches of engineering**

* Chemical engineering هندسة كيميائية  
  Civil engineering هندسة مدنية
* Electrical engineering الهندسة الكهربائية
* Electronic engineering الهندسة الإلكترونية
* Highway engineering هندسة الطرق السريعة
* Hydraulic engineering الهندسة الهيدروليكية
* Industrial engineering هندسة صناعية
* Mechanical engineering الهندسة الميكانيكية
* Mining engineering هندسة التعدين
* Petroleum production engineering هندسة إنتاج البترول
* Production engineering هندسة الإنتاج
* Structural engineering هندسة هيكلية

**Equipment in engineering: some of them**

* Boiler سخان مياه
* Crane رافعه
* Gas engine محرك الغاز
* Machine tool أداة آلية
* Pump مضخة
* Turbine التوربينات محرك يعمل بقوة البخار او الماء او الغاز

**Exercise 01:** Here is an extract from a speech made by a careers advisor to a group of students choosing their future courses of study at university. Complete the speech by choosing one of the words from the box.

Machines – highway – mechanical - chemical – civil – physics – electrical - develop- production – electronic.

Engineering students should have an understanding of maths, (a)------------- and chemistry. Working with pharmaceuticals, food, mineral processing and chemical manufacturing, a (b)\_\_\_\_\_\_\_\_\_ engineer is trained to understand, design, control, and investigate material flows. If you enjoy problem solving and find projects such as the Channel Tunnel and the Three Gorges Dam interesting, (c) ------------ engineering may be for you. You will produce creative designs at an economical price white paying due concern to the environment. If your interest is in road building then you may decide to follow a specialized course in (d) ------------ engineering. By studying (e) -----------and (f) -------------- engineering you learn about the design of complete systems, such as computers, controllers, power and transport systems.(g) ---------------- engineers plan, design and (h) ----------------a wide range of things: washing machines, cars and spacecraft.(i) –-------------------engineers work very closely with mechanical engineers, to make new products at the right price, on time and in the correct quantity. As well as designing and selecting (j) ---------------------and materials, they also organize people and finance.