

**Department of Chemical Engineering** 

# TO WHOM IT MAY CONCERN

## PRESCRIBED PERSONAL LAPTOPS/TABLETS/SMART PHONES AND POCKET CALCULATORS

The Department of Chemical Engineering prescribes access to a laptop computer as a requirement for all students from the 2<sup>nd</sup> semester of the first year.

Since access to and use of smart phones, tablets, e-readers and laptop computers are becoming standard practice, it will be appreciated if you could consider helping your bursar(s) in the acquisition of their own device(s). At minimum the Department expects a student to have his/her own laptop computer, since this will enable access to e-books, internet, UP-based repositories, prescribed software, etc. Tablets and smart phones are great but are not very useful for projects and assignments. Typing on them is difficult and few of them can be used to run the software needed for engineering education.

## Laptop:

- Preferably a 15.6" Laptop Computer with at least an Intel i5 CPU (i7 preferred)
- 802.11a/b/g/n -enabled (preferably a/b/g/n/ac) WLAN and Gbit LAN
- At least 8 GB RAM Memory (>8 GB RAM preferred)

Faculty of Engineering, Built Environment and Information Technology Fakultet Ingenieurswese, Bou-omgewing en Inligtingtegnologie / Lefapha la Boetšenere, Tikologo ya Kago le Theknolotsi ya Tshedimoš

- Disk Drive > 500 GB HDD or 512 GB SSD (preferred)
- Display resolution of 1440 x 900 or above (with VGA/HDMI video out)
- Sufficient USB ports, e.g. 3 or 4 (USB 3.0 preferred)
- DVD Multi Writer (but not essential)
- Separate mouse preferred
- Carry bag
- >= 32 GB USB Memory Stick
- Printer (Laser preferred)

## Software:

- Please note that the Windows 10 operating system is current.

- Word processing, Spreadsheet & Presentation combination (e.g. MS Office or Office 365, or Office 2019. These can be downloaded for free using your student email address.)

## Pocket calculator:

For some modules of the first year, the only prescribed pocket calculator is a non-programmable calculator like the **Casio** fx-991es PLUS or fx-570es PLUS or the newer fx-991ex or fx-570ex or **SHARP** EL-W516 for use in tests and exams where programmable devices are not allowed.

With a good laptop and the advent of smart phones and tablets, a recommendation regarding programmable pocket calculators is difficult. It is recommended that students follow market trends and

Room 8-20, Engineering I Building University of Pretoria, Private Bag X20 Hatfield 0028, South Africa Tel +27 (0)12 420 2475 Fax +27 (0)12 420 5048 Email michael.daramola@up.ac.za www.up.ac.za/chemeng Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie Departement Chemiese Ingenieurswese Lefapha la Boetšenere, Tikologo ya Kago le Theknolotši ya Tshedimošo Kgoro ya Boentšenere bja Dikhemikhale only purchase programmable pocket calculators and the like, once they are sure they know what they need.

Your assistance is highly appreciated.

Yours sincerely,

Marcadola

PROF MO DARAMOLA **PROFESSOR & HEAD:** DEPARTMENT OF CHEMICAL ENGINEERING

> Faculty of Engineering, Built Environment and Information Technology Department of Chemical Engineering Fakulteit Ingenieurswese, Bou-omgewing en Inligtingtegnologie Departement Chemiese Ingenieurswese Lefapha la Boetšenere, Tikologo ya Kago le Theknolotši ya Tshedimošo Kgoro ya Boentšenere bja Dikhemikhale