Program Changes
Software Engineering

Department of Systems and Computer Engineering,
Carleton University, Canada
Why Are We Here?

- Substantial changes to the Software Engineering program have been approved by the University Senate.
- These changes affect the courses you are to take for your degree.
Why is the Program Changing?

• The “computer hardware” component of your program has not been updated for many years.
• The existing program has limited coverage of network and software security, an area that is of growing importance to software engineering.
• The current list of approved engineering electives is very limited.
Computer Hardware

- The following courses are being removed from the program:
  - SYSC 2001 – Computer Systems Foundations
  - SYSC 2003 – Introductory Real-Time Systems
  - SYSC 4507 – Computer Systems Architecture
  - ELEC 2607 – Digital Switching Circuits

- They are being replaced by three new courses:
  - SYSC 2310 – Introduction to Digital Systems
  - SYSC 2320 – Introduction to Computer Organization and Architecture
  - SYSC 3310 – Introduction to Real-Time Systems
Network & Software Security

• New course: SYSC 4810 – Introduction to Network and Software Security
  ▪ With society’s ever-increasing reliance on computing and telecommunication comes the need to ensure that our information technology is protected against unwanted intrusion and disruption. This course will give engineering students exposure to some of the key issues involving network and software security.
Electives

- The old list of permitted electives is short.
- Students in third year have trouble finding an elective that they have the prerequisites for and fit their timetable.
- Two additional courses are now acceptable electives:
  - ECOR 2606 – Numerical Methods
  - SYSC 3501 – Communication Theory
What Do You Need To Do?

• You need to decide whether you want to change to the new program or remain in the old program.

• All students need to inform the department of their choice, either by signing the appropriate signup sheet or by sending an email to ugadmin@sce.carleton.ca.
Reasons to Change to the New Program

- Exposure to modern technologies
- Greater flexibility in course selection
Reasons to Remain in the Old Program

• You’ve already completed ELEC 2607, SYSC 2001 and SYSC 2003
  ▪ These courses will not count towards your degree if you change programs

• You’re more interested in the history of computer architecture, not the future.

• If you started in Fall 2015 or earlier, you may be able to graduate earlier if you remain on the old program. Seek advice!
Warning

• If you choose to remain on the old program you should be aware that SYSC 2001 and SYSC 2003 are being phased out
  - SYSC 2001 – Last offered in Fall 2017
  - SYSC 2003 – Last offered in Winter 2018

• If you don’t complete SYSC 2003 in Winter 2018, you will have to change to the new program, and your graduation will be delayed.
More Information

• Undergraduate Support Website
  ughelp.sce.carleton.ca

• Ask us!