

CEM IAB: New CSE Programme

Kerstin Eder

Design Automation and Verification

Computer Science and Electronics

- Programme Title:
 - BEng Computer Science and Electronics (**H626**)
 - MEng Computer Science and Electronics (**H622**)
 - MEng Computer Science and Electronics with Study Abroad (H624)
- Undergraduate Joint Subject between CS and EEE
- Running from 2008/9
- Revised Programme Structure
 - common core in 1st and 2nd year
 - **Microelectronics** and **Communications** streams in 3rd and 4th year
 - more flexibility for students and for curriculum review

1st Year Programme

Unit Code	CP	Unit Title	H626	H622
COMS11300	10	Procedural Programming	co	co
COMS11600	10	Principles of Programming	c	c
COMS11700	10	Theory of Computation	c	c
COMS11800	10	Programming Project	co	co
COMS12400	10	Object Oriented and Functional Programming	c	c
EENG11002	10	Linear Circuits and EA1	c	c
EENG14000	20	Digital Circuits and Systems	c	c
EENG16000	10	Electronics 1	c	c
EMAT10004	20	Mathematics with Maple 1	co	co
EMAT10100	20	Engineering Mathematics 1	co	co
EMAT10704	20	Discrete Mathematics	c	c

2nd Year Programme

Unit Code	CP	Unit Title	H626	H622
COMS22101	20	Concurrency and Communications	c	c
COMS22201	20	Language Engineering	c	c
COMS21202	20	Signals, Patterns and Symbols	c	c
EENG23000	10	Control 2	c	c
EENG34040	10	Computer Architecture	c	c
EENG20400	10	Digital Systems Design	c	c
EENG21000	10	Signals and Systems	c	c
EENG28010	10	CAD Group Project	c	c
EFAC20001	10	Professional Studies A	c	c

3rd Year Programme

Unit Code	CP	Unit Title	H626	H622
COMS34110	40	CSE BEng Project	c	-
COMS34400	40	CSE MEng Group Project	-	c
EFAC30002	10	Prof Stud B	c	c
Microelectronics				
EENG34030	10	Embedded and Real-Time Systems	o	o
EENG34200	10	Networks and Protocols 3	o	o
COMS30121	10	Image Processing	o	o
COMS30201	10	System Integration	o	o
COMS30125	10	Fault Tolerant Computer Design	o	o
EENG34050	10	VLSI Design 3	o	o
EENG36000	10	Electronics 3	o	o
Communications:				
EENG34030	10	Embedded and Real-Time Systems	o	o
EENG34200	10	Networks and Protocols 3	o	o
COMS30121	10	Image Processing	o	o
COMS30201	10	System Integration	o	o
COMS30124	10	Introduction to Cryptography	o	o
EENG22000	10	Communication Systems 2	o	o
EENG31400	10	Digital Filters and Spectral Analysis 3	o	o

4th Year Programme

Unit Code	CP	Unit Title	H622
COMSM4110	40	CSE MEng Project	c
Microelectronics:			
COMSM0106	10	Mobile and Ubiquitous Computing	o
COMSM0109	10	Advanced Computer Architecture	o
COMSM0213	10	Information Security	o
COMSM0115	10	Design Verification	o
EENGM6011	10	Integrated Circuit Electronics	o
EENGM1411	10	Speech and Audio Processing	o
EENGM4031	10	Embedded and Real-Time Systems – Advanced	o
EENGM4230	10	Device Interconnect - Principles and Practice	o
Communications:			
COMSM0106	10	Mobile and Ubiquitous Computing	o
COMSM0109	10	Advanced Computer Architecture	o
COMSM0213	10	Information Security	o
COMSM2004	10	Advanced Cryptography	o
EENG32000	10	Communication Systems 3	o
EENGM2401	10	Advanced Digital Communications	o
EENGM4021	10	Image and Video Coding	o
EENGM4221	10	Broadband Wireless Communications	o