

COURSE CURRICULUM

PROGRAMME **B.ENG (ELECTRICAL & ELECTRONIC ENGINEERING) PROGRAMME (FULL TIME)**
STUDENT TYPE **CN YANG SCHOLARS / AY2010-2011**

AU REQUIREMENT TABLE

COURSE TYPE	INON	ECAL / ENIC
	AU REQUIREMENT	AU REQUIREMENT
CORE COURSES	110	107
MAJOR PRESCRIBED ELECTIVES	28	31
GER-PE - AHSS	9	9
GER-PE - BM	3	3
GER-PE - STS	3	3
UNRESTRICTED ELECTIVES	10	10
TOTAL	163	163

RECOMMENDED COURSE DISTRIBUTION

COURSE CODE AND TITLE	TYPE	NO. OF HOURS PER WEEK				AU	PRE-REQUISITE / PARALLEL COURSE*		
		LEC	TUT	LAB	TOTAL				
YEAR 1 SEMESTER 1									
BS101A	INTRODUCTORY BIOLOGY	C	3	1	0	4	4	FE1004*	
CHEM1	PRINCIPLES OF MODERN CHEMISTRY	C	3	1	0	4	4	FE1003*	
MATH1A	CALCULUS OF ONE VARIABLE	C	3	1	0	4	4	FE1006*	
PHYS1A	MECHANICS	C	3	1	0	4	4	FE1001*	
HW110	EFFECTIVE COMMUNICATION	C	0	2	0	2	2		
	PRESCRIBED ELECTIVE (SEE NOTE 1)	P	0	0	6	6	3	FE1071*	
							TOTAL	21	
YEAR 1 SEMESTER 2									
MATH1B	CALCULUS OF SEVERAL VARIABLES	C	3	1	0	4	4	FE1007*	
PHYS1B	ELECTROMAGNETISM AND RELATIVITY	C	3	1	0	4	4	FE1002*	
FE1005	MATERIALS SCIENCE	C	2	1	0	3	3		
FE1008	COMPUTING	C	2	1	-	3	3		
CNYPR	CN YANG SCHOLARS PROGRAMME UNDERGRADUATE RESEARCH EXPERIENCE	P	0	0	9	9	3	FE1072*	
							TOTAL	17	
NOTE 1 (CHOOSE ONLY 1 COURSE)									
CHEM2A	FUNDAMENTAL TECHNIQUES OF EXPERIMENTAL CHEMISTRY AND BIOLOGICAL CHEMISTRY	P	0	0	9	9	3		
PHYS1P	PHYSICS LABORATORY I	P	0	0	6	6	3	Physics at A or H2 Level or by approval	
YEAR 2 SEMESTER 1									
MATH1C	LINEAR ALGEBRA & DIFFERENTIAL EQUATIONS	C	2	2	-	4	4	EE2007*	
PHYS1C	WAVES AND QUANTUM MECHANICS	G	3	1	-	4	4	GER-UE 1	
EE2001	CIRCUIT ANALYSIS	C	2	1	-	3	3		
EE2004	DIGITAL ELECTRONICS	C	2	1	-	3	3		
EE2006	ENGINEERING MATHEMATICS I	C	3	1	-	4	4		
EE2071	LABORATORY 2A	C	-	-	3	3	1		
HW210	TECHNICAL COMMUNICATION	C	-	2	-	2	2		
	GER-PRESCRIBED ELECTIVE 1	P	2	1	-	3	3		
							TOTAL	24	

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		LEC	TUT	LAB	TOTAL				
YEAR 2 SEMESTER 2									
EE2002	ANALOG ELECTRONICS	C	2	1	-	3	3		
EE2003	SEMICONDUCTOR FUNDAMENTALS	C	2	1	-	3	3		
EE2005	AC CIRCUITS & MACHINES	C	2	1	-	3	3		
EE2008	DATA STRUCTURES & ALGORITHMS	C	2	1	-	3	3		
EE2010	SIGNALS & SYSTEMS	C	2	1	-	3	3		
EE2072	LABORATORY 2B	C	-	-	3	3	1		
EE2079	DESIGN AND INNOVATION PROJECT	C	0	0	40	40	3		
	GER-PREScribed ELECTIVE 2	P	2	1	-	3	3		
	GER-UNRESTRICTED ELECTIVE 2	G	2	1	-	3	3		
TOTAL							25		
YEAR 3 SEMESTER 1									
EE3001	ENGINEERING ELECTROMAGNETICS	C	2	1	-	3	3	EE2007^	
EE3002	MICROPROCESSORS	C	2	1	-	3	3		
EE3003	INTEGRATED ELECTRONICS	C	2	1	-	3	3	EE2002	
EE3071	LABORATORY 3	C	-	-	3	3	1		
EE3072	PROJECT	C	-	-	3	3	1		
EE3xxx	ELECTIVE 1	P	2	1	-	3	3	REFER TO YEAR 3 ELECTIVE SYLLABUS	
EE3xxx	ELECTIVE 2	P	2	1	-	3	3		
	GER-PREScribed ELECTIVE 3	P	2	1	-	3	3		
	GER-PREScribed ELECTIVE 4	P	2	1	-	3	3		
TOTAL							23		
YEAR 3 SEMESTER 2									
EE3079	INDUSTRIAL ATTACHMENT	(24 WKS, FT)	C	-	-	40	40	10	YEAR 3 STANDING *
OPTION GROUPS: ELECTRICAL & SYSTEMS ENGINEERING [ECAL] ; ELECTRONIC ENGINEERING [ENIC]									
YEAR 4 SEMESTER 1									
EE4041	HUMAN RESOURCE MANAGEMENT	C	2	1	-	3	3		
EE4079	FINAL YEAR PROJECT	C	-	-	8	8	#	YEAR 4 STANDING	
HW310	PROFESSIONAL COMMUNICATION	C	1	1	-	2	2	HW110	
EE4xxx	DESIGN ELECTIVE 1	P	1	-	2	3	2	REFER TO FINAL YEAR OPTION SYLLABUS	
EE4xxx	TECHNICAL ELECTIVE 1	P	2	1	-	3	3		
EE4xxx	TECHNICAL ELECTIVE 2	P	2	1	-	3	3		
	GER-PREScribed ELECTIVE 5	P	2	1	-	3	3		
TOTAL							16		
YEAR 4 SEMESTER 2									
EE4040	ENGINEERS & SOCIETY	C	2	1	-	3	3		
EE4079	FINAL YEAR PROJECT	C	-	-	8	8	#	YEAR 4 STANDING	
EE4xxx	DESIGN ELECTIVE 2	P	1	-	2	3	2	REFER TO FINAL YEAR OPTION SYLLABUS	
EE4xxx	TECHNICAL ELECTIVE 3	P	2	1	-	3	3		
EE4xxx	TECHNICAL ELECTIVE 4	P	2	1	-	3	3		
EE4xxx	TECHNICAL ELECTIVE 5	P	2	1	-	3	3		
	GER-UNRESTRICTED ELECTIVE 3	G	2	1	-	3	3		
TOTAL							17		

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		LEC	TUT	LAB	TOTAL			
OPTION GROUP: INFOCOMMUNICATION ENGINEERING [INON]								
YEAR 4 SEMESTER 1								
EE4001	SOFTWARE ENGINEERING	C	2	1	-	3	3	
EE4041	HUMAN RESOURCE MANAGEMENT	C	2	1	-	3	3	
EE4079	FINAL YEAR PROJECT	C	-	-	8	8	#	YEAR 4 STANDING
HW310	PROFESSIONAL COMMUNICATION	C	1	1	-	2	2	HW110
EE4xxx	DESIGN ELECTIVE 1	P	1	-	2	3	2	REFER TO SYLLABUS
EE4xxx	TECHNICAL ELECTIVE 1	P	2	1	-	3	3	
	GER-PREScribed ELECTIVE 5	P	2	1	-	3	3	
TOTAL							16	
YEAR 4 SEMESTER 2								
EE4040	ENGINEERS & SOCIETY	C	2	1	-	3	3	
EE4079	FINAL YEAR PROJECT	C	-	-	8	8	#	YEAR 4 STANDING
EE4xxx	DESIGN ELECTIVE 2	P	1	-	2	3	2	REFER TO SYLLABUS
EE4xxx	TECHNICAL ELECTIVE 2	P	2	1	-	3	3	
EE4xxx	TECHNICAL ELECTIVE 3	P	2	1	-	3	3	
EE4xxx	TECHNICAL ELECTIVE 4	P	2	1	-	3	3	
	GER-UNRESTRICTED ELECTIVE 3	G	2	1	-	3	3	
TOTAL							17	

Final Year Project is 10 AU, and is spread over 2 semesters.