

B.ENG (ELECTRICAL & ELECTRONIC ENGINEERING) PROGRAMME
(Admission to Engineering Year 1 from AY2013-2014 - Industrial Orientation)

AU REQUIREMENT TABLE

MAJOR REQUIREMENTS		GENERAL EDUCATION REQUIREMENTS (GER)							TOTAL
CORE (C)	MAJOR PRESCRIBED ELECTIVE (PE)	GER-CORE (GC)	GER PRESCRIBED ELECTIVE (GP)					UNRESTRICTED ELECTIVES (UE)	
			ARTS, HUMANITIES & SOCIAL SCIENCES [AHSS]	BUSINESS & MANAGEMENT (BM)	SCIENCE, TECHNOLOGY & SOCIETY (STS)	LIBERAL STUDIES [LS]	ANY CATEGORY (AHSS, BM, STS or LS)		
75	19	12	3	3	3	3	3	15	136

* EE3179 (IA) may be taken in either Semester 1 or 2. Students opting for EE3179, instead of EE3176 (IO), will have the additional 4-AU offset from the GER-UE course category.

CURRICULUM STRUCTURE

COURSE CODE AND TITLE	TYPE	NUMBER OF HOURS PER WEEK				AU	LAB CODE	PRE-REQUISITE/ CO-REQUISITE ^A
		LEC	TUT	LAB	TOTAL			
ENGINEERING YEAR 1								
FE1008 COMPUTING	C	2	1	1	4	3		
FE1073 AN INTRODUCTION TO ENGINEERING & PRACTICES	C	0	0	0	0	1		
MH1810 MATHEMATICS I	C	2	1	0	3	3		
PH1011 PHYSICS *	C	2	1	0	3	3		H2 PHYSICS
HW0110 EFFECTIVE COMMUNICATION	GC	1	1	0	2	2		
GER PRESCRIBED ELECTIVE 1	GP	2	1	0	3	3		
TOTAL		9	5	1	15	15		
* STUDENTS WITHOUT H2 PHYSICS ARE REQUIRED TO READ PH1012 PHYSICS A (4 AUs), INSTEAD OF PH1011.								
EEE YEAR 1 – SEMESTER 2								
EE1002 PHYSICS FOUNDATION FOR ELECTRICAL & ELECTRONIC ENGRG	C	3	1	0	4	4		PH1011/PH1012
EE1003 INTRODUCTION TO MATERIALS FOR ELECTRONICS	C	2	1	0	3	3		
MH1811 MATHEMATICS 2	C	2	1	0	3	3		
UNRESTRICTED ELECTIVE 1	UE	2	1	0	3	3		
UNRESTRICTED ELECTIVE 2	UE	2	1	0	3	3		
TOTAL		11	5	0	16	16		
EEE YEAR 2 – SEMESTER 1								
EE2001 CIRCUIT ANALYSIS	C	3	1	0	4	4	E2001L	
EE2004 DIGITAL ELECTRONICS	C	3	1	0	4	4	E2004L	
EE2006 ENGINEERING MATHEMATICS I	C	3	1	0	4	4		MH1811
EE2008 DATA STRUCTURES & ALGORITHMS	C	2	1	0	3	3	E2008L	
HW0210 TECHNICAL COMMUNICATION	GC	1	1	0	2	2		
TOTAL		12	5	0	17	17		
EEE YEAR 2 – SEMESTER 2								
EE2002 ANALOG ELECTRONICS	C	3	1	0	4	4	E2002L	EE2001
EE2003 SEMICONDUCTOR FUNDAMENTALS	C	3	1	0	4	4	E2003L	EE1002
EE2007 ENGINEERING MATHEMATICS II	C	3	1	0	4	4		MH1811
EE2010 SIGNALS AND SYSTEMS	C	3	1	0	4	4	E2010L	MH1810 & MH1811
EE2073 INTRODUCTION TO EEE DESIGN & PROJECT	C	0.5	0.5	3	4	2		
TOTAL		12.5	4.5	3	20	18		

COURSE CODE AND TITLE	TYPE	NUMBER OF HOURS PER WEEK				AU	LAB CODE	PRE-REQUISITE/ CO-REQUISITE^
		LEC	TUT	LAB	TOTAL			
EEE YEAR 3 – SEMESTER 1								
EE3001 ENGINEERING ELECTROMAGNETICS	C	3	1	0	4	4	E3001L	EE2007^
EE3002 MICROPROCESSORS	C	3	1	0	4	4	E3002L	
EE3080 DESIGN & INNOVATION PROJECT	C	0.5	0	6	6.5	2		REFER TO WEBSITE
HW0310 PROFESSIONAL COMMUNICATION	GC	1	1	0	2	2		
GER PRESCRIBED ELECTIVE 2	GP	2	1	0	3	3		
UNRESTRICTED ELECTIVE 3	UE	2	1	0	3	3		
TOTAL		11.5	5	6	22.5	18		
EEE YEAR 3 – SEMESTER 2								
EE3XXX TECHNICAL ELECTIVE 1	P	2	1	0	3	3		
EE3XXX TECHNICAL ELECTIVE 2	P	2	1	0	3	3		
EE0001 IMPACT OF ELECTROMAGNETIC RADIATION ON HUMANS	GC	2	1	0	3	3		
GER PRESCRIBED ELECTIVE 3	GP	2	1	0	3	3		
GER PRESCRIBED ELECTIVE 4	GP	2	1	0	3	3		
UNRESTRICTED ELECTIVE 4	UE	2	1	0	3	3		
TOTAL		12	6	0	18	18		
EEE YEAR 3 – SPECIAL TERM (MAY – JULY)								
EE3176 INDUSTRIAL ORIENTATION	C	10 WEEKS, FULL-TIME				4		REFER TO WEBSITE
EEE YEAR 4 – SEMESTER 1								
EE4080 FINAL YEAR PROJECT	C	0	0	12	12	4	REFER TO WEBSITE	
EE4XXX DESIGN ELECTIVE 1	P	1	0	3	4	2		
EE4XXX TECHNICAL ELECTIVE 1	P	2	1	0	3	3		
EE4XXX TECHNICAL ELECTIVE 2	P	2	1	0	3	3		
EE0040 ENGINEERS & SOCIETY	GC	2	1	0	3	3		YEAR 4 CLASSIFICATION
TOTAL		7	3	15	25	15		
EEE YEAR 4 – SEMESTER 2								
EE4080 FINAL YEAR PROJECT	C	0	0	12	12	4	REFER TO WEBSITE	
EE4XXX DESIGN ELECTIVE 2	P	1	0	3	4	2		
EE4XXX TECHNICAL ELECTIVE 3	P	2	1	0	3	3		
GER PRESCRIBED ELECTIVE 5	GP	2	1	0	3	3		
UNRESTRICTED ELECTIVE 5	UE	2	1	0	3	3		
TOTAL		7	3	15	25	15		
TOTAL ACADEMIC UNITS REQUIRED FOR GRADUATION								136

WEBSITE REFERENCE:

- <http://www.eee.ntu.edu.sg/programmes/currentstudents/undergraduate/undergraduatefull-time/pages/courseinformation.aspx>

B.ENG (ELECTRICAL & ELECTRONIC ENGINEERING) PROGRAMME
(Admission to Engineering Year 1 from AY2013-2014 - Industrial Attachment)

CURRICULUM STRUCTURE

COURSE CODE AND TITLE	TYPE	NUMBER OF HOURS PER WEEK				AU	LAB CODE	PRE-REQUISITE/ CO-REQUISITE ^A
		LEC	TUT	LAB	TOTAL			
ENGINEERING YEAR 1 – SEMESTER 1								
FE1008 COMPUTING	C	2	1	1	4	3		
FE1073 AN INTRODUCTION TO ENGINEERING & PRACTICES	C	0	0	0	0	1		
MH1810 MATHEMATICS I	C	2	1	0	3	3		
PH1011 PHYSICS *	C	2	1	0	3	3		H2 PHYSICS
HW0110 EFFECTIVE COMMUNICATION	GC	1	1	0	2	2		HW0001
GER PRESCRIBED ELECTIVE 1	GP	2	1	0	3	3		
TOTAL		9	5	1	15	15		
* STUDENTS WITHOUT H2 PHYSICS ARE REQUIRED TO READ PH1012 PHYSICS A (4 AUs), INSTEAD OF PH1011.								
EEE YEAR 1 – SEMESTER 2								
EE1002 PHYSICS FOUNDATION FOR ELECTRICAL & ELECTRONIC ENGRG	C	3	1	0	4	4		PH1011/PH1012
EE1003 INTRODUCTION TO MATERIALS FOR ELECTRONICS	C	2	1	0	3	3		
MH1811 MATHEMATICS 2	C	2	1	0	3	3		
GER PRESCRIBED ELECTIVE 2	GP	2	1	0	3	3		
UNRESTRICTED ELECTIVE 1	UE	2	1	0	3	3		
UNRESTRICTED ELECTIVE 2	UE	2	1	0	3	3		
TOTAL		13	6	0	19	19		
EEE YEAR 2 – SEMESTER 1								
EE2001 CIRCUIT ANALYSIS	C	3	1	0	4	4	E2001L	
EE2004 DIGITAL ELECTRONICS	C	3	1	0	4	4	E2004L	
EE2006 ENGINEERING MATHEMATICS I	C	3	1	0	4	4		MH1811
EE2008 DATA STRUCTURES & ALGORITHMS	C	2	1	0	3	3	E2008L	
HW0210 TECHNICAL COMMUNICATION	GC	1	1	0	2	2		
UNRESTRICTED ELECTIVE 3	UE	2	1	0	3	3		
TOTAL		14	6	0	20	20		
EEE YEAR 2 – SEMESTER 2								
EE2002 ANALOG ELECTRONICS	C	3	1	0	4	4	E2002L	EE2001
EE2003 SEMICONDUCTOR FUNDAMENTALS	C	3	1	0	4	4	E2003L	EE1002
EE2007 ENGINEERING MATHEMATICS II	C	3	1	0	4	4		MH1811
EE2010 SIGNALS AND SYSTEMS	C	3	1	0	4	4	E2010L	MH1810 & MH1811
EE2073 INTRODUCTION TO EEE DESIGN & PROJECT	C	0.5	0.5	3	4	2		
HW0310 PROFESSIONAL COMMUNICATION	GC	1	1	0	2	2		
TOTAL		13.5	5.5	3	22	20		
EEE YEAR 3 – SEMESTER 1								
EE3001 ENGINEERING ELECTROMAGNETICS	C	3	1	0	4	4	E3001L	EE2007 ^A
EE3002 MICROPROCESSORS	C	3	1	0	4	4	E3002L	
EE3080 DESIGN & INNOVATION PROJECT	C	0.5	0	6	6.5	2		
EE3XXX TECHNICAL ELECTIVE 1	P	2	1	0	3	3		REFER TO WEBSITE
EE3XXX TECHNICAL ELECTIVE 2	P	2	1	0	3	3		
EE0001 IMPACT OF ELECTROMAGNETIC RADIATION ON HUMANS	GC	2	1	0	3	3		
TOTAL		12.5	5	6	23.5	19		

COURSE CODE AND TITLE	TYPE	NUMBER OF HOURS PER WEEK				AU	LAB CODE	PRE-REQUISITE/ CO-REQUISITE ^A
		LEC	TUT	LAB	TOTAL			
EEE YEAR 3 – SEMESTER 2								
EE3179 INDUSTRIAL ATTACHMENT	C	20 WEEKS, FULL-TIME				8		REFER TO WEBSITE
EEE YEAR 4 – SEMESTER 1								
EE4080 FINAL YEAR PROJECT	C	0	0	12	12	4	REFER TO WEBSITE	
EE4XXX DESIGN ELECTIVE 1	P	1	0	3	4	2		
EE4XXX TECHNICAL ELECTIVE 1	P	2	1	0	3	3		
EE4XXX TECHNICAL ELECTIVE 2	P	2	1	0	3	3		
GER PRESCRIBED ELECTIVE 3	GP	2	1	0	3	3		
UNRESTRICTED ELECTIVE 4	UE	2	1	0	3	2		
	TOTAL	9	4	15	28	17		
EEE YEAR 4 – SEMESTER 2								
EE4080 FINAL YEAR PROJECT	C	0	0	12	12	4	REFER TO WEBSITE	
EE4XXX DESIGN ELECTIVE 2	P	1	0	3	4	2		
EE4XXX TECHNICAL ELECTIVE 3	P	2	1	0	3	3		
EE0040 ENGINEERS & SOCIETY	GC	2	1	0	3	3		YEAR 4 CLASSIFICATION
GER PRESCRIBED ELECTIVE 4	GP	2	1	0	3	3		
GER PRESCRIBED ELECTIVE 5	GP	2	1	0	3	3		
	TOTAL	9	4	15	28	18		
TOTAL ACADEMIC UNITS REQUIRED FOR GRADUATION								136

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