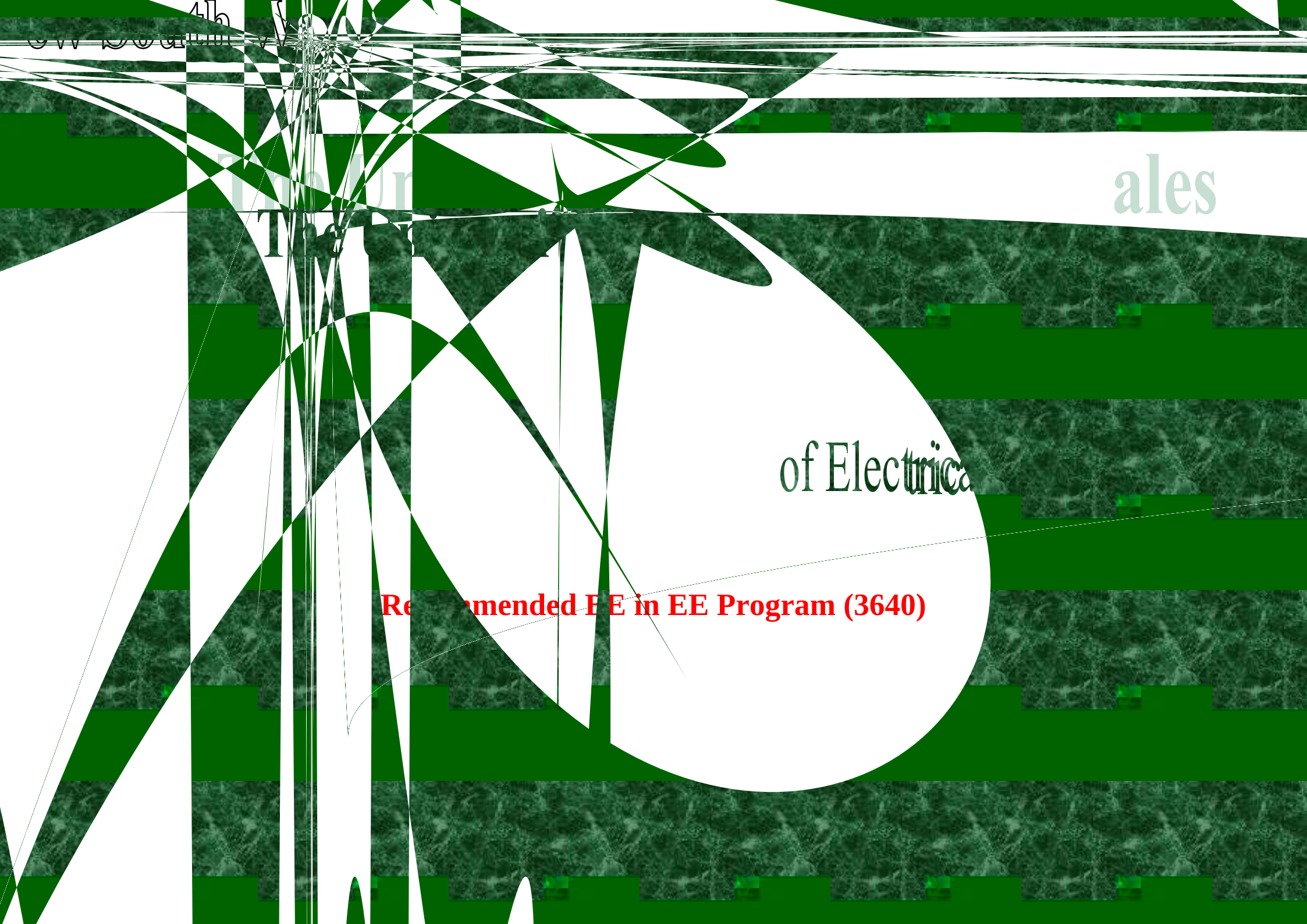

Re mended E E in EE Program (3640)

BE in Electrical Engineering (3640) – New program structure from Year 2006 – Recommended EE Program

Year 1 – Session 1					
MATH1131 or MATH1141	Mathematics 1A or Higher Mathematics 1A		6 hrs/wk	6 uoc	Offered in S1/S2
PHYS1131	Higher Physics 1A		6 hrs/wk	6 uoc	Offered in S1/S2
COMP1911 or COMP1917	Computing 1 or Higher Computing 1		6 hrs/wk	6 uoc	Offered in S1/S2
ENGG1000	Introduction to Engineering Design and Innovation		6 hrs/wk	6 uoc	Offered in S1/S2

Year 1 – Session 2					
MATH1231 or MATH1241	Mathematics 1B or Higher Mathematics 1B	Pre-requisite: MATH1131 or MATH1141	6 hrs/wk	6 uoc	Offered in S2/Ssummer
PHYS1231	Higher Physics 1B	Pre-requisite: PHYS1131	6 hrs/wk	6 uoc	Offered in S2/Summer
COMP1921 or COMP1927	Data Structures and Algorithms or Higher Data Structures & Algorithms	Pre-requisite: COMP1911 or COMP1917	6 hrs/wk	6 uoc	Offered in S2/Summer
ELEC1112	Electrical Circuits		6 hrs/wk	6 uoc	Offered in S1/S2/Summer

Year 2 – Session 1					
MATH2069	Mathematics 2A	Pre-requisite: MATH1231	6 hrs/wk	6 uoc	Offered in S1
ELEC2141	Digital Circuit Design	Pre-requisite: ELEC1111	6 hrs/wk	6 uoc	Offered in S1
ELEC2134	Circuits and Signals	Pre-requisite: MATH1231 or MATH1241 Co-requisite: ELEC1111	6 hrs/wk	6 uoc	Offered in S1/Summer
GENxxxxx	General Education courses			6 uoc	

Year 2 – Session 2					
MATH2099	Mathematics 2B	Pre-requisite: MATH1231	6 hrs/wk	6 uoc	Offered in S2
ELEC2142	Embedded Systems Design	Pre-requisite: ELEC2141 and COMP1921	6 hrs/wk	6 uoc	Offered in S2

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ELEC2133	Analogue Electronics	Pre-requisite: ELEC2134	6 hrs/wk	6 uoc	Offered in S2/Summer
GENxxxx	General Education courses			6 uoc	

Year 3 – Session 1					
ELEC3115	Electromagnetic Engineering	Pre-requisite: PHYS1231 and MATH2069	5 hrs/wk	6 uoc	Offered in S1
ELEC3106	Electronics	Pre-requisite: ELEC2133 and ELEC2141	5 hrs/wk	6 uoc	Offered in S1
ELEC3104	Digital Signal Processing	Pre-requisite: ELEC2134	5 hrs/wk	6 uoc	Offered in S1/Summer
Elective	L3 Elective course (see the L3 list below)		5 hrs/wk	6 uoc	

Year 3 – Session 2					
ELEC3105	Electrical Energy	Pre-requisite: ELEC3115 and ELEC2134	5 hrs/wk	6 uoc	Offered in S2
ELEC3114	Control Systems	Pre-requisite: ELEC2134	5 hrs/wk	6 uoc	Offered in S2
ELEC3117	Electrical Engineering Design	Pre-requisite: ELEC2133	5 hrs/wk	6 uoc	Offered in S2
Elective	L3 Elective course (see the L3 list below)		5 hrs/wk	6 uoc	

L3 Elective courses list					
ELEC3145	Real Time Instrumentation	Pre-requisite: COMP1911 & ELEC2134	5 hrs/wk	6 uoc	Offered in S2
ELEC2146	Engineering Modelling and Simulation (subject to approval)	[redacted]ite: COMP1911 & ELEC2134	[redacted]	6 uoc	[redacted] S2 [redacted]
ELEC3111	Distributed Energy Generation	Pre-requisite: ELEC2134	5 hrs/wk	6 uoc	Offered in S1
COMP2041	Software Construction (subject to approval)	Pre-requisite:COMP1921 or COMP1927	5 hrs/wk	6 uoc	Offered in S1 &2

ELEC4621	Advanced Digital Signal Processing	Pre-requisite: ELEC3104	4 hrs/wk	6 uoc	Offered in S1
ELEC4622	Multimedia Signal Processing	Pre-requisite: ELEC3104	4 hrs/wk	6 uoc	Offered in S2
ELEC4623	Biomedical Instrumentation, Measurement and Design	Pre-requisite: ELEC3104	4 hrs/wk	6 uoc	Offered in S2
Group 4	Systems and Control				
ELEC4631	Continuous-Time Control System Design	Pre-requisite: ELEC3114	4 hrs/wk	6 uoc	Offered in S1
ELEC4632	Computer Control Systems	Pre-requisite: ELEC3114	4 hrs/wk	6 uoc	Offered in S2
ELEC4633	Real Time Engineering	Pre-requisite: ELEC3114	4 hrs/wk	6 uoc	Offered in S1
Group 5	Data and Mobile Communications				
TELE4651	Wireless Communication Technologies	Pre-requisite: TELE3113	4 hrs/wk	6 uoc	Offered in S2
TELE4652	Mobile and Satellite Communication Systems	Pre-requisite: TELE3113	4 hrs/wk	6 uoc	Offered in S2
TELE4653	Digital Modulation and Coding	Pre-requisite: TELE3113	4 hrs/wk	6 uoc	Offered in S1
TELE4642	Network Performance	Pre-requisite: TELE3118	4 hrs/wk	6 uoc	Offered in S1
Group 6	Photonics				
PHTN4661	Optical Circuits and Fibres	Pre-requisite: ELEC3115	4 hrs/wk	6 uoc	Offered in S1
PHTN4662	Photonic Networks	Pre-requisite: TELE3113	4 hrs/wk	6 uoc	Offered in S2
Group 7	Business Administration				
ELEC4445	Entrepreneurial Engineering	Pre-requisite: 132 uoc	4 hrs/wk	6 uoc	Offered in S2

Notes:

- This model allows students to take two L3 electives and four L4 electives, thus providing the depth and breadth required for an Electrical Engineering Degree.
- L3 courses may be drawn from other schools and faculties as well as Telecommunications and Photonic Engineering core courses.
- L4 electives are provided from the six disciplines within the School.
- One L3 course may be substituted by a L2 elective.

Rules governing substitutions, pre-requisites and student exchanges

To suit the special abilities or needs of individual students a limited number of course substitutions are permitted within each program. Any such substitution must have prior approval of the Head of School.

- Substitutions must be of at least the same length and level as the prescribed course.
- Core courses may not be substituted with other courses.

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- Substitution is not normally permitted if it unduly restricts the range of courses studied to only one area of specialisation.
- Progression to 'next level' courses is not permitted without satisfying the nominated pre-requisites.
- In the case of a combined degree program, accreditation of any course in more than one program is not permitted.
- Prior School consent is required for any accredited substitution. This includes any courses taken from other schools at the student's own initiative.
- Substitution is not normally permitted in the first two years of the program.
- Substitution of one postgraduate course within the School is permitted, provided a similar course is not offered at the undergraduate level.
- Student exchanges are permitted, and students are encouraged to organise their exchange in the second session of their third year in order to simplify the process of accrediting substitutions.

Rules Governing Elective Courses

Transfer from Other Programs/Advanced Standing Students/Mid-Year Entry

The introduction of year 1 (L1), year 3 (L3) and year 4 (L4) electives accommodates students who are transferring from another program, are advanced standing or are in mid-year entry, as it allows them to complete required number of units of credit within the stipulated time of the normal program.