

TECHNICAL ELECTIVE COURSES for 2012

Technical electives are for single degree students as specified in the final year of their program. They are subject to availability (upon sufficient enrolment) and approval by the program director.

Students may not undertake a Technical Elective course that is already listed as a core course in their program.

Course		Description	Pre-requisite (You must have passed)	Study Period
Area	Catalog No.			
PHYS	2005	Computational Science 2	Two complete years of an Engineering Degree	2 & 5
EEET	4057	Electrical Power Systems	Dynamics of Electrical Machines or Electromotion	2 & 5
EEET	3043	Engineering Systems Thinking N	54 units of study	2
EEET	5099	Error Control Coding G	Completion of third year of LBIF	2
EEET	4061	Micro Engineering Technology	Two years of Engineering	2
EEET	5104	Satellite Communications G	Intro to Comm Systems and Digital Signal Processing.	2
EEET	3035	Solar Technologies	IT Physics or equivalent	2
EEET	4031	System Design Techniques	Assumed knowledge: discrete maths, state transition diagrams (eg SDL)	2
EEET	4035	Telecommunication Networks M	Eng Mathematics 4E Objects and Algorithms Computer Communications and Networks	2
EEET	4045	VLSI Design G	Principles of Computer Systems and Electronic Analogue Circuits	2
EEET	4054	WCDMA for 3rd Generation Mobile Communications G	Mobile Communications Fundamentals G	2
EEET	4052	Principles of Systems Engineering	Systems Engineering	3
EEET	4032	Advanced Internet Technology	System Design Techniques	5
EEET	5030	Advanced Power Electronics	Power Electronics and Drives	5
EEET	3042	Computer Hardware Design	Computer Hardware	5
EEET	3038	Digital Devices and Systems	Principles of Computer Systems	5
EEET	2044	Electromechanics	Analogue and Digital Electronic Fundamentals	5

EEET	5101	Information Theory	Digital Signal Processing	5
EEET	5102	Mobile Communications Fundamentals G	Intro to Comm Systems and Digital Signal Processing.	5
EEET	4036	Modern Communication Systems	Intro to Comm Systems and Digital Signal Processing.	5
EEET	4046	Optical Communications G	IT Physics	5
EEET	5034	Power System Operation and Control	Electrical Power Systems	5
EEET	5012	Renewable Energy Systems	All of year 3	5
EEET	4056	Knowledge- Based Paradigms and Their Engineering Applications	All of year 3 of LBIF	6
EEET	4053	Electromagnetic Compatibility	IT Physics	6

External:

The following cross-institutional courses have been approved for EIE students to take for electives. Note that two external courses are required to satisfy the equivalent of one UniSA course and three external courses are counted as two UniSA courses.

Course		Description	Prerequisite	University	Sem
Area	Cat No.				
ENGR	3126	Biomedical Instrumentation 1	All of third year	Flinders	1
ELECENG	4058	Power Quality and Condition Monitoring	All of third year	Adelaide	1
ELECENG	4057	RF Engineering IV	All of third year	Adelaide	1
ENGR	3128	Biomedical Instrumentation 2	Biomedical Instrumentation 1	Flinders	2
COMP	7017	Java Card Application Development	Java Programming Computer Communications and Networks	Flinders	2
ELECENG	4059	Power Electronics and Drive Systems	Third year level	Adelaide	2