

**UNIVERSITY OF THE WITWATERSRAND
SCHOOL OF ELECTRICAL AND INFORMATION ENGINEERING**

**APPLICATION OF RULE G.13 AND CALCULATOR REQUIREMENTS
2018**

A dictionary may be taken into any School examination or test

COURSE No.	COURSE NAME	RULE REQUIREMENTS	TYPE OF EXAM	DURATION OF EXAM	TERM
ELEN1000	Electric Circuits	Test 1 10% Test 2 (June Exam) 30% Test 3 10% Exam 50% FCOM applies in the Exam	Open book-limited to: - one text book - one bound file or one notebook of handwritten notes Type 1	3 hours	1 + 2
ELEN1002	Concepts of Design	Project 1: 40% Project 2: 60% <i>A student cannot obtain a passing final mark unless all Course Outcomes are achieved (see CB&O)</i>		No examination	1
ELEN1003	Critical Thinking	Assign 1 40% Assign 2 40% Tests (4) 20%		No examination	1 + 2
ELEN1004	Engineering Design and Skills	Test 1: 10% Project 1: 20% Project 2.1: 30% Project 2.2: 40%		No examination	1 + 2
ELEN1008	Health System Dynamics	Test 1 10% Test 2 10% Midyear Exam 20% Test 3 10% Test 4 10% Exam 40%	Closed book Type 1 MCQ – may include written component	2 hours	1+2
WSOA1011	Key Concepts in Game Design I	Design Project 50% Coursework 50%	Design Project and Technical Report	No examination	1
WSOA1012	Key Concepts in Game Design II	Design Project 50% Coursework 50%	Design Project and Technical Report	No examination	2
COMS2004	Data Structures & Algorithms	Class test 1 10% Class test 2 20% Lab tests 10% Assignment and test 20% Exam 40%	Closed book. Type 1	3 hours	2
ELEN2000	Electrical Engineering (Mechanical, Mining and Chemical Engineering)	Test 20% Labs 10% Exam 70%	Closed book Type 1 + A4 handwritten information sheet	3 hours	2

ELEN2001	Electronics I	Labs Tutorial Test Class Test Exam Project FCOM applies in the Exam component	10% 10% 10% 50% 20%	Closed book Type 2 Equation sheet provided	3 hours	1
ELEN2003	Electric and Magnetic Systems	Test 1 Test 2 Labs Exam	10% 30% 10% 50%	Closed book Type 1 Equation sheet provided	3 hours	2
ELEN2004	Software Development I	Practical programming: - Test 1 - Test 2 Project Exam FCOM applies	10% 20% 30% 60%	Closed book Type 1 + A4 handwritten information sheet C++ Quick Reference provided	3 hours	1
ELEN2005	Signals & Systems I	Project Test 1 Test 2 Labs Exam FCOM applies	20% 10% 10% 10% 50%	Closed book Type 2 Equation sheet provided	3 hours	2
ELEN2006	Microprocessors	Project Test Labs Exam	20% 20% 10% 50%	Closed book Type 0 Information sheet provided	3 hours	2
ELEN2008	Electric Circuits	Test 1 Test 2 Exam FCOM applies	15% 20% 65%	Open book-limited to: - one text book - one A4 plastic sleeve (handwritten notes) Type 2	3 hours	1
HAEM2001	Molecular and Cell Biology	Class Test Project Exam	20% 30% 50%	Closed book Type 1	2 hours	2
WSOA2006	Digital Art Design Project	Design Project Coursework	50% 50%	Design Project and Technical Report	No examination	2
WSOA2009	Introduction to Game Creation IIA	Design Project Coursework	50% 50%	Design Project and Technical Report	No examination	1
WSOA2010	Introduction to Game Creation IIB	10x Short Assignments Exam	5% each 50%	Design Project	No Examination	2
ELEN3000	Electromagnetic Engineering	Test Exam Labs	20% 60% 20%	Closed book A4 (handwritten information sheet) Type 2	3 hours	2

ELEN3002	Electronics II	Test Exam Labs	20% 60% 20%	Open book-limited to: - one text book - one A4 folder Type 2	3 hours	1
ELEN3003	Power Engineering	Test Exam Labs	20% 60% 20%	Closed book Type 2 + A4 handwritten information sheet	3 hours	1
ELEN3007	Probabilistic Systems and Signal Analysis	Test 1 Test 2 Assignment Exam	12.5% 12.5% 20% 55%	Closed book Type 1	3 hours	2
ELEN3008	Biomedical Measurement, Instrumentation and Imaging	Assignments / Oral Labs Exam FCOM applies	20% 20% 60%	Closed book Type 1	3 hours	1
ELEN3009	Software Development II	Labs Test Project Exam FCOM Applies	5% 10% 35% 50%	Closed book Type 1	3 hours	2
ELEN3012	Signals & Systems II A	Test Lab Exam	20% 20% 60%	Closed book Type 2 + A4 handwritten information sheet	3 hours	1
ELEN3013	Signals & Systems II B	Test Lab Exam	20% 20% 60%	Closed book Type 2 + A4 handwritten information sheet	3 hours	2
ELEN3014	Biomedical Signals, Systems and Control	Test Lab Exam	20% 20% 60%	Closed book Type 2 + A4 handwritten information sheet	3 hours	2
ELEN3015	Data and Information Management	Test Labs Exam	20% 20% 60%	Closed book Type 2 + A4 handwritten information sheet	3 hours	1
ELEN3016	Control I	Test Labs Exam	20% 20% 60%	Closed book Type 2 + A4 handwritten information sheet	3 hours	2
ELEN3017	Electrical Engineering Design	<u>Design Project</u> : Blocks 1 and 2 Prelim Report = 25% of design project mark. Project demonstration = 10% Final report = 50% Group presentation = 15%			No examination	1
ELEN3018	Economics of Design	<u>Macroeconomics</u> Block 3 = 50% of overall course mark (20% from Group Project and 30% from Class Test) <u>Microeconomics</u> Block 4 = 50% of overall course mark (20% from Group Project and 30% from Class Test)			No examination	2

ELEN3019	Signals & Systems I	Project 20% Test 1 10% Test 2 10% Labs 10% Exam 50% FCOM applies	Closed book Type 2 Equation sheet provided	3 hours	2
ELEN3020	Professional Practice and Software Development (Applied Computing and Digital Arts)	Project 50% Ass 30% Test 10% Labs 10% Final deliverables for course project form the examination			
ELEN3021	Capstone Project (Applied Computing)	- Preliminary Report 15% - Project Report 60% - Presentation 25% - Individual Appraisal (Interview) ±10% FCOM applies – maximum mark 100	No examination	1 + 2	
ELEN3022	Electronics I (Applied Computing)	Labs 10% Tutorial Test 10% Class Test 10% Exam 50% Project 20% FCOM applies in the Exam component	Closed book Type 2 Equation sheet provided	3 hours	1
ELEN3023	Introduction to Software Engineering (Applied Computing)	Labs 20% Exam 50% Project 30%	Closed Book One A4 crib sheet Equation Sheet provided if necessary	3 hours	1
ELEN3024	Fundamentals of Communication	Test 20% Labs 20% Exam 60%	Closed book Type 2 Equation sheet provided	3 hours	2
WSOA3000	Introduction to Game Creation IIB	Coursework 50% Design Project 50%	Design Project	No Examination	2
WSOA3003	Game Design IIA	Design Project 50% Coursework 50%	Design Project and Technical Report	No Examination	1
WSOA3004	Game Design IIB	Design Project 50% Coursework 50%	Design Project and Technical Report	No Examination	2
ELEN4000 and 4011	Electrical Engineering Design II and Information Engineering Design	Project 100% <i>A student cannot obtain a passing final mark unless all claimed ECSA Exit Level Outcomes are achieved (see CB&O)</i> FCOM applies	Students are required to report to their supervisor once per week	No examination	2
ELEN4001	High Frequency Techniques	Project 30% Labs 20% Exam 50%	Closed book A4 (handwritten information sheet) Type 2	2 hours	1

ELEN4002 and 4012	Electrical Engineering Laboratory and Information Engineering Laboratory	a) Planning b) Project Report c) Presentation <i>A student cannot obtain a passing final mark unless all claimed ECSA Exit Level Outcomes are achieved (see CB&O)</i> FCOM applies	15% 65% 20%	No examination	2
ELEN4003	High Voltage Engineering	Project Exam Lab	30% 60% 10%	Closed book Type 2 + A4 handwritten information sheet	3 hours 1
ELEN4006	Measurement Systems	Project Labs Exam <i>A student cannot obtain a passing final mark unless all claimed ECSA Exit Level Outcomes are achieved (refer to the CB&O)</i> FCOM applies	40% 10% 50%	Open Book – limited to: - prescribed text book; - one A4 folder. Type 2	2 hours 1
ELEN4010	Software Development III	Project Exam Labs	20% 50% 30%	Closed book Type 1	2 hours 1
ELEN4014	Electromechanica 1 Conversion	Project Exam Labs	30% 50% 20%	Closed book Type 2 + A4 handwritten information sheet	3 hours 1
ELEN4016	Control II	Project Labs Exam	20% 30% 50%	Closed book Type 2 + A4 handwritten information sheet	3 hours 1
ELEN4017	Network Fundamentals	Project Exam Lab	30% 50% 20%	Closed book Type 2 + A4 handwritten information sheet	3 hours 1
ELEN4018	Power Systems	Project Lab Exam	30% 20% 50%	Closed book Type 2 + A4 handwritten information sheet	3 hours 1
ELEN4019	Engineer in Society	Assign 1 Assign 2 (FCOM) subminimum Test Exam	15 % 15% 20% 50%	The Exam will consist of essay questions, answer 3 out of 5 questions	3 hours 1
ELEN4020	Data Intensive Computing in Data Science	Lab & Scribing Project Exam	20% 30% 50%	Closed Book Type 2 + A4 handwritten information sheet	3 hours 1
MECN4020	Systems Management and Integration	Project Exam	65% 35%	Closed book Type 2 Equation sheet provided	2 hours 1

CALCULATORS:

Type 0 No calculator permitted

Type 1 Basic scientific calculator permitted

Type 2 Engineering calculator permitted (+ handwritten information sheet if specified or as provided)

Type 3 No restrictions on calculating and data storage devices

GENERAL:

Lectures:

“Better never than late”. This is a professional School and students may not be late for lectures.

SATISFACTORY PERFORMANCE (SP):

A student has attended / completed / submitted - labs / projects / tasks, etc as defined in the CB&O.
As a rule 100% attendance / completion / submission, etc is required.

FCOM:

See CB&O for each course.

LABORATORIES: There will be no laboratory exemptions.