

**Bachelor of Applied Science
(Computer Science & Computer Technology)
Study Guide (Part 1)**

YEAR (3)

Unit	Topics	Reference	Points
ICT 301	General Electrical Knowledge	EE101	3

Unit Code: EE101	<u>DC Circuit Problems</u>
Teaching Video	<p>E003+E004 Videos</p> <p>The links contain the following lessons</p> <p>E003+E004 Lesson 1 DC series circuit</p> <p>E003+E004 Lesson 2 DC parallel circuit</p> <p>E003+E004 Lesson 3 DC Parallel circuit problems</p> <p>E003+E004 Lesson 4 DC series parallel circuit 1</p> <p>E003+E004 Lesson 5 DC series parallel circuit 2</p> <p>E003+E004 Lesson 6 Lamp and resistor circuit</p> <p>E003+E004 Lesson 7 Wheatstone bridge</p>
Writing on whiteboard+Audio	E003+E004 Writing+Audio
Exercise	EXERCISES Page 77 to 81
Theory Practice Test	<p><u>E003+E004</u></p> <p>E003+E004 MCQ Practice 1</p> <p>E003+E004 MCQ Practice 2</p> <p>E003+E004 MCQ Practice 3</p>
Practical Practice	Study the practical equipments , the names of equipments

	<p>and their applications. Follow the instruction.</p> <p>Theory & Practical Instruction</p> <p><u>Equipments</u></p> <p>Open the file in the following link.</p> <p>Practical Guide</p> <p>On page 2 , you will see the names of equipments. Then refer the following link to match with the equipments in the following link.</p> <p>Practical Equipments Practical equipments for online lab</p> <p><u>Diagrams</u></p> <p>Example Diagram Circuit Example</p> <p>Diagram Worksheet</p> <p><u>Assessment</u></p> <p>The teacher can give the photo of the equipment and ask the student to interpret</p> <p><u>Interpreting the equipment practice</u></p> <p>Equipments Interpretation Practice 1</p> <p>Equipments Interpretation Practice 2</p>
Reference Resources + Textbooks	<p>DC Circuit E003 E004.zip</p> <p>Stage 1 Part 1.zip</p> <p>http://www.filefactory.com/file/c0cb8ab/n/Stage_1_Part_1.zip</p>
Australian Curriculum Units	
UEENEEE104A	Solve problems in d.c. circuits

For the students in Myanmar

EE101 DC Circuit Problems

[Lesson 1](#) [Lesson 2](#) [Lesson 3](#)

Test & Assessment

http://www.filefactory.com/file/58r3nfe1qjeh/n/E003_E004_Online_Test_1_Question_pdf

http://www.filefactory.com/file/796n6fdurdij/n/E003_E004_Online_Test_1_Answer_doc

Do the tests and send the answer sheet in soft copy by e-mail to **iqytechnicalcollege@gmail.com**

Unit	Topics	Reference	Points
ICT 302	Digital Electronics	EE209/H012	3
ICT 303	Amplifier	EE208/H013	3

Unit Code: EE115	Basic Analogue & Digital Electronics
Teaching Video	<p><u>DC Power supplies</u></p> <p>H011 Lesson 1 DC Power supply principle.zip</p> <p>H011 Lesson 2 Load regulation.zip</p> <p>H011 Lesson 3 Current limiter.zip</p> <p><u>Amplifier</u></p> <p>H013 Lesson 1 Amplifier model.zip</p> <p>H013 Lesson 2 Amplifier biasing.zip</p> <p>H013 Lesson 3 Amplifier configuration.zip</p> <p>H013 Lesson 4 Amplifier parameters.zip</p> <p>H013 Lesson 5 JFET.zip</p> <p><u>Digital Electronics</u></p> <p>I006 Lesson 5+H012 Lesson 3 Number system.zip</p> <p>I006 Lesson 6+H012 Lesson 4 Binary subtraction.zip</p> <p>I006 Lesson 7+H012 Lesson 5 Encoder+Decoder.zip</p> <p>I006 Lesson 8+H012 Lesson 6 SR Flipflop.zip</p> <p>I006 Lesson 9+H012 Lesson 7 Shift register+Data latches.zip</p> <p>I006 Lesson 10+H012 Lesson 8 Counter.zip</p> <p>I006 Lesson 11+H012 Lesson 9 Display.zip</p>
Writing on whiteboard+Audio	Amplifier+Power Supply+Digital H011+H012+H013.zip
Exercise	EXERCISES Page 207 to 212
Theory Practice Test	<p><u>H011</u> <u>H011</u></p> <p>MCQ Practice 1 H011 MCQ Practice 2</p> <p><u>H013</u></p> <p>H013 MCQ Practice 1 H013 MCQ Practice 2</p>

<p>Practical Practice</p>	<p><u>Circuit Connection Assessment Number 3-2 Amplifier Gain</u></p> <p>http://www.filefactory.com/file/1ufyhhtxvnd/n/Practical_Semester_1_A_pdf</p> <p>http://www.filefactory.com/file/2xikhzj6xuzx/n/3-2_pdf</p> <p>http://www.filefactory.com/file/33ntwrs3o7e3/n/3_2_xls</p> <p>http://www.filefactory.com/file/57di74j6zk7p/n/3_2_doc</p> <p><u>Circuit Connection Assessment Number 3-7 Three Terminal Regulator</u></p> <p>http://www.filefactory.com/file/1ufyhhtxvnd/n/Practical_Semester_1_A_pdf</p> <p>http://www.filefactory.com/file/65maa6x3hkzj/n/3_7_doc</p> <p>http://www.filefactory.com/file/75znot255nq7/n/3_7_xls</p> <p>http://www.filefactory.com/file/1u8jqxxi95tp/n/3-7_pdf</p> <p><u>Circuit Connection Assessment Number 6-1 Class A B Rectifier</u></p> <p><u>Class A-B Amplifier</u></p> <p>http://www.filefactory.com/file/52buiy6mxnfv/n/6-1_pdf</p> <p>http://www.filefactory.com/file/650fxy60dm2z/n/6_1_doc</p> <p>http://www.filefactory.com/file/72af0kxilwf3/n/Class_A-B_Amplifier_pdf</p> <p>Amplifier1_2Practical Amplifier current gain</p> <p><u>Circuit Connection Assessment Number 6-12 Mini Lab</u></p> <p>http://www.filefactory.com/file/42e878f0kjgd/n/H045Day3Practical_pdf</p> <p>http://www.filefactory.com/file/7hr25f7o5an9/n/6-12_pdf</p> <p>http://www.filefactory.com/file/5mbfi4xigxf1/n/6_12_doc</p>
	<p><u>Additional 3.zip</u></p> <p>http://www.filefactory.com/file/c0cb6a8/n/Additional_3.zip</p> <p>AG Additional Amplifier Additional 4.zip</p> <p>http://www.filefactory.com/file/c0cb65c/n/Additional_4.zip</p> <p>DE</p>

Australian Curriculum Units	
UEENEEH111A	Troubleshoot single phase input d.c. power supplies
UEENEEH102A	Repair basic electronic apparatus faults by replacement of components

For the students in Myanmar

[EE115 Basic Analogue & Digital Electronics](#)

[EE116 Process Control System](#)

[Lesson 1](#) [Lesson 2](#) [Lesson 3](#) [Lesson 4](#) [Lesson 5](#) [Lesson 6](#) [Lesson 7](#)

[Lesson 8](#) [Lesson 9](#) [Lesson 10](#)

[Test & Assessment](#)

http://www.filefactory.com/file/46zzpcym7uqz/n/I006_H012_Online_Test_1_Question_pdf

http://www.filefactory.com/file/4e2chw2sf343/n/I006_H012_Online_Test_1_Answer_doc

Do the tests and send the answer sheet in soft copy by e-mail to iqytechnicalcollege@gmail.com

Unit	Topics	Reference	Points
ICT 304	Material Science	E081	3

[E081 Material Science](#)

[T1 Solid Liquid & Gases](#) [Solid](#)

[T2 Dielectric Strength](#) [Dielectric Strength of Solids](#)

[Dielectric Strength of Solid Liquid & Gases](#)

[T3 Conductors & Semi Conductors](#)

[T4 Chemical Effect on materials](#)

[T5 Atomic Construction of Materials](#) [Advanced Theory 1](#) [Advanced Theory 2](#)

[T6 Non metallic materials](#)

[T7 ME 205 Manufacturing Processes-and-Materials](#)

[Manufacturing Processes-and-Materials](#)

[E081 Tutorials](#)

For the students in Myanmar

[EE307 Part 1](#) [EE307 Part 2](#) [EE307 Part 3](#) [EE307 Part 4](#) [EE307 Part 5](#) [EE307 Part 6](#)

[Test & Assessment](#) Submit the solar energy design project

Unit	Topics	Reference	Points
EE204	Physics	E046	3

Unit Code: EE204	Engineering Physics
Teaching Video	E046Part 1.zip E046Part 2.zip E046Part 3.zip
Writing on whiteboard+Audio	Physics-E046 Part 1.zip http://www.filefactory.com/file/c0b68a1/n/Physics-E046 Part 1.zip Physics-E046 Part 2
Exercise	Click HERE to download G037+G038+G039+E046 Exercises
Theory Practice Test	E046 E046 MCQ Practice 1 E046 MCQ Practice 2 E046 MCQ Practice 3 E046 MCQ Practice 4
Australian Curriculum Units	
UEENEEE082A	Apply physics to solving electrotechnology engineering problems

For the students in Myanmar

[EE204 Engineering Physics](#)

[EE204 Part 1](#) [EE204 Part 2](#) [EE204 Part 3](#) [EE204 Part 4](#) [EE204 Part 5](#)

[EE204 Part 6](#)

Test & Assessment

[http://www.filefactory.com/file/13o82qnudgr3/n/E046 Online Test 1 Question pdf](http://www.filefactory.com/file/13o82qnudgr3/n/E046%20Online%20Test%201%20Question%20pdf)

[http://www.filefactory.com/file/6o2lsbtqe7tt/n/E046 Online Test 1 Answer doc](http://www.filefactory.com/file/6o2lsbtqe7tt/n/E046%20Online%20Test%201%20Answer%20doc)

Do the tests and send the answer sheet in soft copy by e-mail to iqytechnicalcollege@gmail.com

Unit	Topics	Reference	Points
EE201	Mathematics 1	E050	3

Unit Code: EE201	Engineering Mathematics
Teaching Video	E050Part1.zip E050 Lesson 7 Mensuration+Area.zip E050 Lesson 8 Differentiation.zip E050 Lesson 9 Integration.zip E050 Lesson 10 Integration of trigo functions.zip E050 Lesson 11 Definite integral+Electrical application.zip E050 Lesson 11 Exercises.zip
Writing on whiteboard+Audio	Maths 1-E050+G047.zip
Exercise	E050 Tutorial.zip EXERCISES Page 39 to 64
Theory Practice Test	E050 E050 MCQ Practice 1 E050 MCQ Practice 2 E050 MCQ Practice 3 R050 MCQ Practice 4
Reference Resources + Textbooks	E050MathsCal1 E050MathsCal2 E050Maths3 E050Maths4 E050MathsCalTextBook
Australian Curriculum Units	
UEENEEE126A	Provide solutions to basic engineering computational problems
UEENEEE050B	Undertake computations in an electrotechnology environment

For the students in Myanmar

[EE201 Engineering Mathematics](#)

[EE201 Part 1](#) [EE201 Part 2](#) [EE201 Part 3](#) [EE201 Part 4](#)

Test & Assessment

http://www.filefactory.com/file/5ho7s6h0svhv/n/E050_Online_Test_1_Answer_doc

http://www.filefactory.com/file/6dqp87kdsorz/n/E050_Online_Test_1_Question_pdf

Do the tests and send the answer sheet in soft copy by e-mail to iqytechnicalcollege@gmail.com

Unit	Topics	Reference	Points
EE202	Mathematics 2	E026	3

Unit Code: EE302	Advanced Engineering Mathematics
Teaching Video	Advanced Engineering Maths Video
Writing on whiteboard+Audio	Maths 2-E026.zip
Exercise	EXERCISES Page 18 to 29
Theory Practice Test	<u>E026</u> E026 MCQ Practice 1 E026 MCQ Practice 2 E026 MCQ Practice 3
Reference Resources + Textbooks	E026 Maths 1 E026 6032H 1 E026 6032H
Australian Curriculum Units	
UEENEEE127A	Use advanced computational processes to provide solutions to energy sector engineering problems

For the students in Myanmar

EE302 Advanced Engineering Mathematics

[EE302 Part 1](#) [EE302 Part 2](#) [EE302 Part 3](#) [EE302 Part 4](#)

http://www.filefactory.com/file/5l9fpcclhjzp/n/E026_Online_Test_3_Question_pdf

http://www.filefactory.com/file/64ccdiiuf0ax/n/E026_Online_Test_3_Answer_doc

Do the tests and send the answer sheet in soft copy by e-mail to **iqytechnicalcollege@gmail.com**

Unit	Topics	Reference	Points
EE306	Basic Control	I008	3

Unit Code: EE306	Electro-mechanical Control
Teaching Video	
Writing on whiteboard+Audio	I020 Part 1 I020 Part 2
Exercise	EXERCISES Page to
Theory Practice Test	
Practical Practice	
Reference Resources + Textbooks	PID.zip I008I020D034F014DataCommA.zip I008I020D034F014DataCommB.zip I008I020D034F014DataCommC.zip Microprocessor Notes upload.zip Microprocessor Textbook to upload.zip Microprocessor References to upload.zip http://kyawnaing325.zoomshare.com/files/6/DigitalElectronics.htm http://kyawnaing325.zoomshare.com/files/6/7794CD-DigitalElectronics.htm
Australian Curriculum Units	
UEENEEI129A	Set up electronically controlled mechanically operated complex systems

For the students in Myanmar

[EE306 Electro-mechanical Control](#)

The students can study Programming language

Unit	Topics	Reference	Points
BAE605	Management		3

[Management + Organization](#)

[Mgt 502 Operation Management \(1 pt\)](#)

Mgt 503 Production & Operation Management (1 pt)

Operation Management

[Part 1](#) [Part 2](#) [Part 3](#) [Part 4](#) [Part 5](#) [Part 6](#)

[Part 7](#) [Part 8](#) [Part 9](#) [Part 10](#) [Part 11](#) [Part 12](#)

[Part 13](#) [Part 14](#) [Part 15](#) [Part 16](#) [Part 17](#) [Part 18](#)

Unit	Topics	Reference	Points
BAE408	Analog & Digital Electronics		3

Online Tutoring

BAE 408

[BAE408 Week 1 Lesson](#)

[BAE408 Week 2 Lesson](#)

[BAE408 Week 3 Lesson](#)

WEEK (4) REVIEW + TEST & ASSESSMENT FOR BAE408

BAE 408 Analogue & Digital Electronics (5 pt)

Subjects	Points	Competency Units
BAE 408 Analogue & Digital Electronics	5	EE 403 Introduction to Electronic Engineering (1 pt) EE 524 Power Electronics & Applied Electronics (1 pt) EE 405 Digital System (1 pt) EE 526 Digital Signal Processing (1 pt) EE 527 Digital Image Processing 1/ 2 (1 pt)

Part 1 Over all Knowledge of the subject

[BAE 408 Analogue & Digital Electronics](#)

Part 2 Competency units of the subject

[EE 403 Introduction to Electronic Engineering \(1 pt\)](#)

[EE 524 Introduction to Power Electronics \(1 pt\)](#)

[EE 524 Power Electronics](#)

[EE 524 Applied Electronics](#)

[Digital Electronics](#)

[EE 405 Digital System \(1 pt\)](#)

[EE 526 Digital Signal Processing \(1 pt\)](#)

[EE 527 Digital Image Processing 1 \(1 pt\)](#)

[EE 527 Digital Image Processing 2](#)

BAE 408 Analogue & Digital Electronics (5 pt)

Folder	BAE 408 Analogue & Digital Electronics			
File	Electrical & Electronic Engineering.zip / Introduction to Electronic Engineering			
<u>Instruction</u>				
Study the notes, calculate the example problems then do the exercises numbers as indicated				
Chapter	Page		Topics	
			Note- PDF File page number and the page number of the scanned document may be different. The student need to check both as necessary	
	17	to	63	Semi conductor devices
	128	to	135	Digital circuits
Exercise	Q459	to	Q467	of Assignment (30)

Folder		BAE 408 Analogue & Digital Electronics		
File		Electrical & Electronic Engineering.zip / Introduction to Power Electronics		
<u>Instruction</u>				
Study the notes, calculate the example problems then do the exercises numbers as indicated				
Chapter	Page		Topics	
			Note- PDF File page number and the page number of the scanned document may be different. The student need to check both as necessary	
	14	to	101	Power Electronics Converters
Exercise	Q468	to	Q476	of Assignment (30)

Part (2) Competency Units

EE 403 Introduction to Electronic Engineering (1 pt)

EE 524 Power Electronics & Applied Electronics (1 pt)

EE 405 Digital System (1 pt)

EE 526 Digital Signal Processing (1 pt)

EE 527 Digital Image Processing 1/ 2 (1 pt)

Folder		EE403 Introduction to Electronic Engineering (1 pt)		
File		EE403 Introduction to Electronic Engineering		
<u>Instruction</u>				
Study the notes, calculate the example problems then do the exercises numbers as indicated				
Chapter	Page		Topics	
			Note- PDF File page number and the page number of the scanned document may be different. The student need to check both as necessary	
	66	to	128	Electronics Circuits
Exercise	Q477	to	Q488	of Assignment Number (31)

Folder		EE524 Introduction to Power Electronics (1 pt)	
File		EE524 Introduction to Power Electronics	
<u>Instruction</u>			
Study the notes, calculate the example problems then do the exercises numbers as indicated			
Chapter	Page		Topics
			Note- PDF File page number and the page number of the scanned document may be different. The student need to check both as necessary
	76	to	117
	Power Electronics Control		
Exercise	Q489	to	Q493 of Assignment Number (32)

References

EE524 Applied Electronics Book 1-Electronics Companion Book 2-Electronics Design

Folder		EE405 Digital System (1 pt)	
File		EE405 Digital System Design	
<u>Instruction</u>			
Study the notes, calculate the example problems then do the exercises numbers as indicated			
Chapter	Page		Topics
			Note- PDF File page number and the page number of the scanned document may be different. The student need to check both as necessary
	9	to	15
	Number system basics		
	19	to	32
	Introduction to logic gates		
	33	to	43
	Combinational logic		
	47	to	51
	Karnaugh map		
	67	to	84
	Arithmetic circuit		
	98	to	111
	Coders/ Multiplexers		
	114	to	123
	Counters		
Exercise	Q494	to	Q511 of Assignment Number (33)

Folder EE526 Digital Signal Processing (1 pt)				
File EE526 Digital Signal Processing				
<u>Instruction</u>				
Study the notes, calculate the example problems then do the exercises numbers as indicated				
Chapter	Page			Topics
				Note- PDF File page number and the page number of the scanned document may be different. The student need to check both as necessary
	1	to	13	Signal system representation
	14	to	26	Fourier/ Z Transform
	27	to	34	Discrete Fourier Transform
	43	to	51	Principle of filter design
	52	to	58	FIR filter design
Exercise Q512 to Q517 of Assignment Number (34)				

Folder EE527 Digital Image Processing (1 pt)				
File EE527 Digital Image Processing Part 1				
<u>Instruction</u>				
Study the notes, calculate the example problems then do the exercises numbers as indicated				
Chapter	Page			Topics
				Note- PDF File page number and the page number of the scanned document may be different. The student need to check both as necessary
	9	to	19	Introduction
	21	to	36	Intensity transformation & spatial filtering
	38	to	40	Filtering in frequency domain
	43	to	44	Discrete Fourier Transform

	49			Butterworth Low Pass Filter
	51			Butterworth High Pass Filter
	58			Image restoration / Noise analysis
Exercise	Q518	to	Q524	of Assignment Number (35)