## **Diploma in Information Technology (Course Outline)**

	St Clements+	Pt				Australian IT Diploma Course
	THEORETICAL TRAINING					
ICT 101	Information Technology	3		GC	ICAICT501A	Research and review hardware technology
	<b>Fundamentals</b>					options for organisations
<u>ICT 102</u>	Computer Applications	2		GC	ICASAS509A	Provide client IT support services
	and Operations			GC	ICASAS503A	Perform systems tests
<u>ICT 103</u>	Applied Programming	5	BAE601	GB	ICAPRG523A	Apply advanced programming skills in another language
<u>ICT 104</u>	Program Project	5	BAE601	GB	ICAPRG502A	Manage a project using software management tools
				GC	ICAICT510A	Determine appropriate IT strategies and solutions
				GD	ICAWEB507A	Customise a complex IT content management system
				GG	CAPMG501A	Manage IT projects
ICT 105	Systems Analysis and	5	BAE603	Core	ICAICT509A	Gather data to identify business requirements
	Programs	-		GC	ICAICT502A	Develop detailed component specifications from
				Core	ICAICT511A	project specifications Match IT needs with the strategic direction of
						the enterprise
<u>ICT 106</u>	Software Engineering	5	BAE603	GB	ICAPRG502A	Manage a project using software management tools
				GB	ICAPRG510A	Maintain custom software
				GB	ICAPRG512A	Prepare for the build phase of an IT system
ICT 107	<b>Business Information</b>	5		GA	ICANWK501A	Plan, implement and test enterprise
	<u>Systems</u>					communication solutions
		30				
	WORK PERFORMANCE					
Tack 1	Provide the OHS			Core	BSBOHS509A	Ensure a safe workplace
TOSKI	Procedure in workplace					· · · · · · · · · · · · · · · · · · ·
Task 2	Provide the procedure to			Core	BSBSUS501A	Develop workplace policy and procedures for
	maintain the IT					sustainability
	equipments in workplace					
Task 3	Take the record of sound			GE	ICAGAM504A	Manage interactive media production
	& picture from an event					
Task 4	Take the digital video by			GF	CADMT501A	Incorporate and edit digital video
	using digital camera &					
	edit/ convert to other					
	formats by provided					
	software					

## Advanced Diploma in Information Technology (Course Outline)

	St Clements+	Pt		Australian IT Diploma Course
	Highlight Course			
	THEORETICAL TRAINING			

ICT 201	Organisational Behaviour	5			BSBWOR502B	Ensure team effectiveness
					BSBMGT516A	Facilitate continuous improvement
					BSBSUS501A	Develop workplace policy and procedures for sustainability
<u>ICT 202</u>	Information Systems	5	BAE602		ICANWK516A	Determine best-fit topology for a local network
	Principles and				ICANWK532A	Manage IT security
	Networking					
ICT 203	Information Systems,	5	BAE602	2	ICAPRG602A	Manage the development of technical solutions
	Analysis and Design					from business specifications
					ICAICT509A	Gather data to identify business requirements
					ICAICT603A	Manage the use of appropriate development methodologies
					ICAICT608A	Interact with clients on a business level
					ICAPMG606A	Manage IT project quality
					ICAICT713A	Manage IT services
ICT 204	Advanced	5	BAE601		ICAPRG527A	Apply intermediate object-oriented language
	Programming					SKIIIS
					ICAPRG501A	Apply advanced object-oriented language skills
					ICAPRG505A	Build advanced user interface
ICT 205	Project Work	5	BAE602	Core	ICAPRG506A	Manage copyright, ethics and privacy in an IT
ICT 206				Core	ICAPMG601A	Establish IT project governance
				Core		*Manage IT project initiation
	ASSESSIVIEINI			Coro		*Manage IT project inclusion
				COLE		
				Core	ICAPMG604A	*Manage IT project delivery
	Total	30		Core	ICAPMG605A	*Manage IT project closure

## Information Technology study Guide (Part 1) (Year 1 – Diploma in Information Technology) ( 30 points)

## Lectures prepared by

## U Kyaw Naing

## Member of Australian Computer Society & Member of Engineers Australia

ICT 101	Information Technology Fundamentals	2 Pt
ICT 102	Computer Applications and Operations	3 Pt

The student should complete ICT 101+ICT 201 within two months.

### TASK (1) (ICT 102)

## Use of Word 2007 or 2010

Download the instruction e-book for Word 2007 or 2010 from the following link.

You can choose the instruction book for Word 2007 or 2010 depending on Microsoft Office program that you have.

### Word 2007

 $(R186) word\mbox{-}2007\mbox{-}introduction\mbox{-}part\mbox{-}i\mbox{-}pdf$ 

http://www.filefactory.com/file/2s874qnp7jfr/n/word-2007-introduction-part-i\_pdf

http://www.filefactory.com/file/23ewfjjerdfd/word-2007-introduction-part-i.pdf

#### (R196)word-2007-introduction-part-ii\_pdf

http://www.filefactory.com/file/3w71sdx5yhw1/n/word-2007-introduction-part-ii\_pdf

http://www.filefactory.com/file/45vvycto7o6j/word-2007-introduction-part-ii.pdf

(210)word-2007-advanced-part-i\_pdf

http://www.filefactory.com/file/4mdugxonqa9b/n/word-2007-advanced-part-i\_pdf http://www.filefactory.com/file/3tgdk2lzorid/word-2007-advanced-part-i.pdf

(R167)word-2007-advanced-part-ii\_pdf

http://www.filefactory.com/file/15ybucj6yphr/n/word-2007-advanced-part-ii\_pdf

http://www.filefactory.com/file/1s64r5vxatgl/word-2007-advanced-part-ii.pdf

#### <u>Word 2010</u>

(238)word-2010-introduction\_pdf

http://www.filefactory.com/file/7824v6tjha2v/n/word-2010-introduction\_pdf http://www.filefactory.com/file/69w78vjoswyv/word-2010-introduction.pdf

(217)word-2010-advanced-part-i\_pdf

http://www.filefactory.com/file/4xop2y9k1erx/n/word-2010-advanced-part-i\_pdf

http://www.filefactory.com/file/24c3t7euhj45/word-2007-advanced-part-i.pdf

(R185)word-2010-advanced-part-ii\_pdf

http://www.filefactory.com/file/2oh7hfuzpodh/n/word-2010-advanced-part-ii\_pdf http://www.filefactory.com/file/1s64r5vxatgl/word-2007-advanced-part-ii.pdf

#### ASSIGNMENT (1)

Follow the instruction given in e-Books, you prepare & present three evidences of documents such as Typed Letters, Table, Diagram etc. If you follow the Introduction Instruction & present the evidences, you can get up to B+ & if follow the Introduction advanced & present the evidences, you can get up to A+.

You can submit the assignment to iqytechnicalcollege@gmail.com

TASK (2) (ICT 102)

Use of Excel 2007 or 2010

Excel 2007 (209)microsoft-office-excel\_pdf

http://www.filefactory.com/file/35qwez9pj431/excel-2010-introduction-part-i.pdf

(R190)excel-2007-advanced-part-i\_pdf

http://www.filefactory.com/file/313xzpm9ijux/n/excel-2007-advanced-part-i\_pdf http://www.filefactory.com/file/c1tjmt27g9f/excel-2010-advanced.pdf

#### Excel 2010

(224)excel-2010-introduction-part-ii\_pdf

http://www.filefactory.com/file/5rljf7fy8p0p/n/excel-2010-introduction-part-ii\_pdf http://www.filefactory.com/file/e9rry5fx0sj/excel-2010-introduction-part-ii.pdf

#### **ASSIGNMENT (2)**

Follow the instruction given in e-Books, you prepare & present three evidences of documents such as Table, Diagram , inserting the formula, graphics etc. If you follow the Introduction Instruction & present the evidences, you can get up to B+ & if follow the Introduction advanced & present the evidences, you can get up to A+.

You can submit the assignment to iqytechnicalcollege@gmail.com

#### TASK (3) (ICT 102)

Use of Power Point

(R215)powerpoint-2007-part-i\_pdf

http://www.filefactory.com/file/4vuoppxsfki3/n/powerpoint-2007-part-i\_pdf (R187)powerpoint-2007-part-ii\_pdf

http://www.filefactory.com/file/2tgxv0xdj0z/n/powerpoint-2007-part-ii\_pdf (R173)powerpoint-2010-advanced\_pdf

#### http://www.filefactory.com/file/1pzcm2f40xy3/n/powerpoint-2010-advanced\_pdf ASSIGNMENT (3)

Follow the instruction given in e-Books, you prepare & present three evidences of documents of power point presentation. You can insert the typing, diagram, picture, sound, video etc. If you follow the Introduction Instruction & present the evidences, you can get up to B+ & if follow the Introduction advanced & present the evidences, you can get up to A+. You can submit the assignment to igytechnicalcollege@gmail.com

#### TASK (4) (ICT 102)

Use of Databaseo rogram

Access 2007

(R192)access-2007-part-i\_pdf

http://www.filefactory.com/file/3aa9df1r1wm3/n/access-2007-part-i\_pdf

(255)access-2007-part-ii\_pdf

http://www.filefactory.com/file/rj0ypy5r58r/n/access-2007-part-ii\_pdf

(214)access-2007-part-iii\_pd

http://www.filefactory.com/file/4u5z5hfcfglv/n/access-2007-part-iii\_pdf

Access 2010

(R177)access-2010-part-i\_pdf

http://www.filefactory.com/file/22lsilwcj3gr/n/access-2010-part-i\_pdf

http://www.filefactory.com/file/ohc9h8u74an/access-2010-part-i.pdf

(R174)access-2010-part-ii\_pdf

http://www.filefactory.com/file/1r4qdnc0txgr/n/access-2010-part-ii\_pdf

http://www.filefactory.com/file/1dol3g2yg9s9/access-2010-part-ii.pdf

(R180)access-2010-part-iii\_pdf

http://www.filefactory.com/file/28d233nzt9db/n/access-2010-part-iii\_pdf

http://www.filefactory.com/file/4xfmzu3ue0pz/access-2010-part-iii.pdf

(243)access-2010-part-iv\_pdf

http://www.filefactory.com/file/7d11ntcq3mbn/n/access-2010-part-iv\_pdf

http://www.filefactory.com/file/egus43txhb1/access-2010-part-iv.pdf

#### ASSIGNMENT (4)

Follow the instruction given in e-Books, you prepare & present three evidences of documents of database system design You can insert the typing, diagram, picture, sound, video etc. If you follow the Introduction Instruction & present the evidences, you can get up to B+ & if follow the Introduction advanced & present the evidences, you can get up to A+. You can submit the assignment to iqytechnicalcollege@gmail.com

#### TASK (5) (ICT 101)

• Download the following link

http://www.filefactory.com/file/c0cc0f7/n/Additional\_1.zip

- Open the folder "Industrial Computer System"
- Study the contents in the following files.

```
"IntroHardware.doc"
"Motherboard_.ppt"
"Presentation_on_the_System_Bus.ppt"
"hard-drive-controllers_1.ppt"
"THE_CPU_.ppt"
```

"Power\_Supply\_Surge\_Protectors.ppt"

#### "good\_one.ppt

Then answer the followings questions & send the answer by e-mail to iqytechnicalcollege@gmail.com

#### **ASSIGNMENT (5)**

- Q1. Explain the followings (a) CPU (b) Interface Cards (c) RAM modules (d) Computer File Structures (e) Sharing a drive or device on a computer network (f) Mapping a network drive:
- Q2. Write the operation function of computer mother board.
- Q3.What is system bus?
- Q4.What travel on the system bus?
- Q5.Explain the function of address bus & memory
- Q6.What is controller?
- Q7.Explain the types of controllers.
- Q8. What is SCSI?
- Q9.What is ATA?
- Q10.Describe the operation function of Internal bus & external bus.
- Q11. What is a computer network and using network drives?
- Q12. What does CPU mean & do?
- Q13. Explain the structure & function of DUO core CPU.
- Q14. To utilize a particular type of CPU what aspects of compatibility to be considered?
- Q15. Explain the function of uninterruptable power supply.
- Q16. How do you understand the stand by UPS.
- Q17. To use UPS, what compatibilities are required to be considered?
- Q18. Explain Cache memory
- Q19.Describe SDRAM & DDR
- Q20.What is the function of heat sink & why it is important?

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ICT 107	Business Information	5		GA	ICANWK501A	Plan, implement and test enterprise
	Systems					
		30				
	WORK PERFORMANCE					
Tack 1	Drovido the OHS			Core	BSBOHS509A	Ensure a safe workplace
TOSKI	Procedure in workplace			00.0	20201100031	
Task 2	Provide the procedure to			Core	BSBSUS501A	Develop workplace policy and procedures for
	maintain the IT					sustainability
	equipments in workplace					
Task 3	Take the record of sound			GE	ICAGAM504A	Manage interactive media production
	& picture from an event					
Task 4	Take the digital video by			GF	CADMT501A	Incorporate and edit digital video
	using digital camera &					
	edit/ convert to other					
	formats by provided					
	software					

ICT 103 Applied Programming

C Programming

<u>Lectures</u>

BAE601-ICT 103+104+204 Week 1 Lesson

## ASSIGNMENT (1)

## Part (1) Questions

Study the slide	Questions
Number from	
2	Explain the writing & running C Program
5	Write the program to call a function
7	Indicate char(12) in memory
10	Describe how (3-6) /5 is calculated
12	What is the difference between ++X and X ++
14	Write a program to call the stack.
16	How for loop can be used instead of while loop, describe with

	example program.?
18	if you wanted to implement a function pow_assign() that
	modified its argument, how will you write the program?
20	What if we had a way to find out the address of a symbol,
	and a way to reference that memory location by address?
	Explain with sample program.
22	Write the program to check the pointer validity.
26	What is array?

## Part (2) Program Task

Write a program to accomplish the followings

- struct timeval is defined in this header
- fields can specify specific bit widths
- A newly-defined structure is initialized using this syntax. All unset fields are 0.
- structs define a layout of typed fields
- Fields are accessed using '.' notation.
- A pointer to a struct. Fields are accessed using '->' notation, or (\*ptr).counter

## ICT 104 Program Projects

C++ Programming Lectures

BAE601-ICT 103+104+204 Week 2 Lesson Part 1

BAE601-ICT 103+104+204 Week 2 Lesson Part 2

BAE601-ICT 103+104+204 Week 2 Lesson Part 3

(R179)structured-programming-with-c-plus-plus\_pdf

http://www.filefactory.com/file/26stkfcfaukj/n/structured-programming-with-c-plus\_pdf

http://www.filefactory.com/file/58weymci0zvf/structured-programming-with-c-plus-plus.pdf

(257)project-2010-advanced\_pdf

http://www.filefactory.com/file/3sye8n116nv9/n/project-2010-advanced\_pdf

http://www.filefactory.com/file/2jn8eqm44qkd/project-2010-advanced.pdf

#### ASSIGNMENT (2)

#### Program Task

### BAE601-ICT 103+104+204 Week 2 Lesson Part 1

- (1) Create a C++program that asks the user for the unit price of a product and, the quantity and then calculate total price
- (2) Draw a JSP Graph and write the C++ program that user can enter the quantity & price.
- (3) Draw a JSP graph & write the C++program to get the following print out.

#### INVOICE

Quantity :	10
Price per unit:	17.70
Total price :	185.85
Tax :	8.85

(4) Write a time conversion program by using C++

### BAE601-ICT 103+104+204 Week 2 Lesson Part 2

#### **Program Task**

- (5) Write a C++program that calculate the sale price. If the customer buy for \$2000, 10% discount will be given. If the customer buy for \$1000 or more than 10 item, 5% discount will be given otherwise no discount will be given.
- (6) Print the number 1 to 10 with their cube by using C++.
- (7) Write the C++program to solve the equation  $X^2+4X=+3=0$ .
- (8) Write the C++ program to calculate the average temperature in January
- (9) Write the C++ program to operate the following warehouse inventory system.



(10)Write C++ program to determine the square root value of numbers.

## ICT 105 Systems Analysis and Programs

### **Lectures**

BAE603-ICT 105 106 Wk 1

#### **References Slides & Notes**

BAE603-ICT 105 106 Wk 3 Part 1

### **System Analysis**

http://www.filefactory.com/file/5uvouii45hnl/System\_Analysis.pdf

ASSIGNMENT (3) Question No	Questions
1	What are the general characteristics of software products?
2	Write the simplified software process.
3	Describe Iterative Refinement
4	How does the feasibility Study of software perform?
5	Describe the Repository
6	Describe the Critical Path Method
7	What are the requirements for software documentation?
8	Describe requirements Definition and Analysis
9	Describe the Observations about Software Processes
10	How will minimize the risk?
11	What are the Technical Strategies in software
	development?
12	How can Software development projects fail ?

ICT 106 Software Engineering

Web link

<u>Lectures</u>

BAE603-ICT 105 106 Wk 2

## **References Slides & Notes**

BAE603-ICT 105 106 Wk 3 Part 2

#### (4) Question No Questions

1	How do you understand Copyright ?
2	What is Derivative Works ?
3	What is Trade Secrets and Non-Disclosure Agreements?
4	What is Open Source software?
5	Describe Source Code Management
6	What should be in the database?
7	Describe Distributed Objects and the System Life-Cycle
8	What is code sharing?
9	Describe Formal Specification Using Diagrams.
10	What are the Principles of Interface Design?
11	Explain Predicting System Performance
12	How do you understand Software Engineering as Engineering?

## ICT 107 Business Information Systems

### Weblink for Teaching Lessons

## **Reading**

## **Business Information System**

## http://www.filefactory.com/file/1s25g2278sen/business-informationsystems\_1%5D.pdf

#### ASSIGNMENT (6)

Study the slide	Questions
Number from	
1	What is organization?
2	What are the needs for organization?
3	What is the most important aspect of information?
4, 5	Write the check list for information quality.
6 to 9	What are the information requirement for small & large
	organizations?
10 to 13	What are the information requirement for trading sector?
14 to 16	What is Computer based Information System (CBIS)?
17 to 19	What is system?, Describe system components and explain
	two of them.
	Provide an example of system type and explain about it.
20, 21	Explain how the nature of open & close loop systems happen
	in a bookstore
22	What is cross functional co-ordination?

23, 24	Explain Components/Sub-Systems of CBIS
25	What are Data Processing Tasks?
26,27	Explain management information system with examples.
28 to 30	Explain data ware house, data mining, data mart.
31to 35	Explain expert system, knowledge intelligence system, marketing information system.
36 to 38	Explain marketing knowledge information system (MKIS)
39	What are the key tasks of Client Relationship Management (CRM)
40, 41	Explain organizational structure with examples in financial sector.
42 to 46	Explain Manufacturing Information System, Total Quality
	Management (TQM) and describe the Management Levels in
	Manufacturing Information Systems
46 to 48	Explain the Importance of Accounting & financial Information
	Systems in Strategic level, Knowledge Level, Management
	level and Operational Level
49 to 52	Describe the kinds of problems arisen & how to do decision
	making
53	Explain business planning

Task 3	Take the record of sound & picture from an event
Task 4	Take the digital video by using digital camera & edit/ convert to other formats by provided software

## Multimedia software -1 Audio Editing Software

By using these software, you can change the audio file format, convert to mp3, divide the file, merge the file etc. Some program can work with 64 bit and some can work with 32 bit

http://www.filefactory.com/file/28pn4u5hdn8x/n/ICD-PX\_Series\_Driver\_zip

http://www.filefactory.com/file/3u4atldal4yh/n/Sony\_3\_3\_zip

http://www.filefactory.com/file/3uph94ke8dux/n/Sony\_zip

http://www.filefactory.com/file/5mfabs7c6sw5/n/Digital\_Voice\_Editor\_3\_zip

## Multimedia software -2 Video Editing Software

By using these software, you can change the video file format, convert to mp4, divide the file, merge the file , create DVD disc etc

http://www.filefactory.com/file/27znv25u36f7/n/FreeStudio\_zip

http://www.filefactory.com/file/2hvsrurvkzqh/n/avimp4\_converter\_zip

http://www.filefactory.com/file/47yg9cqf2w3l/n/NCH\_Software\_zip

http://www.filefactory.com/file/4ap3rrykft0r/n/Very\_good\_program\_to\_use\_zip

http://www.filefactory.com/file/4xq0sk4dtzbd/n/Video\_converter\_software\_zip

## Multimedia software -3 Digital Image compressing software

Digital images can be compressed to PDF format by using these software.

http://www.filefactory.com/file/71a3kdve4ii7/n/jpg2pdf\_fullLicenced\_exe

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					BSBMGT516A	Facilitate continuous improvement
					BSBSUS501A	Develop workplace policy and procedures for sustainability
ICT 202	Information Systems Principles and Networking	5	BAE602		ICANWK516A ICANWK532A ICANWK614A	Determine best-fit topology for a local network Identify and resolve network problems Manage IT security
ICT 203	Information Systems, Analysis and Design	5	BAE602	2	ICAPRG602A ICAICT509A ICAICT603A ICAICT608A ICAPMG606A	Manage the development of technical solutions from business specifications Gather data to identify business requirements Manage the use of appropriate development methodologies Interact with clients on a business level Manage IT project quality
ICT 204	Advanced Programming	5	BAE601		ICAPRG527A ICAPRG501A ICAPRG505A	Apply intermediate object-oriented language skills Apply advanced object-oriented language skills Build advanced user interface

ICT 205	Project Work	5	BAE602	Core	ICAPRG506A	Manage copyright, ethics and privacy in an IT
	,					environment
ICT 206	WORK PERFORMANCE			Core	ICAPMG601A	Establish IT project governance
	ASSESSMENT			Core	ICAPMG602A	*Manage IT project initiation
				Core	ICAPMG603A	*Manage IT project planning
				Core	ICAPMG604A	*Manage IT project delivery
	Total	30		Core	ICAPMG605A	*Manage IT project closure

## ICT 201 Organisational Behaviour Textbook

Organizational Behavior power points

**Organizational Behavior Text book** 

http://www.filefactory.com/file/79ylydgahec9/Organizational\_behavior.pdf

## ASSIGNMENT (1)

**Questions** 

Question No	Questions
1	What is organizational behavior?
2	What are three frequently used methods of collecting data in
	organizational behavior?
3	What are the benefits of studying organizational behaviour?
4	How do you understand positive organizational behavior?
5	Describe list of skills development in organizational behaviour
6	What are the features of organizational system?
7	What are the individual differences in organization?
8	What are generational and age-based differences?
9	Explain the Triarchic Theory of Intelligence
10	What are multiple intelligences?
11	What are <b>personality differences?</b>
12	What is emotional intelligence?
13	Describe the data collection and research methods in
	organizational behavior
14	Describe the human relations movement
15	Explain positive organizational behavior

ICT 202 Information Systems Principles and Networking

Lectures BAE602-ICT202 203 Wk 1 BAE602-ICT202 203 Wk 2 BAE602-ICT202 203 Wk 3

#### **References**

#### **Computer Hardware**

http://www.filefactory.com/file/3m6snu0yf5lt/n/Computer\_hardware\_zip Communication System Laboratory

http://www.filefactory.com/file/74pxxwu8hhnh/n/Communication\_Laboratory\_pdf

#### ASSIGNMENT (2)

Question No	Questions
1	What is computer network?
2	What is the function of wireless network card?
3	Explain server operation system
4	Describe the types of data flow.
5	Describe the organization of internet
6	Explain OSI model
7	How do you understand IP address? Explain with diagram.
8	Describe the modulation of signal
9	Describe line coding and decoding
10	Explain ASK with diagram
11	What is phase shift keying?
12	Explain frequency modulation
13	What are the modes of propagation?
14	Explain frequency hopping spread spectrum

## **References**

Stage 4 Part 5A.zip http://www.filefactory.com/file/c0cc4a1/n/Stage 4 Part 5A.zip

to download the followings

Network Part 1

Network Part 2

Network Part 3

Network Part 4

Click <u>Stage 3 Part 1B.zip</u> http://www.filefactory.com/file/c0ccc42/n/Stage 3 Part 1B.zip

to download the followings

Computer networking (D018)

Computer\_and\_Networks.zip

Develop network services (D016)

D016StudyGuide.zip

D016TheoryNotes\_2.4.30-Network\_infrastructure\_.zip

D016TheoryNotes\_2.4.31Directory\_services\_Part\_1\_.zip

D016TheoryNotes\_2.4.31DirectoryServicesPart2\_.zip

ADDITIONAL NOTES

D016TheoryNotesPart1.zip

D016TheoryNotesPart2.zip

Network\_Practicals.zip

#### ICT 203 Information Systems, Analysis and Design

<u>Lectures</u>

http://www.filefactory.com/file/10tv95a2xqxh/n/ICT\_203\_Lessons\_zip

### Assignment (3)

## **Questions for Lectures**

Study the slide	Questions
Number from	
1 to 5	What is source of information? Explain primary source,
	secondary source and tertiary source.
6	Describe the meaning of organization.
7 to 9	How can the quality of information be checked?
10 to 12	What are the information requirement for an organization
	and explain the information requirement for flat organization
13	Describe the culture of organization.
14 to 17	What are the sources of information for an organization and
	how technology can be utilized to get the specific
	information?
18	How do you understand the corporate social responsibility?
19 to 20	Compare the followings.
	Systems and Procedures, data and information
21	What is Computer based Information System (CBIS)?
22 to 26 &	Explain the followings
28 to 30	Open loop system, closed loop system, feedback system
27	Define the followings.
	Strategic Planning, Tactical/Functional Planning, Operational
	Planning, Functional Strategic Planning

31	How do you understand Cross-Functional Co-ordination?
32 to 33	What is information architecture and which components are included in it?
34	What are Data Processing Tasks ?
35 to 39	What is Management Information System (MIS) & what
	kinds of technical aspects are utilized to support MIS &
	decision?
40	Which techniques are used in model driven decision support
	system?
41	Is data driven DSS the same as model driven DSS? Why?
42 to 47	Explain the followings
	Data ware house, data mart, data mining, knowledge
	support system, artificial intelligence
48	Describe organizational structure.
50 to 52	Explain the decision making process.
53 to 55	Explain the IT planning process.
56 to 62	Explain Entity Relationship Diagram (ERD)of System Design in
	the following aspects
	Design of data base, Design of the User Interface, Physical
	Design, Design of the Hardware/ Software Platform,
	Procedures Development, Procedures Development, Testing
63 to 67	Write the detailed explanation of Object Oriented Analysis
	and Design
68	What is Business Process Reengineering?
69 to 74	How will you organize the information security in your
	organization?

## Information System Analysis & Design

http://www.filefactory.com/file/3vrcam1imjct/Information\_Systems%2C%20Analysis%20and%20De sign.pdf

## **Information System**

http://www.filefactory.com/file/5bgayb335xeb/Information\_Systems.doc

## Information System Analysis & Design Word File

http://www.filefactory.com/file/xy9ioytbe3r/Information\_Systems%2C%20 Analysis%20and%20Design.doc

## Part (2) Question for readings

From the above reading, what knowledge do you absorb. Describe it by 2000 words.

ICT 204 Advanced Programming

#### **Lectures**

BAE601-ICT 103+104+204 Week 2 Lesson Part 3

## **Readers**

(R179)structured-programming-with-c-plus-plus\_pdf http://www.filefactory.com/file/26stkfcfaukj/n/structured-programming-with-c-plus-plus\_pdf

http://www.filefactory.com/file/6ck9zw25w35p/structured-programming-with-c-plus-plus.pdf

#### (211)/visio-2007\_pdf

http://www.filefactory.com/file/4shpdcmgb6td/n/visio-2007\_pdf

http://www.filefactory.com/file/1aauabjz28fp/visio-2007.pdf

#### $(222) object\-oriented\-programming\-using\-c\-sharp\_pdf$

http://www.filefactory.com/file/5gkn3yfop60p/n/object-oriented-programming-using-c-sharp\_pdf http://www.filefactory.com/file/5cz6zi5kyn2v/object-oriented-programming-using-c-sharp.pdf

## Assignment (4)

## **Program**

- (1) Write the C++ program to determine the average
- (2) Write C++ program to accomplish the following tasks
  - Tax is 5%
  - 10% discount for purchasing over \$3000
  - 5% discount for purchasing over \$1000 or quantities more than 50
  - Final price should include appropriate discount & tax
- (3)Write C++ program which reads quantity and unit price of a product from the user and the name of the user. The program needs to calculate the total price of the product and print a personal price note on the screen.

(4)Write a C++ program to store 30 inventories in a store that includes the product name, quantity in the store, price and supplier in table.

**Lectures** 

BAE601-ICT 103+104+204 Wk 3 Lessons Part 2

BAE601-ICT 103+104+204 Wk 3 Lessons Part 2

**Reference Slides** 

BAE601-ICT 103+104+204 Wk 3 Lessons Part 1

BAE601-ICT 103+104+204 Wk 3 Lessons Part 1

Also view the reference slides containing the features of VB

#### **Readers**

(R183)introduction-to-programming-in-visual-basic-6-0\_pdf http://www.filefactory.com/file/2e4r2noib70t/n/introduction-to-programming-in-visual-basic-6-0\_pdf

http://www.filefactory.com/file/2jzpvo2ogo09/introduction-to-programming-in-visual-basic-6-0.pdf

## Assignment (5)

## Program (1)

Study the example VB program (Making Pizza ) included in the slides and referring the principle & idea included in the program in all slides, you need to write the following Visual Basic program.

🐃 Pizza		
	MAMA-PA	PA PIZZA
Name Johr	n Doe	O <u>P</u> ickup
Phone: 555-	-1111	• <u>D</u> elivery
Size	Ent	er Address
C <u>S</u> mall	123 Anystreet	<u> </u>
⊙ <u>M</u> edium		
C Large	T	V
Toppings		
Pepperoni	🗖 Green Peppers	<u>O</u> rder
🔽 Sausage	🔲 Extra Cheese	
Mushrooms	🗖 Onions	<u>C</u> ancel

The above is the VB program explained in lecture. Referring the programming principles presented in the program, you write a customer order taking program to fulfil the following aspects

Company Name- Mega Electrical Products

Customer Name, Phone Number, E mail address are to be included.

The customer will need to choose two option to purchase the products.

- (1) Mail order by parcel
- (2) Delivery by courier

The postal address for mail order and delivery by courier for street address are to be recorded.

The customer can select several electrical, electronics and computer equipments. You can name 10 electrical/ electronics products and 10 computer products.

Preference of dispatch are to be included. There will be one of two options to be selected They are

- (1) Normal dispatch
- (2) Priority dispatch

You need to type the coding on Word file & send it by e-mail.

**Lectures** 

BAE601-ICT 103+104+204 Wk 3 Lessons Part 3

Assignment (6)

**Program** 

ICT 205 Project Work

**C # Programming** 

## **Introduction**

http://www.filefactory.com/file/4nkx66h5o88h/n/Part1\_1\_pdf http://www.filefactory.com/file/6dlohpohof9l/n/Lesson\_1 - Introduction\_to\_Programming\_1\_pdf

## Programmer Reference

http://www.filefactory.com/file/6mmpk77zvnc1/n/23759\_A\_Programmers\_Introduction\_to\_Csharp \_1\_pdf

+

## **ICT 206 Work Performance**

## **Lectures**

EE309 Part 1 EE309 Part 2 EE309 Part 3 EE309 Part 4

## **Project Management in Information Technology**

#### ASSIGNMENT (6) Project Submission

ICAPRG506A	Manage copyright, ethics and privacy in an IT environment
ICAPMG601A	Establish IT project governance
ICAPMG602A	*Manage IT project initiation
ICAPMG603A	*Manage IT project planning
ICAPMG604A	*Manage IT project delivery
ICAPMG605A	*Manage IT project closure

## 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	DC Circuit Problems
Teaching Video	
	E003+E004 Videos
	The links contain the following lessons
	E003+E004 Lesson 1 DC series circuit
	E003+E004 Lesson 2 DC parallel circuit
	E003+E004 Lesson 3 DC Parallel circuit problems
	E003+E004 Lesson 4 DC series parallel circuit 1
	E003+E004 Lesson 5 DC series parallel circuit 2
	E003+E004 Lesson 6 Lamp and resistor circuit
	E003+E004 Lesson 7 Wheatstone bridge
Writing on whiteboard+Audio	E003+E004 Writing+Audio
Exercise	EXERCISES Page 77 to 81
Theory Practice Test	E003+E004
	E003+E004 MCQ Practice 1
	E003+E004 MCQ Practice 2
	E003+E004 MCQ Practice 3
Practical Practice	Study the practical equipments , the names of equipments
	and their applications. Follow the instruction.
	<u>ineory &amp; Practical Instruction</u>

	Equipments
	Open the file in the following link.
	Practical Guide
	On page 2 , you will see the names of equipments. Then refer the following link to match with the equipments in the following link.
	Practical Equipments Practical equipments for online lab
	<u>Diagrams</u>
	Example Diagram Circuit Example
	Diagram Worksheet
	Assessment
	The teacher can give the photo of the equipment and ask the student to interpret
	Interpreting the equipment practice
	Equipments Interpretation Practice 1
	Equipments Interpretation Practice 2
Reference Resources + Textbooks	DC_Circuit_E003_E004.zip
	Stage 1 Part 1.zip
	http://www.filefactory.com/file/c0cb8ab/n/Stage_1_Part_1.zip
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/58r3nfe1qieh/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	DC Power supplies	
	H011 Lesson 1 DC Power supply principle.zip	
	H011 Lesson 2 Load regulation.zip	
	H011 Lesson 3 Current limiter.zip	
	Amplifier	
	H013 Lesson 1 Amplifier model zin	
	The is Lesson if Ampliner model.zip	
	H013 Lesson 2 Amplifier biasing.zip	
	H013 Lesson 3 Amplifier configuration.zip	
	H013 Lesson 4 Amplifier parameters.zip	
	H013 Lesson 5 JFET.zip	
	Digital Electronics	
	Digital Electronics	
	1006 Lesson 5+H012 Lesson 3 Number system.zip	
	1006 Lesson 6+H012 Lesson 4 Binary substraction.zip	
	1006 Lesson 7+H012 Lesson 5 Endecoder+Decoder.zip	
	1006 Lesson 8+H012 Lesson 6 SR Flipflop.zip	
	1006 Lesson 9+H012 Lesson 7 Shift register+Data	
	latches.zip	
	1006 Lesson 10+H012 Lesson 8 Counter.zip	
	1006 Lesson 11+H012 Lesson 9 Display.zip	
Writing on whiteboard+Audio	Amplifier+Power Supply+Digital H011+H012+H013.zip	
Exercise	EXERCISES Page 207 to 212	
Theory Practice Test	H011 H011	
	MCQ Practice 1 H011 MCQ Practice 2	
	H013	
	H013 MCQ Practice 1 H013 MCQ Practice 2	
Practical Practice	<b><u>Circuit Connection Assessment Number 3-2 Amplifier Gain</u></b>	
	nttp://www.filetactory.com/file/1utynndtxvnd/n/Practical_Semest	
	http://www.filefactory.com/file/2xikhzj6xuzx/n/3-2_pdf	
	http://www.filefactory.com/file/33ntwrs3o7e3/n/3_2_xls	
	http://www.filefactory.com/file/57di74j6zk7p/n/3_2_doc	
	Circuit Connection Assessment Number 3-7 Three Terminal	
	Regulator	

	http://www.filefactory.com/file/1ufyhhdtxvnd/n/Practical_Semest er_1_A_pdf
	http://www.filefactory.com/file/65maa6x3hkzj/n/3_7_doc
	http://www.filefactory.com/file/75znot255nq7/n/3_7_xls
	http://www.filefactory.com/file/1u8jqxxi95tp/n/3-7_pdf
	<u>Circuit Connection Assessment Number 6-1 Class A B</u> <u>Rectifier</u>
	<u>Class A-B Amplifie</u> r
	http://www.filefactory.com/file/52bujy6mxnvf/n/6-1_pdf
	http://www.filefactory.com/file/650fxy60dm2z/n/6_1_doc
	http://www.filefactory.com/file/72af0kxilwf3/n/Class A- B_Amplifier_pdf
	Amplifier1 2Practical Amplifier current gain
	Circuit Connection Assessment Number 6-12 Mini Lab
	http://www.filefactory.com/file/42e878f0kjgd/n/H045Day3Practical_pdf
	http://www.filefactory.com/file/7hr25f7o5an9/n/6-12_pdf
	http://www.filefactory.com/file/5mbfi4xigxf1/n/6_12_doc Additional 3 zip
	http://www.filefactory.com/file/c0cb6a8/n/Additional_3_zin
	AG Additional Amplifier Additional 4.zip
	http://www.filefactory.com/file/c0cb65c/n/Additional_4.zip DE
Australian Curriculum Units	
	Troubleshoot single phase input d.c. power supplies
	Renair hasic electronic annaratus faults hy renlacement of
	components

For the students in Myanmar

## **EE115 Basic Analogue & Digital Electronics**

### **EE116 Process Control System**

Lesson 1Lesson 2Lesson 3Lesson 4Lesson 5Lesson 6Lesson 7Lesson 8Lesson 9Lesson 10Test & 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 Materia	<u>Science</u>			
T1 Solid Liquid	d & Gases Solid			
T2 Dielectric S	Strength Dielectri	c Strength of Solids		
<b>Dielectric Stre</b>	ngth of Solid Liquid & G	ases		
T3 Conductors	s & Semi Conductors			
T4 Chemical E	Effect on materials			
T5 Atomic Cor	nstruction of Materials	Advanced Theory 1	Advanced TI	neory 2
T6 Non metal	lic materials			

## T7 ME 205 Manufacturing Processes-and-Materials

## **Manufacturing Processes-and-Materials**

#### E081 Tutorials

For the students in Myanmar <u>EE307 Part 1</u> <u>EE307 Part 2</u> <u>EE307 Part 3</u> <u>EE307 Part 4</u> <u>EE307 Part 5</u> <u>EE307 Part 6</u> 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
	EU46Part 2.21p
	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 <u>HERE</u> to download G037+G038+G039+E046
	Exercises
Theory Practice Test	E046
Theory Flactice Test	
	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** 

<u>EE204 Part 1</u> <u>EE204 Part 2</u> <u>EE204 Part 3</u> <u>EE204 Part 4</u> <u>EE204 Part 5</u>

EE204 Part 6

#### Test & Assessment

http://www.filefactory.com/file/13o82qnudgr3/n/E046\_Online\_Test\_1\_Question\_pdf

http://www.filefactory.com/file/6o2lsbtge7tt/n/E046\_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
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	<u>E050</u>

	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 <u>EE201 Engineering Mathematics</u> <u>EE201 Part 1</u> <u>EE201 Part 2</u> <u>EE201 Part 3</u> <u>EE201 Part 4</u> <u>Test & Assessment</u>

http://www.filefactory.com/file/5ho7s6h0svhv/n/E050\_Online\_Test\_1\_Answer\_doc

http://www.filefactory.com/file/6dqo87kdsorz/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	E026 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

#### <u>EE302 Part 1</u> <u>EE302 Part 2</u> <u>EE302 Part 3</u> <u>EE302 Part 4</u>

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	1008	3

Unit Code: EE306	Electro-mechanical Control
Teaching Video	
Writing on whiteboard+Audio	<u>1020 Part 1</u>
	<u>1020 Part 2</u>
Exercise	EXERCISES Page to
Theory Practice Test	
Practical Practice	
Reference Resources + Textbooks	<u>PID.zip</u>
	10081020D034F014DataCommA.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/DigitalElec tronics.htm
	http://kyawnaing325.zoomshare.com/files/6/7794CD-
Australian Currisulum Units	
	Cat up alastronically controlled machanically successed
	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	<u>Part 6</u>
Part 7	Part 8	Part 9	<u>Part 10</u>	<u>Part 11</u>	<u>Part 12</u>
Part 13	<u>Part 14</u>	Part 15	Part 16	<u>Part 17</u>	<u>Part 18</u>

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	5	EE 403 Introduction to Electronic Engineering (1 pt)
Electronics		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
				Instruction
				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
				Instruction
				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
				Instruction
				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
				Instruction
				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
				Instruction
				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
				Instruction
				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
				Instruction
				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)

## EXERCISES

Bachelor of Applied Engineering (Electrical) Exercise Part (1) Theory

## Bachelor of Applied Engineering (Electrical) Exercise Part (2A) Problems

Bachelor of Applied Engineering (Electrical) Exercise Part (2B) Problems

## Bachelor of Applied Science (Computer Science & Computer Technology) Study Guide (Part 2)

## **YEAR (4)**

Unit	Topics	Reference	Points
ICT 401	Advanced Mathematics 1	BAE401	3

Onlne Tutoring

#### BAE 401

BAE401 Week 1 Lesson All

BAE 401 Week 1 Lesson Part 1 Part 2 Part 3 Part 4 Part 5 Part 6

BAE401 Week 2 Lesson All

BAE401 Week 3 Lesson All

WEEK (4) REVIEW + TEST & ASSESSMENT FOR BAE401

#### **BAE 401 Advanced Engineering Mathematics (9 pt)**

Subjects	Points	Competency Units
BAE 401 Advanced	Q	Maths 301 Introduction to Complex Variables ( 1 nt)
Engineering Mathematics	5	Maths 302 Elementary Linear Algebra (1 pt)
		Maths 401 Continuous Distributions (1 pt)
		Maths 402 Discrete Distributions (1 pt)
		Maths 403 Engineering Mathematics (1 pt)
		Maths 501 Introduction to Probability( 1 pt)
		Maths 501 Linear Algebra & Matrices ( 1 pt)
		Maths 502 Finite Difference Methods for Partial
		Differential Equations & Mathematical Modelling (1 pt)
		Maths 601 Random Variables ( 1 pt)

## Part 1 Over all Knowledge of the subject

BAE 401 Advanced Engineering Mathematics

## Part 2 Competency units of the subject

Maths 301 Introduction to Complex Variables (1 pt) Maths 302 Elementary Linear Algebra (1 pt) Maths 401 Continuous Distributions (1 pt) Maths 402 Discrete Distributions (1 pt) Maths 403 Engineering Mathematics (1 pt) Maths 403 Engineering Mathematics Exercises Maths 501 Introduction to Probability(1 pt) Maths 501 Linear Algebra 1 (1 pt) Maths 501 Linear Algebra 2

Maths 501 Linear Algebra & Matrices

Maths 502 Introductory Finite Difference Methods for Partial Differential Equations (1 pt)

Maths 502 Mathematical Modelling

Maths 601 Random Variables (1 pt)

#### Part (1) Overview Knowledge of the subject

Folder				BAE 401 Advanced Engineering Mathematics
File				An Introduction to theory of complex variables
				Instruction
				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	12	to	16	Complex numbers
2	20	to	26	Functions
3	29	to	38	Differentiability
4	42	to	46	Integration in the complex plane
5	53	to	66	Integral theorems
6	71	to	73	Power series
	156	to	159	Introduction of rational functions of trigonometric functions.
Exercise	Q 1	to	Q8	of Assignment Number (1)

Folder				BAE 401 Advanced Engineering Mathematics
File				Continuous distribution
				Instruction
				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
2	7	&	20	Exponential distribution
3	9	&	31	Normal distribution

6	13	&	83	Gamma distribution
8	122			Convergence in distribution
10	127			F distribution
Exercise	Q 9	to	Q13	of Assignment Number (1)

Folder				BAE 401 Advanced Engineering Mathematics
File				Discrete distribution
				Instruction
				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
2	6	&	12	Binomial distribution
3	8	&	26	Poisson distribution
Exercise	Q 14	to	Q16	of Assignment Number (1)

Folder				BAE 401 Advanced Engineering Mathematics
File				Elementary linear algebra
				Instruction
				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
	27			Algebra in F <sup>n</sup> Example problems
	30			Geometric meaning of vectors
	31			Geometric meaning of vector addition
	33			Distance between points in Rn Length of vector
	37			Geometric meaning of scalar multiplication
	47			Dot product
	54			Cross product
	73			System of equation geometry
	76			System of equation – Algebric operation
	97			Matrice arithmetic
	125			Determinants –Basic technique & properties
Exercise	Q 17	to	Q34	of Assignment Number (1)

Folder	BAE 401 Advanced Engineering Mathematics
File	Integration and differential equations
	Instruction

				Study the notes, calculate the example problems then do the
Chapter	Page			
Onapter	i ayc			Note DDE Eile as an average and the assault are of the
				Note- PDF File page number and the page number of the
				scanned document may be different. The student need to
				check both as necessary
	10			List of integrals
	12	to	14	Introduction to background
	19	to	24	Theorem of integration
	32			Improper integrals
	33	to	37	Improper integral problems
	38	to	40	Integration of rational functions
	63	to	65	Differential equations
	67	to	68	First order ordinary differential equations
	69	to	72	Homogenous equations
	73	to	77	The general linear equations
Exercise	Q 35	to	Q47	of Assignment Number (1)

Folder				BAE 401 Advanced Engineering Mathematics
File				Random variables
				Instruction
				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
	20			Simple introduction examples
	21			Problems
	22			Frequency and distribution functions in 1 dimension
Exercise	Q 48	to	Q51	of Assignment Number (1)

Folder				BAE 401 Advanced Engineering Mathematics
File				Mathematical modelling preliminary
				Instruction
				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
	7			Introduction
	9	to	11	Discrete time model
	12	to	13	Example problems
Exercise	Q 52	to	Q53	of Assignment Number (1)

Folder				BAE 401 Advanced Engineering Mathematics
File				Elementary linear algebra
				Instruction
				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
	27			Algebra in F <sup>n</sup> Example problems
	30			Geometric meaning of vectors
	31			Geometric meaning of vector addition
	33			Distance between points in Rn Length of vector
	37			Geometric meaning of scalar multiplication
	47			Dot product
	54			Cross product
	73			System of equation geometry
	76			System of equation – Algebric operation
	97			Matrice arithmetic
	125			Determinants –Basic technique & properties
Exercise	Q 17	to	Q34	of Assignment Number (1)

#### Part (2) Competency Units

Maths 301 Introduction to Complex Variables (1 pt)

Maths 302 Elementary Linear Algebra (1 pt)

Maths 401 Continuous Distributions (1 pt)

Maths 402 Discrete Distributions (1 pt)

Maths 403 Engineering Mathematics (1 pt)

Maths 501 Introduction to Probability(1 pt)

Maths 501 Linear Algebra & Matrices (1 pt)

Maths 502 Finite Difference Methods for Partial Differential Equations & Mathematical Modelling

(1 pt)

Maths 601 Random Variables (1 pt)

Folder				Maths 301 Introduction to Complex Variables (1 pt )
File				Maths 301 Introduction to Complex Variables
				Instruction
				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
	80			The residue Theorem
	83			Example 32
	84	to	86	Example 33

	87			Example 34
	93			Fourier Transform
	95			Example 36
	96			Example 37
	96			Example 38
	107	to	108	Integral theorem of complex analysis with applications to the
				evaluation of real integral
	110			Introduction
	111			Example 1
	113			Integral theorems – The green Theorem
	114			Cauchy's integral theorem
	114	to	115	Example 2
	116	to	119	Example 3, 4, 5
	120	to	123	Cauchy's residue theorem
Exercise	Q 52	to	Q58	of Assignment Number (2)

Folder				Maths 302 Elementary Linear Algebra (1 pt)
File				Maths 302 Elementary Linear Algebra
				Instruction
				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
	134			A formula for the inverse
	138			Cramer's rule
	135	to	141	Example 6.2.3 , 6.2.4 , 6.2.6, 6.2.7
	165	to	169	Rank of a matrix
	177	to	182	Example 8.2.9, 8.2.10, 8.3.3, 8.3.5, 8.3.6, 8.3.7, 8.3.8
	182	to	186	Linear independence and bases
				Example 8.4.6, 8.4.7,
	193	to	194	Example 8.4.21, 8.4.22, 8.4.24
	211	to	212	Linear transformation
	214			Constructing the matrix of a linear transformation
	215	to	216	Example 9.2.3, 9.2.4
	223			Example 9.2.14
	249	to	250	Linear programming
	253			Example 11.2.2
	255			Example 11.2.3
Exercise	Q 59	to	Q65	of Assignment Number (3)

Folder	Maths 401 Continuous Distribution (1 pt)
File	Maths 401 Continuous Distribution

				Instruction
				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
	126			X <sup>2</sup> Distribution
	127			F Distribution
	130			F Distribution & "t" Distribution
	126			Example 9.1
	127			Example 10.2
	130			Example 11.1
	121			Estimation of parameters
	131			Example 12.1
	133	to	134	Example 12.2
Exercise	Q 66	to	Q68	of Assignment Number (4)

Folder				Maths 402 Discrete Distribution (1 pt)
File				Maths 402 Discrete Distribution
				Instruction
				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
	33			Geometric distribution
	33	to	39	Example 4.1, 4.2, 4.3, 4.4, 4.5, 4.6
	51			Pascal distribution
	51			Example 5.1
	54			Negative binomial distribution
	54			Example 6.1
	56			Hyper geometric distribution
	56			Example 7.1
Exercise	Q 69	to	Q72	of Assignment Number (5)

Unit		Maths 403 Engineering mathematics (1 pt)
Folder	File	Maths 303 Essential Engineering Mathematics
		Instruction
		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

	23			Vectors and matrices
	30	&	35	Example problems
	39	to	48	Functions and limits, Example problems
	51	to	69	Calculation of one variable (Part 1) Differentiation,
				Example problems
	79	to	105	Calculation of one variable (Part 1) Integration,
				Example problems
	111	to	121	Calculus of many variables, Example problems
	123	to	126	Ordinary differential equations, Example problems
	134	to	142	Complex function theory, Example problems
Exercise	Q 73	to	Q90	of Assignment Number (6)

Folder				Maths 501 Introduction to probability (1 pt)
File				Maths 501 Introduction to probability
				Instruction
				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
	6	to	8	Theoretical background
	9			Example 2.1, 2.2
	12	To7.1	18	Example 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7
	19			Playing card
	20	to	23	Example 4.2. 4.3, 4.4, 4.5
	35			Binomial distribution
	35	to	37	Example 6.1, 6.2, 6.3
	38			Lotto Example
	42			Conditional probabilities –Baye's formula
	42	to	43	Example 10.1, 10.2, 10.3
Exercise	Q 91	to	Q94	of Assignment Number (7)

Folder		Maths 501 Linear algebra and matrices (1 pt)
File		Maths 501 Linear algebra and matrices
		Instruction
		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
	47			Linear transformation matrices
	48	to	49	Definition 2.1.1 to 2.1.3
	50			Example 2.1.4
	51			Example 2.1.6
	52	to	53	i j Entry of product Definition 2.1.8
	54			Example 2.1.9
	55			Example 2.1.11
	58			Example 2.1.14
	62			Example 2.1.24, 2.1.26
	64			Example 2.1.27
	65			Example 2.1.28
	122			Rank of matrices
	137	to	139	Row operations
	145			Example 4.2.5
	146			Example 4.2.6
Exercise	Q 95	to	Q98	of Assignment Number (8)

Folder				Maths 502 Introductory Finite Difference Method for PDE
				(1pt)
File				Maths 502 Introductory Finite Difference Method for PDE
				Instruction
				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
	10	to	15	Partial differential equations. Example problems
	17	to	30	Taylor theorem
	42			Iterative solution methods
	43			Jacobi Iteration
	45			Gauss Seidel Iteration
	47			Successive Relaxation method
Exercise	Q 99	to	Q108	of Assignment Number (9)

Folder		Maths 601 Random Variables ( 1 pt )
File		Maths 601 Random Variables
		Instruction 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

	6	to	14	Theoretical results		
	20	to	34	Frequencies and distribution (1 dimension)		
	75	to	82	Function of random variables		
Exercise	Q109	9 to	Q115	of Assignment Number (10)		
Unit		Topics	\$	Reference	Points	•
ICT 402		Advan	ced Mat	hematics 2 BAE402	3	

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#### <u>BAE 402</u>

BAE402 Week 1 Lesson

BAE 402 Week 2 Lesson

BAE 402 Week 3 Lesson

### BAE 402 Calculus (3 pt)

Subjects	Points	Competency Units
BAE 402 Calculus	3	Maths 304 Integration and Differential Equations. (1 pt) Maths 403 Second Order Ordinary Differential Equations
		( 1 pt) Maths 303 Engineering Mathematics ( 1 pt)

## Part 1 Over all Knowledge of the subject

BAE 402 Calculus

## Part 2 Competency units of the subject

Engineering Maths+Calculus Maths 304 Integration and Differential Equations. (1 pt) Maths 403 Second Order Ordinary Differential Equations (1 pt) Maths 303 Essential Engineering Mathematics (1 pt)

## BAE 402 Calculus ( 3 pt)

## Part (1) Overview Knowledge of the subject

Folder	BAE 402 Calculus
File	Calculus 1 a .pdf

				Instruction
				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
	50	to	57	Differentiation, Example problems
	58	to	76	Integration, Example problems
	79	to	96	Simple differential equations, Example problems
Exercise	Q116	to	Q122	of Assignment Number (11)

Folder				BAE 402 Calculus
File				Calculus 2 a .pdf
				Instruction
				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
	8			Integration of trigonometric polynomials
	11			Complex decomposition of a fraction between two
				polynomials
	17			Chain rule
	19			Calculation of the directional derivatives
	29			An overview of integration in the plane and in the space
	44			Line integrals
	46			Surface integral
	70			Green's theorem in the plane
Exercise	Q123	to	Q127	of Assignment Number (11)

Folder		BAE 402 Calculus
File		Calculus 2b 1.pdf
		Instruction
		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
	7	The range of functions in several variables
	37	Line integral
	51	Space integral
	66	Line integral

Exercise Q128 to Q138 of Assignment Number (11)

#### Additional Study

Calculus 2 C (2) , Calculus 2 C (3) , Calculus 2 C (4), Calculus 2 C (5) , Calculus 2 C (6) , Calculus 2 C (7) Calculus 2 C (8) , Calculus 2 C (9), Calculus 2 C (10)

Folder				BAE 402 Calculus
File				Calculus 3b. pdf
				Instruction
				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	88	Power series method in solution of problems, Example
				problems
Exercise	Q139	to	Q142	of Assignment Number (11)

Folder				BAE 402 Calculus
File				Calculus 3C 1. pdf
				Instruction
				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
	6			Sequence in general Example 1.1 to 1.14
Exercise	Q143	to	Q150	of Assignment Number (11)

Folder BAE 402 Calculus					
File		Calculus 4C 1. pdf			
		Instruction			
		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
	6			Sum function of Fourier series
	62			Fourier series and uniform convergence
				Example 2.1 to 2.10
Exercise	Q151	to	Q155	of Assignment Number (11)

#### Additional Study

Calculus 3 C (1) , Calculus 3 C (2) , Calculus 3 C (3), Calculus 3 C (4) , Calculus 4 b , Calculus 4 C (1) Calculus 4 C (2) , Calculus 4 C (3)

#### Part (2) Competency Units

Maths 304 Integration and Differential Equations. (1 pt)

Maths 403 Second Order Ordinary Differential Equations (1 pt)

Maths 303 Engineering Mathematics (1 pt)

Folder				Maths 303 Engineering Mathematics (1 pt)				
File				Maths 303 Engineering Mathematics				
				Instruction				
				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				
	12	to	35	Introduction and background				
	38	to	48	Integration of rational functions				
	49	to	56	Integration of trigonometric functions				
	62	to	73	Differential equations				
Exercise	Q156	to	Q178	of Assignment Number (12)				

Folder	Maths 403 Second Order Differential Equations (1 pt)						
File				Maths 403 Second Order Differential Equations			
				Instruction			
				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			
	13	to	16	Power series solutions			
	39	to	46	Bessel equations and Bessel functions			
	49	to	51	Legendre polynomials			

	62	to	73	Differential equations		
Exercise	Q179	to	Q185	of Assignment Number (13)		

Unit	Topics	Reference	Points
BAE604	Telecommunication System		3
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Subjects	Points	Competency Units
BAE 604 Telecommunication Engineering	2	EE 525 Data Communication ( 1 pt) EE 603 Electronics Telecommunication ( 1 pt)

## Part 1 Over all Knowledge of the subject

BAE 604 Telecommunication Engineering

## Part 2 Competency units of the subject

EE 525 Data Communication (1 pt) EE 603 Electronics Telecommunication (1 pt) Part (1) Overview Knowledge of the subject

Folder		BAE 604 Telecommunication Engineering				
File		H046	6 Teleco	om Note 1		
		Instru Study exerc	Instruction Study the notes, calculate the example problems then do the exercises numbers as indicated			
File name	Chapte	r	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		
Week 1			All	Communication fundamental		
Week 2			All	Information & bandwidth		
Week 3			All	Amplitude modulation transmission		
Week 4			All	Amplitude modulation reception		
Week 5		All Single side banded communication				

File	H046 Telecom Note 2				
	<u> </u>	Instruction			
	:	Study	the notes	, calcı	ulate the example problems then do the
<b>P</b> 1		exercises numbers as indicated			
File name	Chapter		Page		lopics
					Note- PDF File page number and the
					page number of the scanned document
					may be different. The student need to
					check both as necessary
Week 6			All		Frequency modulation – Transmission
Week 7			All		Frequency modulation –Reception
Week 8			All		Communication Techniques
Week 9		All Communication Receivers			
Week 10			All		Pulse Modulation
File		H046	6 Teleco	m Nc	ote 3
	!	Instruction			
		Study the notes, calculate the example problems then do the			
Eilo namo	Chantor	exercises numbers as indicated			
	Chapter		Faye		Note DDE File name number and the
					Note- PDF Flie page number and the
					page number of the scanned document
					may be different. The student need to
					check both as necessary
Week 11			All		Code transmission
Week 12			All		ISDN
Week 13			All		Transmission lines
Week 14			All		Wave propagation
Week 15			All		Antenna
Week 16			All		Fibre optics
Exercise	Q989	to	Q1026		of Assignment (72A)

Part (2) Competency UnitsEE 525 Data Communication (1 pt)EE 603 Electronics Telecommunication (1 pt)

Folder				EE 525 Data Communication (1 pt)		
File				EE 525 Data Communication		
				Instruction		
				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		
	2	to	14	Overview of data communication		
	15	to	28	Data terminals		
	31	to	40	Massage and transmission channels		
	41	to	60	Asynchronous modems and interfaces		
	61	to	75	Synchronous modem and digital transmission		
	88	to	101	Protocol and error control		
Exercise	Q1027	to	Q1034	of Assignment Number (72B)		

Folder				EE 608 Electronics Telecommunication (1 pt)			
File				EE 608 Electronics Telecommunication			
				Instruction			
				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			
	349	to	354	RF Transmission			
	355	to	360	Transmission Lines & Antennas			
	309	to	316	Video signals			
Exercise	Q1035	to	Q1043	of Assignment Number (73)			

Unit	Topics	Reference	Points
BAE508	Project Management		3

## BAE 508 Industrial Engineering & Industrial Management (1 pt)

Subjects	Points	Competency Units
BAE 508 Industrial Engineering & Industrial Management	1	Mgt 501 Basic Management & Communication Skills ( 1 pt)

## Part 1 Over all Knowledge of the subject

BAE 508 Industrial Engineering & Industrial Management

## Part 2 Competency units of the subject

Mgt 501 Communication SkillsMgt 501 Basic Management (1 pt)Mgt 501 Management BrifesManagement + OrganizationMgt 502 Operation Management (1 pt)Mgt 503 Production & Operation Management (1 pt)

## **Operation Management**

Part 1	Part 2	Part 3	Part 4	Part 5	<u>Part 6</u>
Part 7	Part 8	Part 9	<u>Part 10</u>	<u>Part 11</u>	<u>Part 12</u>
Part 13	<u>Part 14</u>	Part 15	Part 16	<u>Part 17</u>	<u>Part 18</u>

<u>Mgt 504 Project Management (1 pt)</u> <u>Mgt 505 Quality Management and Manufacturing Engineering (1 pt)</u> <u>Mgt 505 Quality Management</u> <u>Mgt 506 Strategic Financial Managenet (1 pt)</u>

Unit	Topics	Reference	Points
ICT 305	Professional Programming (1) C #		3
ICT 403	Professional Programming (2) Object Oriented		3
ICT 404	Professional Programming (3) Java		3

#### ICT 305 C #

(222)object-oriented-programming-using-c-sharp\_pdf

http://www.filefactory.com/file/5gkn3yfop60p/n/object-oriented-programming-using-c-sharp\_pdf

http://www.filefactory.com/file/39b9v84f02dv/object-oriented-programming-using-csharp.pdf

#### ICT403 Object Oriented

ICT 403 Object Oriented Programming (1 pt)

(R169)object-oriented-programming-using-java\_pdf

http://www.filefactory.com/file/191u5fn951l1/n/object-oriented-programming-using-java\_pdf

http://www.filefactory.com/file/2f1ie4vbt2ch/object-oriented-programming-using-java.pdf

#### ICT404 JAVA

(R164A)an-introduction-of-java-programming\_pdf http://www.filefactory.com/file/3hfsj29tpyp/n/an-introduction-of-java-programming\_pdf

http://www.filefactory.com/file/6lz2hcawvl3b/an-introduction-of-java-programming.pdf

(234)an-introduction-to-java-programming-3\_pdf

http://www.filefactory.com/file/734tf3rzwljv/n/an-introduction-to-java-programming-3\_pdf

http://www.filefactory.com/file/11kpvbp74cvx/an-introduction-to-java-programming-3.pdf

(241)an-introduction-to-java-programming-2\_pdf

http://www.filefactory.com/file/7bbwr64e25ox/n/an-introduction-to-java-programming-2\_pdf

http://www.filefactory.com/file/33ro5l1utdqj/an-introduction-to-java-programming-2.pdf

#### **OTHER PROGRAMMING**

(R164B)an-introduction-to-relational-database-theory\_pdf http://www.filefactory.com/file/43iyher6hcd1/n/an-introduction-to-relational-database-theory\_pdf

http://www.filefactory.com/file/3xuviix77kp1/an-introduction-to-relational-database-theory.pdf

#### (R184)visual-event-computing\_pdf

http://www.filefactory.com/file/2i96uvrvapst/n/visual-event-computing\_pdf

http://www.filefactory.com/file/74sg78c5x0fv/visual-event-computing.pdf

(R183)introduction-to-programming-in-visual-basic-6-0\_pdf http://www.filefactory.com/file/2e4r2noib70t/n/introduction-to-programming-in-visual-basic-6-0\_pdf

http://www.filefactory.com/file/2jzpvo2ogo09/introduction-to-programming-in-visual-basic-6-0.pdf

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http://www.filefactory.com/file/1aauabjz28fp/visio-2007.pdf

#### (223)applications-of-prolog\_pdf

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http://www.filefactory.com/file/24m1z8ju0ynx/applications-of-prolog.pdf

#### (225)c-programming-in-linux\_pdf

http://www.filefactory.com/file/5sxkpeyhj16j/n/c-programming-in-linux\_pdf

http://www.filefactory.com/file/88nqxfhhzkt/c-programming-in-linux.pdf

(233)prolog-techniques-applications-of-prolog\_pdf http://www.filefactory.com/file/70wmr99i2pwx/n/prolog-techniques-applications-of-prolog\_pdf

http://www.filefactory.com/file/3ba0co6zy2d1/prolog-techniques-applications-of-prolog.pdf

(246)perl-for-beginners\_pdf http://www.filefactory.com/file/7g5jt5snocy9/n/perl-for-beginners\_pdf

http://www.filefactory.com/file/7g5jt5snocy9/n/perl-for-beginners\_pdf

Unit	Topics	Reference	Points
ICT 405	Professional Practice (1) Network		3
ICT 406	Professional Practice (2) Website		3
ICT 407	Artificial Intelligence		3

#### ICT405 NETWORK

Develop network services

#### D016 Study Guide

D016StudyGuide.zip

D016TheoryNotes\_2.4.30-Network\_infrastructure\_.zip

D016TheoryNotes\_2.4.31Directory\_services\_Part\_1\_.zip

D016TheoryNotes\_2.4.31DirectoryServicesPart2\_.zip

ADDITIONAL NOTES

D016TheoryNotesPart1.zip

D016TheoryNotesPart2.zip

Stage 3 Part 1B.zip http://www.filefactory.com/file/c0ccc42/n/Stage\_3\_Part\_1B.zip ICT406 WEBSITE

#### <u>D018</u>

(Download from <u>www.electricaldiploma2013.zoomshare.com/Additional For</u> <u>17908+17794</u> Folder )

UEENEED018B Design and implement Internetworking systems

#### **Computer networking (D018)**

Computer\_and\_Networks.zip

Stage 4 Part 13.zip http://www.filefactory.com/file/c0cc6c1/n/Stage\_4\_Part\_13.zip

#### Embedded system, Embedded C, Embedded design, Object Oriented Programming, Object Oriented Design, Data Acquisition

Computer\_and\_Network\_2.zip Computer\_and\_Networks\_3.zip

UEENEED010B Set up and create content for a web server

(Download from <u>www.electricaldiploma2013.zoomshare.com/Additional For</u> <u>17908+17794</u> Folder )

#### D10 Web Design Notes

- Lesson\_1\_Setting\_up\_adding\_the\_contents.zip
- Lesson\_2\_CSS.zip
- Lesson\_3\_Multimedia.zip
- Lesson\_4\_Animation2-3DGraphics.zip
- Lesson\_5\_More\_detailed\_design.zip
- Lesson\_6\_Multiple\_Pages\_Set\_up\_Site\_Upload.zip
- Lesson\_7\_Frame\_Layer.zip
- Lesson\_8\_Flash\_Firework-Graphics\_Movie.zip
- D10NoteDataBase.zip
- D010Web\_ServerScripting\_Programming.zip

#### RESOURCES

Photos.zip

Audio.zip

Digital\_Images\_Collection.zip

Dreamweaver\_notes.zip

Example\_Web\_Pages.zip

HTML\_Manual.zip

UEENEED021B	Design and implement Internetworking systems multi-layer switching
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(Download from <u>www.electricaldiploma2013.zoomshare.com/Additional For</u> <u>17908+17794</u> Folder )

#### D021.zip

UEENEED022B	Design and implement Internetworking systems security
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#### D022.zip

#### **ICT407 ARTIFICIAL INTELLIGENCE**

R188)artificial-intelligence-agent-behaviour-i\_pdf

http://www.filefactory.com/file/2wtc8mmdymel/n/artificial-intelligence-agent-behaviour-i\_pdf

http://www.filefactory.com/file/1gvj4iat36ch/artificial-intelligence-agent-behaviour-i.pdf

(203)artificial-intelligence-agents-and-environments\_pdf

http://www.filefactory.com/file/46sfcigim6y7/n/artificial-intelligence-agents-and-environments\_pdf

http://www.filefactory.com/file/3lx2lo8gvkbb/artificial-intelligence-agents-and-environments.pdf

(219)artificial-intelligence-exercises-i\_pdf

http://www.filefactory.com/file/5ds2reslkka3/n/artificial-intelligence-exercises-i\_pdf

http://www.filefactory.com/file/3kaarn0n2h15/artificial-intelligence-exercises-i.pdf

(254)artificial-intelligence-exercises-ii\_pdf

http://www.filefactory.com/file/qdakumctpat/n/artificial-intelligence-exercises-ii\_pdf

http://www.filefactory.com/file/hcllqoftkxd/artificial-intelligence-exercises-ii.pdf

(256)how-to-do-the-final-year-projects\_pdf

http://www.filefactory.com/file/ydtey45bnu9/n/how-to-do-the-final-year-projects\_pdf

http://www.filefactory.com/file/5r9cns94xemp/how-to-do-the-final-year-projects.pdf

#### (257)project-2010-advanced\_pdf

http://www.filefactory.com/file/3sye8n116nv9/n/project-2010-advanced\_pdf http://www.filefactory.com/file/1n92pw5q6r91/project-2010-introduction-part-i.pdf http://www.filefactory.com/file/2tfzn5y19819/project-2010-introduction-part-ii.pdf http://www.filefactory.com/file/4bifn11thz9n/project-2010-advanced.pdf

## **Bachelor of Applied Science**

(Computer Science & Computer Technology)

#### Stage I

- Information Technology Fundamentals
- Computer Applications and Operations
- Applied Programming
- Program Project

Students who have passed these subjects will be issued with an ACP certificate in Information Technology and Programs.

- Systems Analysis and Programs
- Software Engineering
- Business Information Systems

and one of the following electives

- Accounting
- Organisational Behaviour

#### Stage II

- Information Systems Principles and Networking
- Information Systems, Analysis and Design
- Advanced Programming
- Project Work

Students who have passed the above subjects will be issued with an ACP Advanced Diploma in Computer Science.

#### Year IV (ICT 305+403+404+405+406+407) ASSESSMENT

Two reports one for Programming for (ICT305+403+404) & another for Networking+ Artificial Intelligence for (ICT 405+406+407) subjects are required to be presented.

Each should contain 4000 to 6000 words of how you pursue the study in Programming & Networking should be described.

The project should contain sample programming, networking task, job procedures etc of the topics of your choices.

## **Bachelor of Science in Computing**

#### Stage III

- Professional Issues, Computing and Society
- Applied Computing (External Placement)I
- Major Thesis Project

A 10,000 – 12,000 word research project in a Computer Science or Information Technology discipline area. In this project the candidate will need to demonstrate they can apply the knowledge learnt in Stages I and II.