### **BASIC CIVIL ENGINEERING STUDY GUIDE**

### **CE 101 Mathematics**

FileDiploma in Electrical Engineering Learning System ,

EE201 Engineering Mathematics.

Follow the study guide.

(OR)

Cert EE+ Dip EE + Adv Dip EE (Myanmar) Learning System

EE201 Engineering Mathematics.

Follow the study sequence.

CE 102 Physics

File-

Diploma in Electrical Engineering Learning System ,

**EE204 Engineering Physics** 

Follow the study guide.

(OR)

Cert EE+ Dip EE + Adv Dip EE (Myanmar) Learning System

**EE204 Engineering Physics** 

Follow the study sequence.

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### **CE 104 Fluid Dynamics**

The same contents in ME 301 Fluid Dynamics

Advanced Mechanical Engineering Study Guide.

Follow the instructions for ME 301 Fluid Dynamics

### **CE 108 Electrical Principle**

File-

Certificate in Electrical Engineering Learning System

EE 101 DC Circuit Problem Part (1)

Follow the study sequence/ guide

(OR)

Cert EE+ Dip EE + Adv Dip EE (Myanmar) Learning System

EE 101 DC Circuit Problem Part (1)

Follow the study sequence.

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#### **CE 109 Energy Efficient Building Design**

#### File-

Advanced Diploma in Electrical Engineering Learning System

EE 307 Energy Efficient Building Design

Follow the study sequence/ guide

(OR)

Cert EE+ Dip EE + Adv Dip EE (Myanmar) Learning System

EE 307 Energy Efficient Building Design

Follow the study sequence

### **CE 111 Engineering Mechanics**

# **Engineering Mechanics**

Folder			BAE 403 Engineering Mechanics of B App Eng (Electrical)			
File						
			•	otes, calculate the example problems then do the umbers as indicated		
File name	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		
Chap 1. pdf			All	Stress Example 1.1, 1.2, 1.3		
Chap 1 slide.pdf			All	Stress lectures		
Chap 2.pdf			All	Strain All examples		
Chap 2 slide.pdf			All	Strain lessons		
Chap 3.pdf			All	Mechanical properties of materials		
Chap 3 slide.pdf			All	Mechanical properties of materials		
Chap 4.pdf			All	Axial members		
Chap 4 slide.pdf			All	Axial members		
Chap 5.pdf			All	Torsion of shaft		
Chap 5 slide.pdf			All	Torsion of shaft		
Chap 6.pdf			All	Symmetric bending of beams		
Chap 6 slide.pdf			All	Symmetric bending of beams		
Exercise	Q186	to	223	of Assignment (14) Assignment (90)		

### **ME 103 Engineering Mechanics**

# **Engineering Mechanics**

Folder		BAE 403 Eng	403 Engineering Mechanics of B App Eng (Electrical)		
File					
		,	•	tes, calculate the example problems then do the	
		•	exercises nur	mbers as indicated	
File name	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	
Chap 7.pdf			All	Deflection of symmetric beams	
Chap 7 slide.pdf			All	Deflection of symmetric beams	
Chap 8.pdf			All	Stress transformation	
Chap 8 slide.pdf			All	Stress transformation	
Chap 9.pdf			All	Strain transformation	
Chap 9 slide.pdf			All	Strain transformation	
Chap 10.pdf			All	Design and failure	
Chap 10 slide.pdf			All	Design and failure	
Chap 11.pdf			All	Stability of columns	
Chap 11 slide.pdf			All	Stability of columns	
Exercise	Q224	to	Q251	of Assignment (14) Assignment (91)	

# **ME 301 Applied Mathematics**

### **ME 101 Applied Mathematics**

# **Applied Mathematics**

Folder				ME 301 Applied Mathematics ( 1 pt )
File				ME 301 Applied 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
	16			Kinematics
	26			Projectiles
	36			Forces
	45			Resistance forces
	55			Resolving forces
	63			Rigid bodies
	73			Centre of gravity
	80			Momentum
	92			Energy
	100			Circular motion
	112			Gravitation and planetary motion
	122			The language of vectors
Exercise	Q252	to	Q264	of Assignment Number (15)

Folder				CE 103 Basic Surveying		
File				CE 103 Basic Surveying		
				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			Basic survey methods		
	2			Scales		
	3	to	4	Survey diagrams		
	5	to	6	Survey stations		
	7	to	8	Survey instruments		
	9			Таре		
	10			Surveying signs		
	11	to	12	Laying the chains		
	13	to	15	Measurement on hills		
	16	to	17	Arc intersection		
	18	to	19	Transverse survey		
	20	to	22	Levelling		
	23	to	24	Sextant / Level		
	26	to	27	Prism/ Cross Staff		
	28	to	29	Use of clinometer		
	30	to	31	Chain angle, Example survey diagram		
	35	to	38	Site surveying		
Exercise	Q1297	to	Q1305	of Assignment Number (92)		

Folder				CE 105 Hydraulics		
File				CE 105 Hydraulics		
				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	14	Fundamental		
	15	to	25	Hydrostatics		
	26	to	31	Energy equation		
	32	to	40	Momentum equation		
	41	to	51	Pipe flow		
	52	to	61	Physical modelling		
	62	to	72	Open channel flow		
	73	to	82	Uniform flow		
	83	to	93	Channel design		
	94	to	102	Critical flow		
	103	to	113	Rapidly varied flow		
	114	to	122	Hydraulic pump		
	123	to	130	Hydraulic structure		
	131	to	138	Gradually varied flow		
	139	to	147	Computation of flow profile		
	148	to	158	Unsteady flow		
	159	to	176	Hydraulic machinery		
	0.1000		0.1000			
Exercise	Q1306	to	Q1332	of Assignment Number (93)		

Folder				CE 106 Hydrology
File				CE 106 Hydrology
				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
	11	to	21	Introduction
	22	to	37	Participation
	38	to	50	Evaporation
	51	to	63	Infiltration
	64	to	76	Ground water
	77	to	92	Hydrograph
	93	to	106	Flow routing
	107	to	118	Hydrological measurement
	119	to	131	Hydrological statistics
	132	to	145	Hydrological design
Evereica	01222	to	01270	of Assignment Number (O4)
Exercise	Q1333	to	Q1370	of Assignment Number (94)

Folder				CE 107 Sanitation and Water Supply
File				CE 107 Sanitation and Water Supply
				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	18	Global sanitation and water supply
	19	to	34	Water and excreta related diseases
	35	to	67	Sanitation system
	68	to	90	Water supply system
	91	to	108	Programming and planning
	109	to	123	Economic and financing
	124	to	149	Annex A to D
Exercise	Q1372	to	Q1393	of Assignment Number (95)

Folder				CE110 Building Construction
File				CE110 Building Construction
				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
	5	to	10	Making building
	13	to	39	Foundation
	40	to	54	Wood
	55			Nail & junction jointer
	58	to	61	
	62	to	74	Heavy timber frame construction
	75	to	81	Light wood frame construction
	82			Building plan
	83	to	92	Frame
	93	to	102	Roof/ Stair
	103	to	116	Exterior finish
	117	to	130	Interior finish
	131	to	136	Stairs
	137	to	154	Brick masonary
	155	to	171	Stone & concrete masonary
	172	to	180	Masonary load bearing wall construction
	180	to	181	Structural drawing of masonary load bearing wall
	182	to	185	Brick laying pattern
	187	to	223	Steel frame construction

	225	to	232	Light gauge steel frame construction
	237	to	254	Concrete construction
	255	to	279	Site cast concrete framing system
	283	to	300	Pre cast concrete framing system
	302	to	324	Roofing
	325	to	342	Glazing
	343	to	357	Windows & Doors
	361	to	363	Cladding
	370	to	376	Cladding with metal & glass
	385			
	387	to	395	
	399	to	404	Interior finish
	405	to	413	Interior wall/ Partition
	418			
	420			
	422			
	424	to	438	Finish ceiling & floors
	440	to	454	Building Construction Technical Terms
Exercise			1	Assignment Number ( 96+97)