# St Clements University Certificate/ Diploma / Advanced Diploma / Associate Degree in General Engineering Practice

This is a mixed discipline engineering practice study program.

### **Course + Credit Outlines**

	Entry Year 9	
YEAR 10	Certificate II in Work Place English & Pre-vocational Engineering (6 Credits)	
		Credits
WENG 1	Workplace English 1	1
CGVE 401A	Year 10 Maths	1
CGVE 402A	Year 10 Physics	1
CGVE 403A	Year 10 Information Processing	1
CGVE 404A	Year 10 Science	1
CGVE 406A	Year 10 Chemistry	1
		6 credits
Year 11	Certificate III in Work Place English & Basic	
	Engineering (9 Credits)	
		Credits
WENG 2	Workplace English 2	1
CGVE 401B	Year 11/12 Maths	1
CGVE 402B	Year 11/12 Physics	1
CGVE 403B	Year 11/12 Software Design	1
CGVE 404B	Year 11/12 Science	1
CGVE 405B	Year 11+12 Design & Technology	1
CGVE 406B	Year 10+11+12 Chemistry	1
CGVE 410	Industrial Technology (One unit from	2
	Certificate IV in Electrical/Civil/Mechanical	
	Engineering)	
		15
		credits

## Year 12 Certificate IV in Work Place English & General Engineering Practice(15 Credits)

	Engineering Fractice(15 credits)	Credits
WENG 3	Workplace English 3	1
GE6	Occupational Health & Safety	2
IE6	Principle of Electricity	2
	PLUS any 4 units or more from the following group	
GE1	Electrical Wiring (EE)	2
GE8	Electronics (EE)	2
GE13	Principle of Engine(ME)	2
GE14	Fitting & Machining (ME)	2
GE16	Engineering Drawing I (EE/CE/ME)	2
GE19	Computer Programming (EE/CE/ME)	2
GE22	Painting & Decoration (CE)	2
GE27	Machine Principle(ME)	2
GE30	Bricklaying (CE)	2
GE31	Sprouting & Guttering (CE)	2
IE9	Basic Building Construction (CE)	2
	Credit Transfer from Certificate III in Work Place English & Basic Engineering	2
	_	15 Credits

#### **Award Rule-**

- If all elective are selected from EE units CIV in Work place English & Electrical Engineering Practice will be award. As for CE & ME.
- If the electives are selected from mixed discipline, CIV in Workplace English & General Engineering Practice will be awarded

Year 1 After	Diploma in General Engineering Practice	<u>Credits</u>	
Year 12	30 credits		
IE1	Engineering Mathematics	2	
IE2	Engineering Physics	2	
IE3	Material Science	2	
IE13	Workshop	2	
IE15	Advanced Engineering Design & Project Work	2	
	PLUS any 4 units or more from the following group		
GE2	Electrical Machine (EE)	5	
GE3	Electrical Distribution (EE)	5	
GE4	Power System Operation (EE)	5	
GE9	Process Control (EE/ME)	5	
GE15	Building Construction (CE)	5	
GE18	Air-conditioning & Refrigeration (ME)	5	
GE20	Computer Networking (EE)	5	
GE21	Welding (ME)	5	
GE25	Surveying (CE)	5	
GE28	Hydraulic (CE/ME)	5	
GE29	Materials & Corrosion Prevention (CE/ME)	5	
	Workplace Assessment Units		
	(Only based on previous work experiences)		
IE11	Electrical & Mechanical Engineering Work Experience	5	
IE12	Civil Engineering Work Experience	5	
		30 Credits	

#### **Award Rule-**

- If 4 electives are selected from EE units Dip in Electrical Engineering Practice will be award. As for CE & ME.
- If the electives are selected from mixed discipline, Dip in General Engineering Practice will be awarded

Year 2 After	ar 2 After Advanced Diploma in Engineering Practice		
Year 12	60 credits		
EE307	Energy Efficient Building Design	2	
EE308	Sustainability	2	
EE309	Project Management	2	
EE310	Engineering Officer Competency Report	2	
	PLUS any 4 units from the following group		
IE7	Electrical Circuit I (EE)	5	
IE8	Electrical Circuit II (EE)	5	
IE9	Advanced Building Construction (CE)	5	
IE10	Transmission Line (EE)	5	
GE7	Project Management (EE/CE/ME)	5	
GE10	Industrial Electronics (EE)	5	
GE11	Programmable Logic Controller (EE/ME)	5	
GE17	Pipe Fitting (CE/ME)	5	
GE23	Pnuematics (CE/ME)	5	
GE24	Manufacturing Management (ME)	5	
		30 Credits	

#### **Award Rule-**

- If 4 electives are selected from EE units Adv Dip in Electrical Engineering Practice will be award. As for CE & ME.
- If the electives are selected from mixed discipline, Adv Dip in General Engineering Practice will be awarded

Year 3 After	Associate Degree in Engineering Practice	<u>Credits</u>
Year 12	(General/EE/CE/ME) 90 credits	
BAE 401	Advanced Engineering Mathematics	9
BAE 402	Calculus	3
BAE 403	Engineering Mechanics	1
BAE 404	Engineering Materials & Thermodynamics	3
BAE 508	Industrial Engineering & Management	1
BAE 601	Computer Programming	3
BAE 608A	Final Graduation Project/ Research Report	10

Based on Advanced Diploma, Associate Degree will be awarded in relevant discipline.